

The Regional Bicycle and Pedestrian Network in 2040

The *Bicycle and Pedestrian Plan for the National Capital Region* includes 643 bicycle and pedestrian facility improvement projects from across the region. If every project in the plan is implemented, in 2040 the region will have added approximately 2100 miles of bicycle lanes and 2000 miles of shared-use path. The overall network length (allowing for some dual bike lane/sidepath facilities) will increase by approximately 4000 miles.

In addition, hundreds of miles of signed on-road bicycle routes will be created. In many cases roads are designated for improvement as bicycle routes, but the exact nature of the improvement – bike lane, widened shoulders, wide outside lane, shared lane markings, signs – has not yet been determined.

Thirty-one major pedestrian intersection improvements will be carried out, and fifteen pedestrian/bicycle bridges or tunnels will be built. Hundreds of intersections will receive new crosswalk signals, and ongoing sidewalk improvement programs will retrofit sidewalks in areas where they are missing.

A new bicycle and pedestrian crossing over the Potomac will be created at the American Legion Bridge, and the bridges over the Anacostia River will be improved for pedestrians and bicyclists. In addition, twenty-seven major streetscaping projects will improve pedestrian and bicycle access and amenities in places such as Atlantic Boulevard, Tysons, Maryland Avenue NE, and downtown Bethesda.

Table 7-1 below summarizes the new facility mileage that will be added by 2040 if this plan is implemented in full.

Table 7-1: Miles of Bicycle/Pedestrian Facilities in the Washington Region						
Facility Type	Total in 2005	Completed 2006- 2010	Completed May June 2010 May 2014	Planned New Facilities/ Upgrades	Total	in
Bicycle Lane	56	35	45	2090	2226	
Shared-Use Path	490	53	50	1990	2583	
Total	546	88	95	4080	4809	

Progress Since 2010

Fifty-four projects from the 2010 Bicycle and Pedestrian Plan have been completed. This total does not count projects on which significant progress has been made, unless for reporting purposes the project was split into phases, and the earlier phases reported as complete.

Ten major pedestrian intersection improvements, seven streetscaping projects, and two pedestrian bridges or tunnels were completed.

Notable projects finished since 2010 include Capital Bikeshare in the District of Columbia and Arlington, and the L Street NW protected bike lane in DC.

Mileage of sidewalk construction was not tracked, but there are ongoing sidewalk retrofit and pedestrian safety programs in all the major inner jurisdictions. Privately provided facilities are generally not counted.

The region is currently adding about twelve miles of shared-use path and eleven miles of bike lane per year. At the current pace of construction the region will have completed about 420 miles of shared use path, and 385 miles of bike lane by 2040, or about one fifth of the planned network.

However, it should be noted that the planned network is twice as large as the one in the 2010 plan. The pace of implementation is increasing, but the agency plans are now much more ambitious.

Funding

While many of these projects have no identified funding source, and are not expected to be built soon, some are very close to being realized. Of the 485 planned projects, seventeen are under construction, ninety-one are fully funded, and another ninety-nine have some funding identified.

Under “Complete Streets” policies, most bicycle and pedestrian projects are now built as part of larger transportation projects. Of the transportation projects in the [FY 2013-2018 Transportation Improvement Program](#), 133 include some form of bicycle and pedestrian accommodation, while 30 projects were identified as being specifically bicycle or pedestrian.

Cost Estimates

Cost estimates were provided by the agencies for about 30% of the planned projects. For most of the planned projects that have not yet been designed, no meaningful project-level estimates can be made. Many of the projects which have cost estimates are part of a larger project. In a combined project it is nearly impossible to disentangle the portion of the cost attributable to bicycle or pedestrian features.

Given the difficulties of getting actual cost estimates for each project, we have imputed a range of regional costs for the plan based on an [assumed typical cost per mile](#) or per project.¹ The total cost of improvements listed in the plan is estimated at about \$2 billion (2014 dollars).

Table 7-2 Imputed Costs for Selected Bicycle Facilities (in thousands of dollars)				
Facility Type	Imputed Cost Range per Mile or per Project	Average	Miles or Number of Projects	Imputed Cost
Shared Use Path	\$300 - \$4,000	480	1990 miles	\$500,000 - \$6,500,000
Bicycle Lane	\$5 \$500	133	2090 miles	\$7000 - \$700,000
Pedestrian/Bicycle Bridge/Tunnel	\$1,000 - \$6,000		15 projects	\$15,000 - \$95,000
Pedestrian Intersection Improvement	\$300 - \$600		31 projects	\$10,000 - - \$15,000
Streetscape	\$2,000 - \$4,000		27 project	\$54,000 - \$108,000
Total				\$600,000 - \$6,000,000

No comparable “financially unconstrained” plan exists for other types of transportation projects over the next 30 years. The six-year, FY 2013-2018 Transportation Improvement Program includes \$15.6 billion worth of transportation projects and programs, an amount which is widely seen as inadequate for the region’s transportation needs. Assuming the region continues to fund transportation at the same real level for the next 30 years, fully funding the bicycle and pedestrian plan over the same period would cost about 5% of the total transportation budget.

Explanation of Project listings

Appendix A lists the plan projects, organized alphabetically by state and jurisdiction. Facility type, responsible agencies, limits, length, and cost are also included. Note that due to the nature of bicycle and pedestrian facility improvements, the list in Appendix A is expected to change annually, as projects are added or removed.

The project list is drawn from a database that includes more extensive information, including project status, agency project ID number, facility lengths, facility alignment, description, project status, project web site, date of (projected) completion, date the record was last updated, and project manager name and contact information. Agency

¹ *Costs for Pedestrian and Bicyclist Infrastructure Improvements*” UNC Highway Safety Research Center, October 2013.

staff may enter via a password-protected web site to enter, edit, and delete project information, making the process of keeping the database accurate simple. A public access version of this on-line version of this database can be found at <http://www.mwcog.org/bikepedplan/>.

Over time the database has proven useful in tracking the progress of bicycle and pedestrian projects at a regional level. A sample database entry and a data dictionary are found in Appendix B.

This project list is intended to be a list of significant planned bicycle and pedestrian projects in the Washington region. Agencies were encouraged to submit projects for inclusion if they were one mile or more in length, or cost more than \$400,000. Small sidewalk projects are not included unless they were part of a larger pedestrian or bicycle project.

Figures 7-1 and 7-2 show the location of major bicycle and pedestrian projects throughout the region. Pedestrian/bicycle bridge or tunnel projects, multi-use paths greater than three miles in length, and projects estimated by their sponsors to cost more than \$500,000 are mapped, except for area projects that cannot be mapped in a meaningful way. About a quarter of the plan projects are mapped. Project details can be found in the project list in Appendix A, which groups the projects by state and jurisdiction.