APPENDIX O: COST ESTIMATES

General (order of magnitude) cost estimates were developed for the main components of this Plan. The estimated cost to implement this Plan over 10 years is approximately $240 million (based on 2007 dollars). The Plan cost includes approximately $35.7 million for on-road bicycle facilities, $7.0 million for roadway crossing improvements, $63.7 million for multi-use trail facilities (includes the Burke-Gilman Trail missing link), $80.6 million for major capital projects (e.g., bicycle and pedestrian bridges), $46.5 million for bicycle facility maintenance, and $5.9 million for other projects (e.g., bicycle parking, bicycle maps, bicycle education, etc.). The level of investment that will be required in order to implement this Plan is relatively modest in comparison to other transportation facilities.

The general costs were developed by calculating rough quantities and applying unit costs (based on 2006 City of Seattle cost data). Costs were then translated into per mile or per facility costs, as explained in the spreadsheet associated with this appendix. For bicycle facilities that may be implemented with a larger project, the estimate represents the marginal cost required to develop the bicycle facility. For example, if bicycle lanes are added to a roadway during a repaving project, the estimate includes just the cost to implement the bicycle lanes (e.g., new pavement markings and bicycle related signs), but it does not include the new pavement.

Estimation of the costs involved several assumptions, including:

- Cost estimates assume that most on-road bicycle facilities will be added as a component of an overall project to improve the roadway for all types of users; few roadway projects will be done for the exclusive purpose of adding bicycle facilities.
- Costs are based on 2007 dollars. They may change due to future economic conditions.
- Costs assume that facility projects will be implemented by contractors through a bidding process. They may vary if projects are done in-house.
- Facility costs include construction and design.
- All construction projects include a contingency, typically estimated at 25 percent of the construction cost.
- Design and construction costs may vary depending on the actual construction project size (e.g., project limits) and overall cost. Implementation will likely be more costly if bicycle improvements are done as many small projects compared to a smaller number of large projects.
- During the early design stages of projects, maintenance of traffic, mobilization, potential utility impacts, drainage, and property acquisition costs can be based on a percentage of total project cost. These costs are not included in the estimates because specific projects are not yet defined and those project limits are unknown.
- Costs for adding new pavement to create on-road bicycle facilities do not include curb and gutter, drainage, erosion and sediment control, and grading. These costs are not included in the estimates because specific projects are not yet defined and those project limits are unknown.
- Costs for right-of-way acquisition are not included. These costs are not included in the estimates because specific projects are not yet defined.
- Costs for new multi-use trail construction include pavement, drainage, erosion and sediment control, and grading, but not right-of-way acquisition.

Regulatory and warning signs for bicycle lanes and on-street parking are included in the on-road bicycle facility costs. Bicycle wayfinding signs are also included in the on-road bicycle facilities category.

Costs are classified as construction costs only when new facilities are developed. Costs for restriping roadways, repaving trails, replacing signs, and other similar activities are considered to be maintenance costs.

Cost calculations assume that bicycle facility improvements are made on both sides of the street. Costs are generally over-estimated for the small portion of recommendations on one-way streets.

#