
1031 SIGNING AND MARKING OF SHARED-USE PATHS

Bicyclists operating on public roadways are recognized in State law as having the same rights and responsibilities as operators of vehicles. Nevertheless, shared-use paths, i.e. separated from motorized vehicular traffic and also used by pedestrians, skaters, joggers, etc., are also frequently used by bicyclists. Such shared-used paths are often placed parallel and adjacent to roadways used by motorized vehicles.

Experience has shown that signing and markings along shared-use paths do not assist adjacent drivers of motorized vehicles in anticipating (and avoiding collisions with) bicyclists when the motorists turns onto an intersecting roadway with which the adjacent shared-use path also intersects. For their part, bicyclists traveling on shared-use paths which parallel public roadways have been observed to take their right-of-way cues not from signs or traffic control devices which may be placed on the shared-use path, but from the traffic movements on the parallel roadway. Bicyclists also tend to ignore STOP signs along shared-use pathways which they perceive to be unnecessary or which conflict with the right-of-way along the parallel roadway.

Moreover, signs and markings placed along shared-use paths are sometimes interpreted as implying that bicyclists are expected to use the path instead of the adjacent roadway. This can lead to harassment of bicyclists who are otherwise safely and legally using the roadway.

It is therefore intended that sidewalks or shared-use paths on State right-of-way parallel and adjacent to roadways shall not be marked or signed for the preferential or exclusive use of bicyclists. This includes the use of centerline markings, BIKE ROUTE signs, STOP or YIELD signs, or similar devices.

R5-3 NO MOTOR VEHICLE signs may be installed at entrances to sidewalks or shared-use paths.

This policy does not apply to shared-use paths on independent alignments that are not parallel and adjacent to roadways and intersect State highways at locations away from roadway intersections, or in locations where the adjacent roadway is a controlled-access freeway where bicyclists have been prohibited in accordance with PGP 1030.

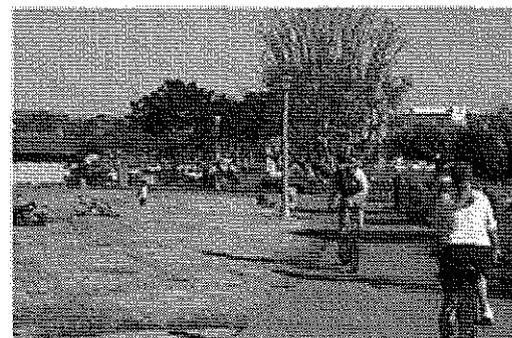
Exceptions to this policy may be made on the recommendation of the District Engineer with the approval of the State Traffic Engineer.



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Principles of Shared Use Path Planning and Design

1. Shared use paths are an addition, and complimentary, to the roadway network. They are not a substitute for providing access to streets and highways. In the past, some communities have treated the development of a shared use path as the only thing they needed to do to "provide for bicyclists" and give them somewhere to ride. However, even the most extensive trail network cannot provide access to all the origins and destinations in a community, and trail users have to be able to get to and from the trail on the regular street network.



Cyclists enjoy a wide shared use path as people relax in the adjacent park.

The 1999 edition of the

AASHTO Guide for the Development of Bicycle Facilities specifically notes that, "shared use paths should not be used to preclude on-road bicycle facilities but rather to supplement a system of on-road bike lanes, wide outside lanes, paved shoulders and bike routes."

2. Shared use paths function best when they are in their own right of way. Paths along former railroad corridors or canals work well because they are likely to have fewer intersections with roadways, and may even be completely grade separated from crossing roadways (i.e. they cross roadways on railroad trestles or other bridges/structures). By contrast, paths that have frequent intersections with roadways and/or driveways usually require path users to stop or yield at every crossing and every crossing creates potential conflicts with turning traffic.

The Idaho Department of Transportation bicycle and pedestrian planning manual provides a "suggested analysis of separated multi-use pathways" that recommends against installing a multi-use path when there are more than 8 crossings per mile, suggesting an on-street facility be provided instead. The guidance also recommends proceeding with extreme caution and perhaps switching to on street bicycle lanes when there are between 5 and 8 crossings per mile, and with one to four crossings per mile the manual encourages the designer to use special care to treat potential conflicts.

National and state design manuals strongly caution against developing shared use paths immediately adjacent to highways and to designating sidewalks as shared use facilities for a number of reasons.

