

DUPAGE COUNTY ON-ROAD BICYCLE CONNECTION GUIDELINES

(DRAFT)



Prepared For:
DuPage County Division of Transportation
Jack T. Knuepfer Administration Building
421 North County Farm Road
Wheaton, Illinois 60187

August 2006



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I. INTRODUCTION

DuPage County provides in excess of 60 miles of bicycle-accessible off-road trails throughout the county. These trails, including the Great Western Trail and the four branches of the Illinois Prairie Path, link several communities and points of interest together under one system.

As bicycle usage increases in the county, on-road bicycle facilities will be needed to supplement the off-road path system. DuPage County has defined three types of on-road bicycle facilities for this purpose: bicycle lanes, bicycle routes and bicycle connections. Of the three, bicycle lanes are the highest form of on-road bicycle facilities, with striped and signed lanes specifically set for bicycle use. Bicycle routes are located on roadways that do not have bicycle lanes, but are still appropriate for casual bicyclists. Each of these types of facilities is discussed in greater detail in the DuPage County On-Road Bicycle Guidelines¹.

Bicycle connections are located on roadways that may only be appropriate for experienced bicycle riders. They may be needed to complete connectivity between other off-road paths, bicycle lanes, bicycle routes or other destinations. But bicycle connections do not meet the guidelines for on-road bicycling that is appropriate for casual bicyclists.

The figure below illustrates the defined types of bicycle facilities. At the top is off-road multi-use path, the most desirable type of bicycle facility, followed by on-road bicycle lanes, on-road bicycle routes and at the bottom, on-road bicycle connections. This report focuses on the bicycle connections, as highlighted in the figure.

II. BICYCLE CONNECTION DEFINITION

A bicycle connection is a designated bikeway facility along a shared roadway that does not meet DuPage County's guidelines for an on-road bicycle lane/route. Instead, it supplements the off-road trail and on-road bicycle lane/route network and is intended for experienced riders. These roadways have importance in the overall bicycle network for the following reasons: 1) A bicycle connection could link two on-road bicycle lanes/routes to one another. This connection can be in the form of a perpendicular link between two parallel lanes/routes, or as continuation in series between two on-road bicycle lane/route termini. It would give experienced bicycle riders an opportunity to traverse between the two bicycle lane/route segments. 2) In similar fashion to connecting on-road bicycle lanes/routes, bicycle

¹ DuPage County On-Road Bicycle Guidelines, DuPage County Division of Transportation, Wheaton, IL, 2006.

connections could also link two off-road trails – either linking parallel trails or as continuation in series between two off-road trail termini. 3) A bicycle connection could also link two destinations. For instance, a bicycle connection could link a commuter rail station with a residential area or a bicycle lane/route leading to a residential area.

