# CITY OF ATLANTA
# Designing Streets For All Ages and Abilities

Department of
## CITY PLANNING

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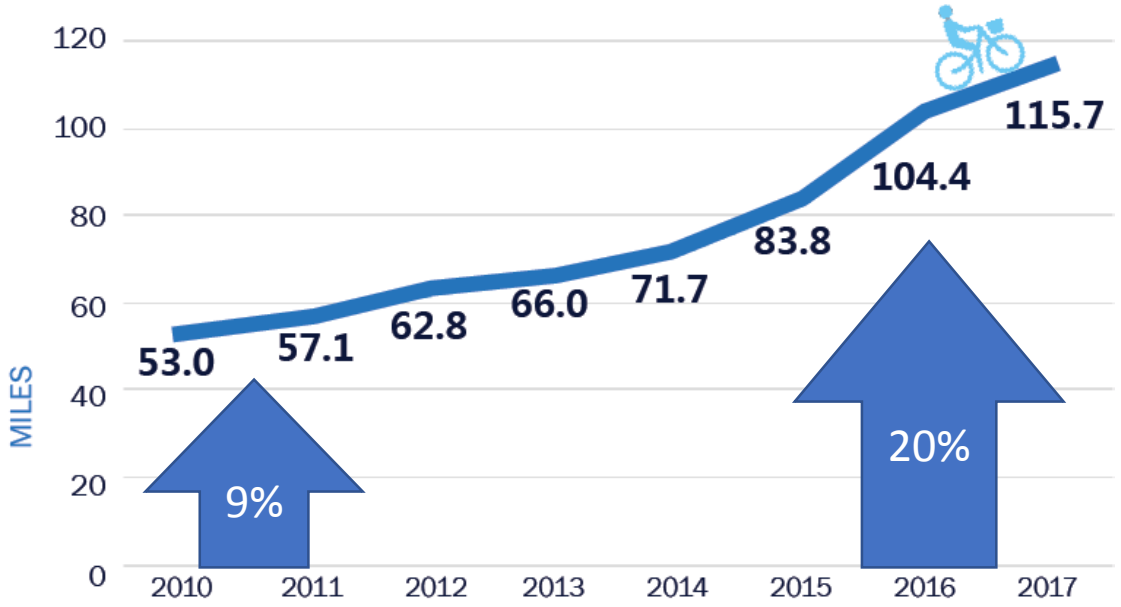
# 2017 KEY BICYCLE PROJECTS

- **PATH Parkway**
- BeltLine Westside Trail
- Ralph David Abernathy Boulevard Bike Lanes
- Mural Bike Rack & Bicycle Art Programs

# BIKE INFRASTRUCTURE MILEAGE




# Bike Counter 2017 Daily Ridership Averages

| COUNTERS INSTALLED IN 2016 | |
|---|---|
| 10th Street & Monroe Drive | **1137** |
| 10th Street & Myrtle Street | **507** |
| 5th Street (Tech Square) | **287** |
| Peachtree Street | **119** |
| Peachtree Center Avenue | **102** |

# Relay Bike Share

25,000+ riders
86,500 trips
49,000 hours
193,400 miles

# Past Selection Processes: City of Atlanta Bike Plan 1995

## Types of Bicycle Facilities

### Class I – MultiOUSe Greenway Trail

### Class II- Bike Lanes, Bike Shoulder, Wide Curb Lane

### Class III - Shared Travel Lane

**BICYCLE FACILITIES ON DIFFERENT TYPES OF STREETS**

**Arterials and Major Collectors**

The most appropriate facilities for cyclists on arterial and major collector streets are bike lanes. Bike lanes provide separate facilities for cyclists, decrease the stress level of the cyclist, increase safety, and expand the awareness of motorists that cyclists have a right to the road. Some roadways cannot physically provide for bike lanes due to constraints, such as existing buildings or environmentally sensitive areas. In these cases, it might be possible to narrow or remove travel or parking lanes to accommodate the bike lane. A wide curb lane, however, can be substituted as a last resort. If a wide curb lane is used on an arterial or major collector, reducing the travel speed can create a safer and more comfortable environment for the cyclists.

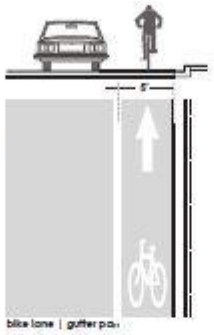
**Minor Collectors and Local Streets**

The most appropriate facilities for cyclists on minor collectors and local streets are wide curb lanes and shared lanes, since the traffic speeds and volumes are lower on such streets. Bike lanes are appropriate on minor collectors if high traffic volumes and speeds require separate facilities, if the street connects to other existing bike lanes, or if particular destination points generate levels of high bicycle traffic.