Indeed, the 1999 edition of the AASHTO Guide for the Development of Bicycle Facilities recommends against such facilities in at least three separate places, and provides a list of nine reasons why. A similar list is included in almost all state design manuals, for example the New Jersey DOT's Bicycle Compatible Roadways and Bikeways. The list includes:

- a. They require one direction of bicycle traffic to ride against motor vehicle traffic, contrary to normal Rules of the Road.
- b. When the bicycle path ends, bicyclists going against traffic will tend to continue to travel on the wrong side of the street. Likewise, bicyclists approaching a bicycle path often travel on the wrong side of the street in getting to the path. Wrong-way travel by bicyclists is a major cause of bicycle/automobile accidents and should be discouraged at every opportunity.
- c. At intersections, motorists entering or crossing the roadway often will not notice bicyclists coming from their right, as they are not expecting contra-flow vehicles. Even bicyclists coming from the left often go unnoticed, especially when sight distances are poor.
- d. When constructed in narrow roadway right of way, the shoulder is often sacrificed, thereby decreasing safety for motorists and bicyclists using the roadway.
- e. Many bicyclists will use the roadway instead of the bicycle path because they have found the roadway to be safer, more convenient, or better maintained. Bicyclists using the roadway are often subjected to harassment by motorists who feel that in all cases bicyclists should be on the path instead.
- f. Bicyclists using the bicycle path generally are required to stop or yield at all cross streets and driveways, while bicyclists using the roadway usually have priority over cross traffic, because they have the same right of way as motorists.
- g. Stopped cross street motor vehicle traffic or vehicles exiting side streets or drive-ways may block the path crossing.
- h. Because of the closeness of motor vehicles to opposing bicycle traffic, barriers are often necessary to keep motor vehicles out of bicycle paths and bicyclists out of traffic lanes. These barriers can represent an obstruction to bicycles and motorists, can complicate maintenance of the facility, and can cause other problems as well.
- i. Cyclists using the path against the flow of traffic often cannot see the signs posted for traffic using the roadway without stopping and turning around.

For the above reasons, bicycle lanes, or shared roadways should generally be used to accommodate bicycle traffic along highway corridors rather than providing a bicycle path immediately adjacent to the highway.

There may, however, be some circumstances where a shared use path adjacent to a highway does make sense. Examples include:

- o where there are infrequent crossings, such as a alongside an interstate or across a long bridge
- o where the crossings can be grade separated, for example where the trail is built in conjunction with a major highway project
- o where the section of adjacent path or sidewalk is relatively short and provides a critical

connection between two paths, and the sidewalk has few driveways and intersections.

When two-way paths are located adjacent to a roadway, the AASHTO Guide recommends wide separation between the two to demonstrate to motorists and path users that the path is an independent facility. When separation of more than five feet cannot be achieved, a physical barrier at least 42 inches high between the path and the roadway is recommended.

3. Shared use paths are used by a wide variety of users traveling in both directions.

Design manuals from the 1970s and 1980s suggested that paths could be designed for the exclusive use of bicycles, and further that those paths might be used in just one direction. The reality of paths of almost any size is that they are used by a wide variety of users including pedestrians, joggers, in-line skaters, fitness walkers, people with dogs or strollers, and people travel in both directions regardless of any traffic control devices that try to say otherwise.

Consequently, design manuals now acknowledge that paths are "shared use" facilities and that they must be designed to accommodate bi-directional mixed use. The most obvious example of this is that the AASHTO Guide now recommends a minimum trail width of 10 feet (up from 8 feet) and encourages the use of 12 feet or more where heavy or mixed uses are expected.

4. Shared use paths need to be connected to the transportation system. Trails do not exist in a vacuum; users need to be able to get to and from the facility on the regular street network and the transition between the two should be safe, obvious and convenient. Similarly, connections between the trail access points and local transit service can encourage trail use and boost bus ridership. Strategies for achieving this connection include:

- signing access to the trail from the roadway network
- signing the trail at cross streets and vice versa, so that trail users know where they are and motorists recognize that they are crossing a trail
- providing on-street facilities such as striped bike lanes on streets approaching the trail
- locating bus stops close to trail access points (but not so close that a stopped bus would obscure the trail or block the trail crossing!)

5. Intersections between shared use paths and roadways are the greatest challenge.

 Great care has to be taken in managing the operation of trail/roadway intersections to ensure safety, convenience and comfort are balanced. Trail users don't want to have to stop every few hundred yards at every driveway and intersection, especially where crossing traffic volumes are very small. Nor do designers want to set up dangerous conflicts between motor vehicle traffic and trail users by providing inadequate information and traffic control at intersections. More information on intersection design is provided in the "Design Details" section 6.2.2.

6. Shared use paths should be designed based on the same engineering principles that are applied to highways. This doesn't mean that trails should always be mini-highways that flatten everything in their path — but it does mean that principles such as providing adequate sight

distances and stopping distances cannot be ignored just because these are "trails".

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