
WIDE PAVED SHOULDERS



Wide paved shoulders may be added to sections of existing roadways where there is a need to more safely accommodate bicycles.

DEFINITION

A paved shoulder refers to the part of the highway that is adjacent to the regularly traveled portion of the highway and is on the same level as the highway. Ideally, wide paved shoulders should be included in the construction of new highways and the upgrade of existing highways where there is a significant level of current/potential bicycle travel. A wide paved shoulder refers to additional pavement width of at least 4' that has been added to an existing roadway in order to more safely accommodate bicycles.

WHEN TO CONSIDER THIS TYPE OF FACILITY

On urban streets with curb and gutter, wide outside lanes and bicycle lanes are usually the preferred facilities. Shoulders for bicycle use are not typically provided on roadways with curb and gutter.

- On rural roadways where bicycle travel is common, such as roads in coastal resort areas, wide paved shoulders are highly desirable.
- On secondary roadways without curb and gutter where there are few commercial driveways and intersections with other roadways, many bicyclists prefer riding on wide, smoothly paved shoulders.

PRINCIPAL PLANNING CONCERNS WITH WIDE PAVED SHOULDERS

This type of facility is most frequently used in rural areas on both primary and secondary roads. Sufficient right-of-way is needed to accommodate the addition of the paved shoulders and, if necessary, to relocate drainage ditches that run parallel to the roadway.

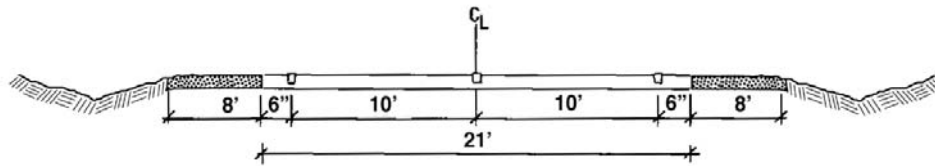
- Shoulders that are paved to accommodate bicycle traffic are generally full-depth or equal to the pavement depth of the adjacent roadway. Partial-depth paved shoulders are rarely recommended because of the tendency to crack under vehicular loads.
- Rumble strips and other devices used to alert sleepy motorists should be avoided, because they pose a safety hazard to bicyclists. If rumble strips are necessary, additional shoulder width should be provided for the bicyclists.

PLANNING AND DESIGN CONSIDERATIONS

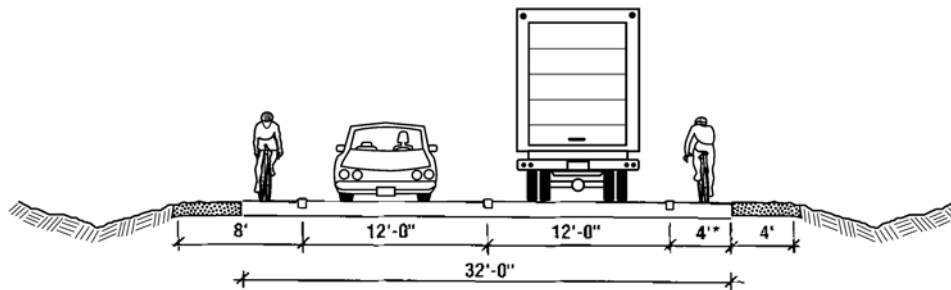
The paved shoulder should be of adequate width, smoothly paved, and have adequate strength and stability to support vehicle loads without rutting. The minimum width for a paved shoulder to accommodate bicycles is 1.2m (4 ft). Recommendations for the actual paved shoulder width may vary according to the width of the adjacent roadway, traffic volume, posted speed limit, and the presence of heavy truck traffic along the roadway. The slope of the roadway should continue across the shoulder to maintain adequate drainage. Wide paved shoulders not only benefit bicyclists, but improve safety for drivers and reduce maintenance costs.

WIDE PAVED SHOULDERS

Existing Roadway



Roadway Retrofitted with 4-Ft Paved Shoulders



* If speeds are higher than 40 mph, shoulder widths greater than 4' are recommended.