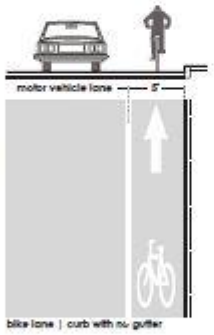
# Past Selection Processes: City of Atlanta Bike Plan 2008

## 1.5 GUIDANCE ON BICYCLE FACILITY DESIGN

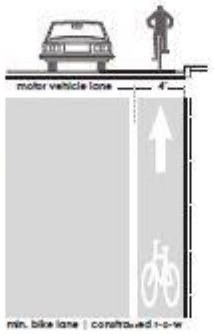
**Design Option 1: Standard 5' Bicycle Lane** (Curb and Gutter)



**Design Option 2: Standard 5' Bicycle Lane** (Header Curb)

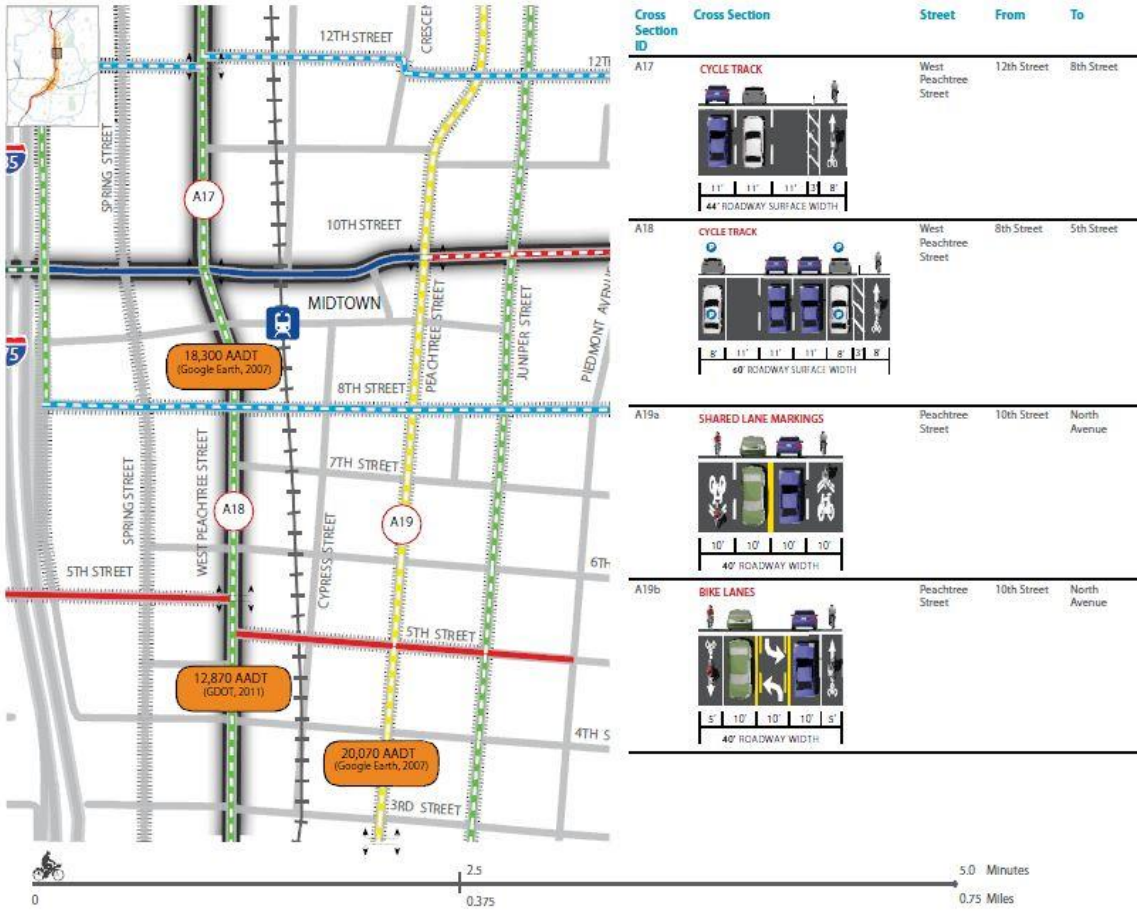


**Design Option 3: 4' Bicycle Lane** (For Constrained Street Sections)



| Where these should be used | Where they should NOT be used | Guidelines for placement |
|---|---|---|
| • Used on curb-and-gutter street sections without on-street parking.<br>• Can be striped when existing curb dimensions will allow five (5) feet of smooth surface for the bicycle lane and at least ten (10) feet of width remaining for the adjacent travel lane.<br>• This (or Design Option 2, depending on curb construction) should be used as the base design for any reconstructed streets or roads where bicycle lanes are to be added and on-street parking will not be included. Five (5) feet should always be used as the base dimension for bicycle lane width when adjacent to a travel lane. | • Do not apply if this bicycle lane will replace permitted on-street parking without the Department of Public Works first working with neighborhood residents to determine if this is an acceptable design option.<br>• Do not apply if existing curb-to-curb dimensions will not allow five (5) feet of bike lane in paved surface AND at least ten (10) feet of width in adjacent travel lane. | • Place one marking (bicycle symbol and arrow) immediately after a signalized intersection and at least one per 500 feet.<br>• Refer to MUTCD (2003 edition) Chapter 9C, Figure 9C-6 for appropriate design and spacing of the bicycle symbol and arrow.<br>• At intersections with dedicated right turn lanes, bicycle lanes should always be placed between the turn lane and the right-most through travel lane. |
| • Used on header curb sections without on-street parking.<br>• Can be striped when existing curb dimensions will allow five (5) feet of smooth surface for the bicycle lane and at least ten (10) feet of width remaining for the adjacent travel lane.