CHAPTER FIVE
ALTERNATIVE TRANSPORTATION FACILITY & DESIGN GUIDANCE
Before discussing some of the potential recommendations, it is necessary to address the potential types of alternative transportation investments that can be implemented.

**Sidewalks** - Sidewalks are typically constructed for pedestrians using concrete adjacent to vehicular roadways. Sidewalks are separated from the roadway through at least a curb or gutter but ideally through some type of landscape buffer or (in more urban settings) through an enhancement and/or furniture buffer. The width and design of sidewalks will vary depending on a number of factors including the type of adjacent street, pedestrian demand, and even the surrounding built environment. In all cases, it is critical to provide adequate sidewalk width so that at least two people can walk side-by-side with a third passing easily. At a minimum, the Americans with Disabilities Act (ADA) requires a four foot width with five foot wide passing zones every 200 feet. GDOT recommends a simple minimum sidewalk width of five feet. Sample design approaches for suburban and urban areas are provided in Figures 18 through 21.

**Sharrows** – Sharrows are street markings indicating that a travel lane is specifically intended to be a ‘shared-lane’ that can be both used by both automobiles and bicycles. When implementing, they should be installed immediately after any intersection and every 200 feet thereafter. The 2009 MUTCD states that sharrows:

- Assist bicyclists with lateral positioning in a shared lane with on-street parallel parking in order to reduce the chance of a bicyclist’s impacting the open door of a parked vehicle,
- Assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane,
- Alert road users of the lateral location bicyclists are likely to occupy within the traveled way,
- Encourage safe passing of bicyclists by motorists, and
- Reduce the incidence of wrong-way bicycling.

While not a standard, the MUTCD also advises guidance that sharrows not be installed on roadways with speed limits of more than 35 miles per hour. An example of a sharrow application is provided in Figure 22.

**Bicycle Lanes** – Bicycle lanes are areas of the roadway dedicated for bicycle-only traffic. The bike lane is designated though pavement markings and signage, such as that shown in MUTCD sign R3-17. These lanes are typically 4 feet to 7 feet wide, located on the right side of the roadway, and are used in the same direction as vehicular traffic. At intersections and points of conflict, special care must be made in the design to maximize safety for the bicyclists – the MUTCD has several standards and guidelines relating to best practices. An example of a bike lane application is shown in Figure 23.

**Cycle Tracks** – Cycle tracks differ from bicycle lanes in that they are physically separated (either by striping or raised pavement) from the roadway. Cycle tracks vary widely in width depending on use and likelihood of passing bicyclists. They may also be constructed as two-way facilities in certain situations. As with bike lanes, at intersections and points of conflict, special care must be made in the design to maximize safety for the bicyclists. Example applications of cycle tracks are shown in Figures 24 and 25.

**Multi-Use Trails** – Multi-use trails are designated for both pedestrians and bicyclists. These modes may have separated pathways from each other depending on the intensity of anticipated use. Multi-use trails may be constructed along abandoned railways (as the Fall Line Trace was), adjacent to rivers (such as the Riverwalk) or streams, and along roadways. As with bike lanes and cycle tracks, at intersections and points of conflict, special care must be made in the design to maximize safety for the bicyclists. Multi-use trails should be at least 8 feet wide to allow for two-way bicycle traffic but are recommended to be at least 12 feet wide where heavy use is anticipated. Example applications of Multi-Use Trails are shown in Figures 26 and 27.

**Road Diet** – Road diets are projects in which vehicular capacity along the corridor is reduced and replaced by a variety of the previously discussed amenities. In order to minimize impacts to traffic flow, road diets are only appropriate when excess vehicular capacity is identified.

Additionally, design elements must be fully compliant with the design standards and guidelines associated with the American Disabilities Act (ADA) which can be accessed via the internet at [http://www.ada.gov/2010ADAsstandards_index.htm](http://www.ada.gov/2010ADAsstandards_index.htm). As it pertains to transportation, this federal law requires that disabled people are accommodated in the design of facilities including the provision of curb ramps at intersections.
Figure 18 – Suburban Local Road Sidewalk Example
Figure 19 – Suburban Collector and Arterial Sidewalk Example
Figure 20 – Urban Core Sidewalk (Minimum Width Example)
Figure 21 – Urban Core Sidewalk (Maximum Width Example)
Figure 22 – Sharrow Application Example
Figure 23 – Bike Lane Application Example
Figure 24 – Two Way Cycle Track Application Example
Figure 25 – Raised Cycle Track Application Example
Figure 26 – Basic Multi-Use Trail Application Example
Figure 27 – Separated Multi-Use Trail Application Example