



DRAFT PRIORITIZATION CRITERIA

Each of the 9 regional priority bikeway corridors identified in District 5 will be prioritized using the criteria summarized below. These criteria are consistent with regional goals. The following criteria, summarized in this document, are intended to provide a comparison of the performance of each bikeway corridor relative to one another.

1. Trip Demand

Based on the Bicycle Priority Index (BPI), a measure of population and employment density, land use, local schools, bicycle amenities (e.g. beginning/end of trip facilities) and transit amenities that influence bicycle usage.

The OCTA Bicycle Priority Index GIS metric is a score per acre, where higher numbers represent a higher estimated potential demand and therefore a higher priority for treatment.

2. Level of Traffic Stress (LTS)

Addresses the perceived safety related to traffic speed, number of lanes and existing bikeway facility type. In addition to serving as a proxy for safety, the existing bikeway factor is a measure of existing network supply.

Stress increases with traffic speed, number of lanes and lack of existing bikeways. LTS scores can range from 1 (low stress) to 4 (high stress). High stress routes are prioritized for treatment. The District 1 & 2 study used traffic volumes to determine traffic stress. The District 5 study can emulate the same LTS criteria based on available data.

3. Safety Factor (Bike Collisions)

Address safety through five years of reported data, normalized by crashes per mile. Unlike automobile crashes, the lower volume of bike crashes and lack of robust, long term exposure data (i.e. number of bicyclists using each corridor) means that this dataset is not as statistically sound. However, it is still commonly reported and easily understood.

For each corridor, a 100' buffer IS defined and all reported collisions for the five year period up to and including 2012 counted. If no facility exists, the buffer will be expanded to 2000' to incorporate adjacent roadways. The total reported collisions are divided by corridor length in miles. Corridors with higher collisions per mile are prioritized for treatment.

4. Completes the Corridor

Proportion of the corridor that is already built to at least minimum Caltrans standard for the bikeway type that is proposed – this helps to prioritize corridors which are already partially built. This factor is also part of the LTS Index (criterion 2).

Assessed by a ratio of proposed length to total length. A high ratio (near 100%) means that the corridor has no existing bikeways to build on. Corridors with existing facilities are a higher priority for treatment.

5. Completes the Network

Accounts for the proportion of the corridor that is already built to at least minimum Caltrans standard for the bikeway type that is proposed – this helps to prioritize corridors which are already partially built. This factor is also part of the LTS Index (criterion 2).

Assessed by a ratio of proposed length to total length. A high ratio (near 100%) means that the corridor has no existing bikeways to build on. Corridors with existing facilities are a higher priority for treatment.



6. Public Support

Incorporates public priorities through a Public Demand Index. Weighting may be reduced depending on the extent of public interest.

Combination of survey and workshop “votes”

7. Constraints

Tally of physical constraints such as right of way, on-street parking, freeway crossings, interchanges, railroad crossings and other “chokepoints”. Fewer constraints results in a higher score as the corridor will be easier to implement.

Subjective assessment of parking impacts and right of way needs (pinch points/chokepoints). Points assigned 1, 2, 3, or 4. 1 is no constraints, 4 is high number of constraints. Lower scoring corridors are considered easier to implement and therefore prioritized for treatment.

7a. Slope

Analyzes slope as a barrier to bicycle travel. Slope is a deterring factor for most utilitarian bicyclists while an attraction for recreational cyclists seeking more rigorous terrain for increased caloric burn. Class 1 multi-use bicycle paths should not exceed 5% grade to meet ADA standard. While there is no set standard for bicycle facility grades on existing roadways, using the following criteria can quantify segments along each corridor that may be a barrier to utilitarian bicyclists.

The average grade of the entire corridor will be scored by the criteria below.

8. Economic Efficiency

Measures the financial benefits associated with corridor, normalized by the number of anticipated users (in turn a product of the facility type and length), and divided by the rough order construction cost estimates.

Using NCHRP Report 552 methods, 1/4, 1/2 and 1-mile buffers are drawn around each corridor to obtain American Community Survey (ACS) population and journey to work mode share data. An extrapolation of all bicycle trips are made and estimates of potential ridership developed based on Class 1 path or Class 2 bicycle lane attractiveness functions defined in the NCHRP research calculated. Using the existing and estimated ridership, annual mobility, health, recreation, and reduced auto use cost saving benefits are calculated.