<br>• This (or Design Option 1, depending on curb construction) should be used as the base design for any reconstructed streets or roads where bicycle lanes are to be added and on-street parking will not be added. Five (5) feet should always be used as the base dimension for bicycle lane width when adjacent to parking. | • Do not apply if this bicycle lane will replace permitted on-street parking without the Department of Public Works first working with neighborhood residents to determine if this is an acceptable design option.<br>• Do not apply if existing curb-to-curb dimensions will not allow five (5) feet of bike lane in paved surface AND at least ten (10) feet of width in adjacent travel lane. | • Place one marking (bicycle symbol and arrow) immediately after a signalized intersection and at least one per 500 feet.<br>• Refer to MUTCD (2003 edition) Chapter 9C, Figure 9C-6 for appropriate design and spacing of the bicycle symbol and arrow.<br>• At intersections with dedicated right turn lanes, bicycle lanes should always be placed between the turn lane and the right-most through travel lane. |
| • Used on header curb sections without on-street parking.<br>• Should only be used when existing curb dimensions will allow only four (4) feet of smooth surface for the bicycle lane and at least ten (10) feet of width remaining for the adjacent travel lane (i.e. total width from centerline to curb is 14 feet).<br>• May be used when centerline-to-curb width is up to 16 feet if travel lane widths up to 12 feet need to be preserved. If centerline-to-curb width is greater than 16 feet, a five (5) foot bicycle lane should be used.<br>• When streets are reconstructed and bicycle lanes will be added, a five-foot width should always be used unless there are physical limitations or cost-related reasons that would make that width impractical. | • Do not apply if this bicycle lane will replace permitted on-street parking without the Department of Public Works first working with neighborhood residents to determine if this is an acceptable design option.<br>• Do not apply if existing curb-to-curb dimensions will not allow four (4) feet of bike lane in paved surface AND at least ten (10) feet of width in adjacent travel lane. | • Place one marking (bicycle symbol and arrow) immediately after a signalized intersection and at least one per 500 feet.<br>• Refer to MUTCD (2003 edition) Chapter 9C, Figure 9C-6 for appropriate design and spacing of the bicycle symbol and arrow. |

