

# Prioritization

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The Implementation Plan chapter of *Shifting Gears: A Bicycle and Pedestrian Master Plan* includes the completion of infrastructure modifications. This chapter presents the methodology employed to achieve such prioritization.

For this master planning effort, three separate priority lists were developed:

**Sidewalk Construction, Trail Construction and Bicycle Facilities within the Roadway.** The lists were developed separately because these facilities are typically funded by different funding sources. The lists prioritize improvements to provide guidance and to prudently direct the City's limited resources to those segments that demonstrate the highest cost-benefit.

There are two separate methodologies presented. The first addresses facilities within the roadway environment (sidewalks and on-road bicycle facilities). The second methodology addresses trail prioritization.

## [Sidewalk Construction and Bicycle Facilities within the Roadway](#)

Most bicyclists and pedestrians have the same origins, destinations and routes as those using the motor vehicle network. An inclusive and connected roadway system that includes non-motorized vehicles (bicyclists and pedestrians) is an unmistakable solution to achieve the overall vision of the Bicycle and Pedestrian Master Plan. The roadway network for this plan includes collector and arterial roadways as well as select local roads within the City of Clearwater. Local roads that provided connectivity were selected for this Master Plan to provide convenient travel alternatives. Though most local roadways were not included, many function as good bicycle and pedestrian facilities due to their characteristics (such as low traffic volume) and thus, are important to the City's overall network.

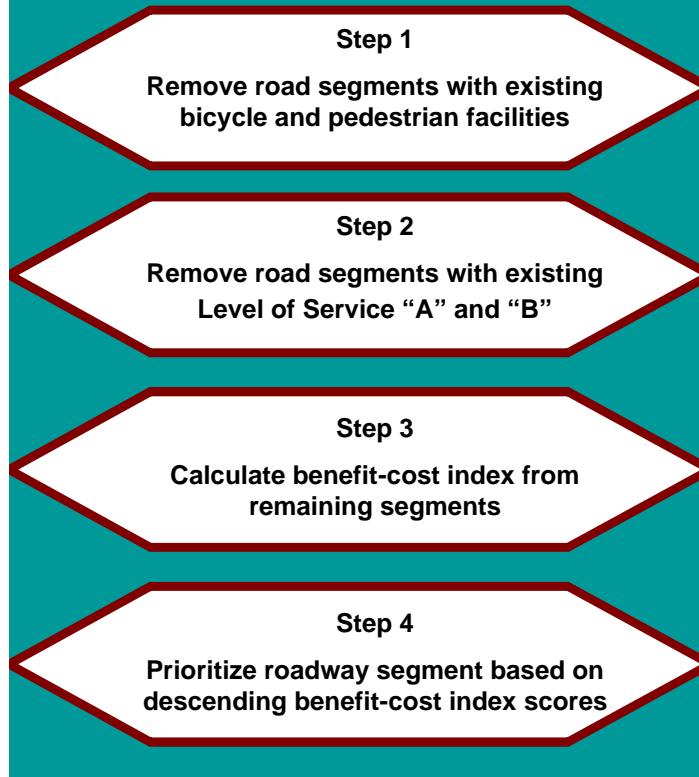
The steps utilized in this prioritization process are as follows:

### **Step 1**

After analysis, roadway segments with existing facilities (designated bicycle lanes and sidewalks) were removed from the priority list. These roadways already accommodate



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bicyclists and pedestrians to the greatest extent possible.

## Step 2

Remove roadway segments that either possess a Level of Service of "A" or "B". This Master Plan recommends the adoption of a minimum level of service of "B" for both bicyclists and pedestrians. As such, roadways that meet or exceed this standard already accommodate bicyclists and pedestrians were removed among the list of projects to prioritize.

## Step 3

The third step in the prioritization process is the calculation of a Benefit-Cost Index. Benefit-Cost indices are traditionally used as tools for infrastructure investment planning. They provide an indication of the relative value of improving one facility relative to other facilities. The Index is an objective prioritization methodology that helps select among candidate projects based on several factors.

Individual factors of the Benefit-Cost index are the criteria determined by the Bicycle and Pedestrian Master

Plan Task Force. Those in the numerator (Bicycle Level of Service, Pedestrian Level of Service, Demand) are the "benefits" while the denominator is the "cost".

For this Master Plan, the Benefit-Cost index equation is as follows:

$$\frac{(.5) \Delta \text{Level of Service} + (.5) \text{Demand}}{\text{Cost}}$$

Where:

- "Δ Level of Service" is the difference between the Plan's target bicycle and pedestrian level of service grade ("B" or 2.5 numerically) and each roadway segment's existing bicycle level of service grade.
- "Demand" is the potential bicycle activity along a particular road segment
- "Cost", which is the particular roadway segment's bicycle facility construction cost (per mile).
- The terms (.5) were the weighting decided for the numerator by the Bicycle and Pedestrian Master Plan Task Force.

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## Step 4

The final step in the prioritization process, subsequent to calculating the Benefit-Cost index for each roadway segment, is to rank the roadway segments in descending order of Benefit-Cost Index. The resulting bicycle and pedestrian prioritization lists are presented directly following this chapter.

As these lists are meant to provide planning guidance, the City's current sidewalk program can be directed toward the priority list. However, bicycle facility improvements are accomplished best in conjunction with reconstruction, new construction or resurfacing programs.

## Trail Prioritization

Potential trails were identified through the Community Involvement Plan and by assessing the gaps in the existing trail system. As demonstrated in the Existing Trail Facilities section of the Master Plan, City of Clearwater residents enjoy many existing trail segments.

Trails were first separated into two separate categories: Primary and

Secondary trails. Primary trails function as the main arteries of our trail system, while secondary trails support the primary trails. Each list was also prioritized based on a cost-benefit index. The numerator for this equation consists of the following factors:

- A trail segment identified in a previous planning document (PI)
- Availability of right-of-way (ROW)
- Connectivity either the Pinellas Trail, Progress Energy Trail or the Clearwater East-West Trail (Con)

For this Master Plan, the benefit-cost index for trail segments is demonstrated below.

$$\frac{(.33) PI + (.33) ROW + .33 (Con)}{Cost}$$

Consistent with the other priority lists, the segments are ranked in descending order. The resultant trail priority list is presented at the end of this Chapter.



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## Conclusion

Three separate priority lists were developed (Sidewalk Construction, Trail Construction and Bicycle Facilities within the Roadway) for this master planning effort. The lists (Appendix D, Appendix E and Appendix F) prioritize improvements so that the City can direct its limited resources and existing programs (sidewalk, resurfacing, reconstruction) effectively to the segments that exhibit the greatest reward level.