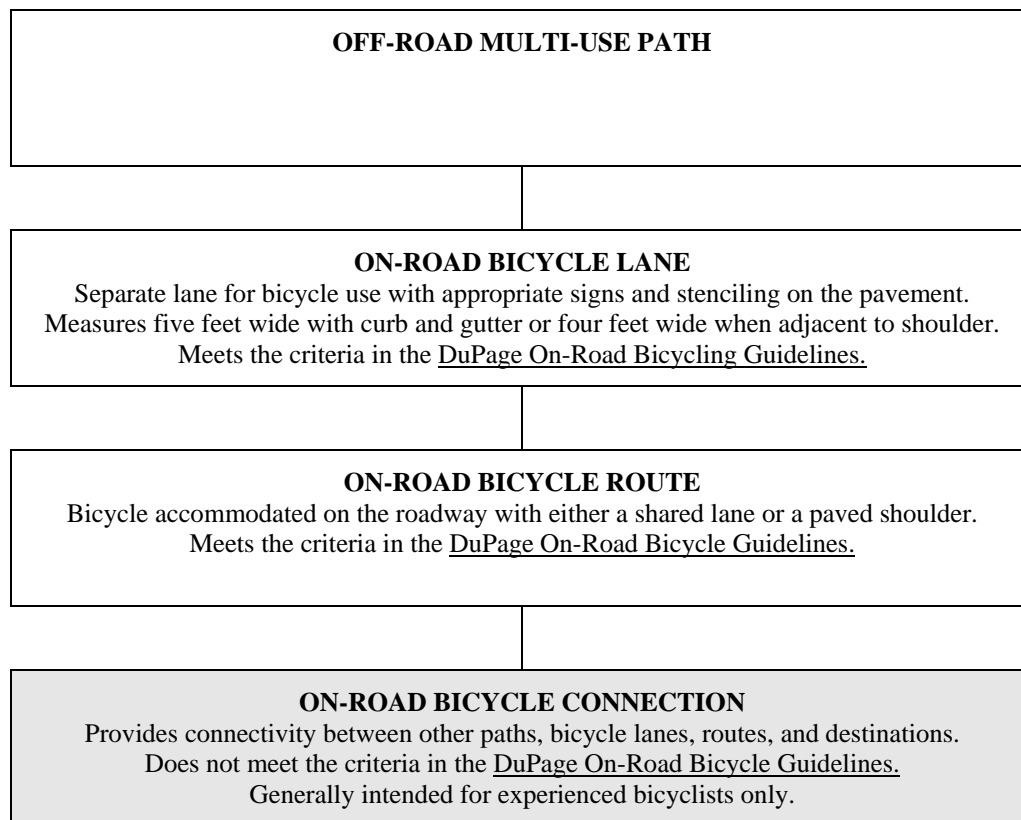


Figure 1. DuPage County Bicycle Classifications

III. ESTABLISHING A BICYCLE CONNECTION

Bicycle connections are designated based on engineering judgment. Some of the factors that should be considered as part of engineering judgment include safety, proximity to other bikeways and length of the connection. First, safety should be the most important priority when considering a bicycle connection. Roadway width, traffic, posted speed limit and mean travel speed are all considerations that should be analyzed. Second, proximity to other on-road bicycle facilities and off-road trails should be considered. Care should be taken not to create a redundancy with other on-road bicycle routes or off-road trails in the area. Third, the length of the connection should be considered. Bicycle connections are intended to be supplemental to other on-road bicycle routes and off-road trails. Therefore, bicycle connections are generally limited in length.

Bicycle routes and bicycle connections should be reviewed periodically to confirm that the appropriate designation remains applicable. In addition, when a designated bicycle connection roadway undergoes improvement, consideration should be given to upgrading the

roadway where practical to improve conditions for bicycling. Thus, the roadway designation could be changed from a bicycle connection to a bicycle lane or route.

IV. SIGNING OF A BICYCLE CONNECTION

Signs should be posted along the roadway to inform bicyclists of the start of a bicycle connection. These signs may appear at the end of off-road trails, at the end of an on-road bicycle lanes or bicycle routes. Exhibit 1 shows such signs at the end of an on-road bicycle route. Note that a similar sign scheme may be used for connecting bicycle lanes or destinations. Along the bicycle route, the first set of signs signifies the end of the bicycle route per MUTCD standard. These signs are green with white lettering and graphics. The second set of signs introduces the bicycle connection. The top sign guides the bicyclists to the next bicycle route, off-road trail or other point of interest via the bicycle connection. It would also be green with white lettering and graphics. The bottom sign describes that a bicycle connection may have higher traffic volumes and higher speed limits than a bicycle route. This sign would be white with black lettering and would be posted at selected locations where appropriate.

On the bicycle connection itself, there are two additional sets of signs shown. The first set shows a white bicycle symbol on a green background. The sign below it depicts the logo of the trail the connection may be a part of (if applicable). Approaching the bicycle route, a bicycle route sign and arrow (both white on green) will direct bicyclists back onto a bicycle route. These signs should be placed at appropriate locations and frequencies to be determined on a case-by-case basis.

V. CONCLUSION

In order to supplement the off-road trail and on-road bicycle network, bicycle connections may be established along roadways that do not meet the guidelines DuPage County has established for on-road bicycle routes. This report provides direction for establishing bicycle connections. Through the use of bicycle connections, the DuPage County bikeway network can provide more mobility and for experienced bicycle riders.