# Selection Gap Filler: Cycle Atlanta 1.0 and 2.0 (2013 and 2018)

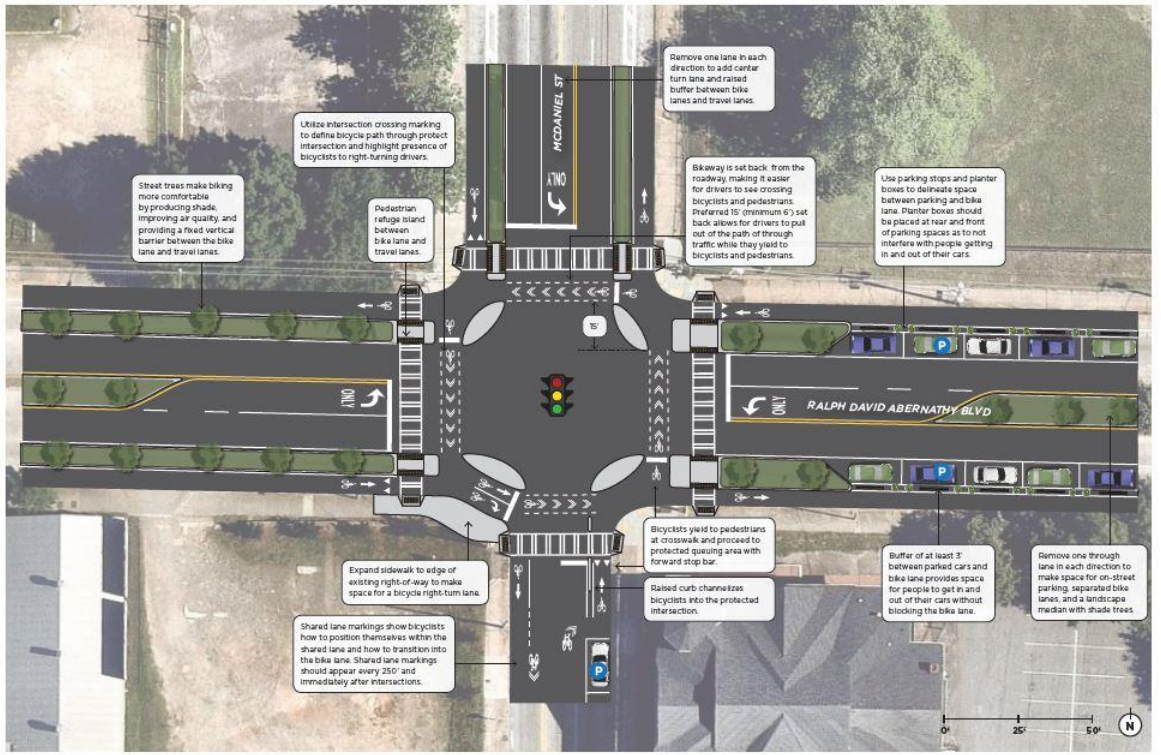



| Cross Section ID | Cross Section | Street | From | To |
|---|---|---|---|---|
| A17 | CYCLE TRACK<br>44' ROADWAY SURFACE WIDTH | West Peachtree Street | 12th Street | 8th Street |
| A18 | CYCLE TRACK<br>60' ROADWAY SURFACE WIDTH | West Peachtree Street | 8th Street | 5th Street |
| A19a | SHARED LANE MARKINGS<br>40' ROADWAY WIDTH | Peachtree Street | 10th Street | North Avenue |
| A19b | BIKE LANES<br>40' ROADWAY WIDTH | Peachtree Street | 10th Street | North Avenue |



