Based upon various design speeds of 18 to 30 mph and a maximum lean angle of  $20^{\circ}$ , minimum radii of curvature for Paved Shared Use Paths can be selected from Table A-5-7:

| Design Speed (V)<br>(mph) | Minimum Radius<br>(feet) |
|---------------------------|--------------------------|
| 12                        | 27                       |
| 14                        | 36                       |
| 16                        | 47                       |
| 18                        | 60                       |
| 20                        | 74                       |
| 25                        | 115                      |
| 30                        | 166                      |

## TABLE A-5-7

## MINIMUM RADII FOR PAVED SHARED USE PATHS BASED ON 20° LEAN ANGLE

Source: AASHTO – <u>Guide For The Development Of Bicycle Facilities</u>.

• Grade

Grades on shared use paths should be kept to a minimum, especially on long inclines. Grades greater than 5 percent are undesirable because the ascents are difficult for many bicyclists to climb and the descents cause some bicyclists to exceed the speeds at which they are competent or comfortable. The maximum grade of a shared use path adjacent to a roadway should be 5 percent, but the grade shall generally match the grade of the adjacent roadway. Where a shared use path runs adjacent to the roadway, grades may exceed 5 percent but shall be less than or equal to the roadway grade.

Grades on shared use paths in independent rights of way shall be limited to 5 percent maximum.

Grades steeper than 3 percent are not practical for shared use paths with crushed stone or other unpaved surfaces for both bicycle handling and drainage erosion reasons.

Options to mitigate excessive grades on shared use paths include the following:

• Use higher design speeds for horizontal and vertical curvature, stopping sight distance and other geometric features.

Deleted Information\*

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