8 Bike and Walk Networks

8.1 Coding Bike Facilities into the Highway Network

8.1.1 Off-Street Bicycle-Pedestrian Facilities
Exclusive bike or walk links are coded into the highway network to reflect more detailed skims across features like parks, etc., where biking or walking is allowed, but where no motorized access is allowed.

Off-street bike paths are separate links in the model network, coded with a CAPCLASS value of 7 and BIKE value of 1. Normally, the free-flow SPEED value for these off-street bike-walk links is 3mph. Use these links to represent any off-street bike and pedestrian paths, bridges, etc.

8.1.2 On-Street Bicycle Facilities
On-street bicycle facilities (i.e., on a street where motor vehicles can operate) are represented by the BIKE value in the highway network. The values for each on-street bicycle facility type are listed below. A link’s bicycle facility type influences the perceived cost of bicycling on that link, as described below in the section on Building Bike and Walk Skims.

BIKE values in the highway network correspond to the following facility types:

- 0 = bikes are allowed, but no signage or other special infrastructure exists for cyclists.
- 1 = off-street bike-ped path. Motorized vehicles are not allowed on these links. Only off-street bike facilities should have a BIKE value of 1.
- 2 = Class 2 on-street painted bike lane.
- 3 = Class 3 on-street bike route, usually indicated by “bike route” signs and/or shared-lane markings, known as “sharrows”.
- 8 = Class 2 painted bike lane, but on the arterial overpass or underpass of a freeway interchange. These are coded separately from BIKE values of 2 to capture the higher levels of stress associated with cycling through freeway interchanges.
- 9 = The arterial overpass or underpass of a freeway interchange. These are coded separately from BIKE values of 0 to capture the higher levels of stress associated with cycling through freeway interchanges.