West End Station

MCDANIEL ST + RALPH DAVID ABERNATHY BLVD

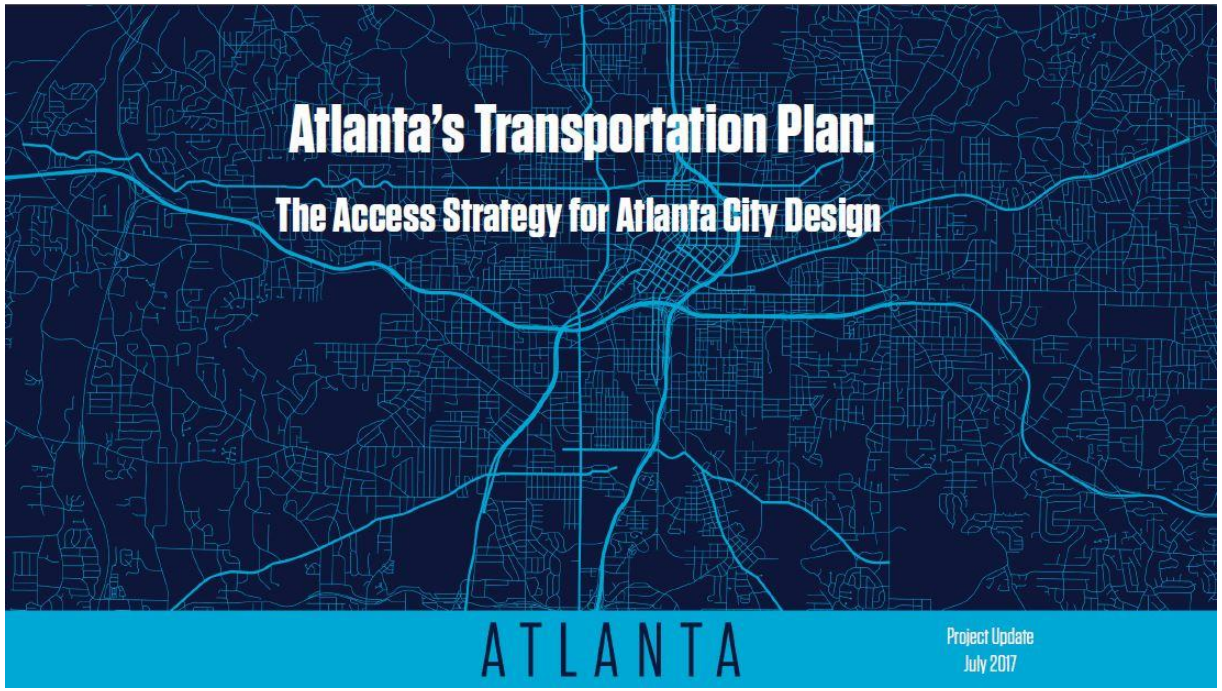


# Current Selection Processes Background: City of Atlanta Move Atlanta 2015

## Move Atlanta Design Manual

- Inspired by LA's Model Street Design Manual
- Consolidated all previous roadway manuals in the City of Atlanta (13 manuals)

# Current Selection Processes: City of Atlanta Transportation Plan 2018




## DESIGN GUIDANCE FOR CHOOSING A FACILITY TYPE

Figure 7-1 National Association of City Transportation Official Facility Selection Guidance

**Contextual Guidance for Selecting All Ages & Abilities Bikeways**

| Roadway Context | | | | All Ages & Abilities Bicycle Facility |
|---|---|---|---|---|
| Target Motor Vehicle Speed* | Target Max. Motor Vehicle Volume (ADT) | Motor Vehicle Lanes | Key Operational Considerations | |
| *Any* | | *Any* | *Any of the following:* high curbside activity, frequent buses, motor vehicle congestion, or turning conflicts† | **Protected Bicycle Lane** |
| < 10 mph | Less relevant | No centerline, or single lane one-way | Pedestrians share the roadway | **Shared Street** |
| ≤ 20 mph | ≤ 1,000 – 2,000 | | < 50 motor vehicles per hour in the peak direction at peak hour | **Bicycle Boulevard** |
| ≤ 25 mph | ≤ 500 – 1,500 | | | |
| | ≤ 1,500 – 3,000 | Single lane each direction, or single lane one-way | Low curbside activity, or low congestion pressure | **Conventional or Buffered Bicycle Lane, or Protected Bicycle Lane** |
| | ≤ 3,000 – 6,000 | | | **Buffered or Protected Bicycle Lane** |
| | Greater than 6,000 | | | **Protected Bicycle Lane** |
| | *Any* | Multiple lanes per direction | | |
| Greater than 26 mph† | ≤ 6,000 | Single lane each direction | Low curbside activity, or low congestion pressure | **Protected Bicycle Lane, or Reduce Speed** |
| | | Multiple lanes per direction | | **Protected Bicycle Lane, or Reduce to Single Lane & Reduce Speed** |
| | Greater than 6,000 | *Any* | *Any* | **Protected Bicycle Lane, or Bicycle Path** |
| High-speed limited access roadways, natural corridors, or geographic edge conditions with limited conflicts | | *Any* | High pedestrian volume | **Bike Path with Separate Walkway or Protected Bicycle Lane** |
| | | | Low pedestrian volume | **Shared-Use Path or Protected Bicycle Lane** |

*While posted or 85th percentile motor vehicle speed are commonly used design speed targets, 95th percentile speed captures high-end speeding, which causes greater stress to bicyclists and more frequent passing events. Setting target speed based on this threshold results in a higher level of bicycling comfort for the full range of riders.

†Setting 25 mph as a motor vehicle speed threshold for providing protected bikeways is consistent with many cities' traffic safety and Vision Zero policies. However, some cities use a 30 mph posted speed as a threshold for protected bikeways, consistent with providing Level of Traffic Stress level 2 (LTS 2) that can effectively reduce stress and accommodate more types of riders.[18]

‡Operational factors that lead to bikeway conflicts are reasons to provide protected bike lanes regardless of motor vehicle speed and volume.

(Credit: Designing for All Ages & Abilities, National Association of City Transportation Officials)

# THANKS!

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