

Buffered Bike Lanes & Cycle Tracks

If you build it, they will come. Buffered bike lanes and cycle tracks are gaining traction in cities in the Midwest and across the country. By implementing buffered bicycle lanes and cycle tracks in Madison, city officials can increase rider comfort and safety, which can increase ridership within the city.

Why use these facilities?

Buffered bike lanes and cycle tracks should be a prominent element of Madison's bicycle network for the following reasons:

- **Enhanced safety sensitivity:** Buffered bicycle lanes and cycle tracks increase bicyclist perception of safety over a standard bicycle lane and provide more room to avoid collisions with parked car doors or other obstacles.
- **Decrease bicyclist/motorist conflicts:** Both facilities better define a space for bicyclists on streets than standard bike lanes. It is clearer where both bicyclists and motorists belong, lessening bicyclist/motorist conflicts and interactions.
- **Increased ridership:** Data from New York City and Vancouver, British Columbia, suggests that buffered bike lanes and cycle tracks increase bicycle ridership as much as 30%.
- **Appealing to more Madisonians:** Large numbers of people who are not comfortable bicycling in standard bicycle lanes or in traffic report that they would be comfortable bicycling in buffered bike lanes or cycle tracks.
- **Appealing to women and children:** Evidence from Europe shows that women and children are more likely to bicycle when facilities such as cycle tracks are available.

By adding buffered bike lanes and cycle tracks to the Madison bicycle network, the city can increase overall bicycle ridership, particularly among women, families and those not comfortable riding on existing on-street bicycle facilities.

Buffered Bike Lanes

According to the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide, buffered bike lanes are "conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane."

Buffered bike lanes provide increased distance between motor vehicles and bicyclists. In addition to increasing the perception of safety, this increased space allows bicyclists more room to pass other cyclists, ride outside of the door zone, and ride around obstacles in the lane.



Cycle Tracks

According to NACTO, "a cycle track is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane." Cycle tracks are physically separated from motor vehicle traffic by a curb or median, bollards, planters, parked cars or other physical barriers. At the same time, cycle tracks are distinct from the sidewalk, and are separated by either a curb or different colored or textured pavement.



Cycle tracks may be one-way or two-way facilities and may be located on one or both sides of the street. Regardless of how they are installed, cycle tracks are intended to provide space that is exclusively used by bicyclists. By largely separating bicycles from motor vehicle traffic, cycle tracks can attract a wider group of bicyclists than only those who are comfortable riding with traffic.

Cycle tracks and buffered bike lanes in the United States

A sampling of American cities that have implemented buffered bike lanes or cycle tracks is below.



Chicago, Illinois

The City of Chicago is rapidly expanding its on-street bicycle network, and buffered bike lanes and cycle tracks are a key part of the new facilities. According to Adolfo Hernandez, director of advocacy for the Active Transportation Alliance, "Under the Mayor's Transportation Plan, the city would build 100 miles of protected bike lanes over his four-year term." When completed, this will be North America's largest network of protected on-street bicycle facilities.



Milwaukee, Wisconsin

Milwaukee completed its comprehensive bike plan in 2010 which calls for nearly five miles of cycle tracks throughout the city. In June of this year, the city began construction of the first cycle track on South Bay Street. This facility will be a raised cycle track that is separated from the primary travel lanes by a low, angled curb that can easily be ridden up and down by bicycles, but also provides feedback to motorists that they are leaving their lane.



New York, New York

New York City has made the biggest splash with physically separated bicycle facilities in the United States. Known for traffic congestion and gridlock, the city plans to increase its on-street bicycle network to 1,800 miles by 2030. Cycle tracks and buffered bike lanes are a key part of this network, and the city has built five miles of these facilities to date. With these facilities, the city is on track to meet its goal of doubling its 2007 bicycle mode share by 2015.



San Francisco, California

San Francisco has been rapidly expanding their bicycle network since the lifting of an injunction against their bike plan in 2010. Cycle tracks and buffered bike lanes factor heavily into the network expansion. According to Streetsblog, the San Francisco Metropolitan Transportation Agency plans to install six new cycle tracks over the next year in addition to those that have already been installed.



Washington, D.C.

Washington, D.C., has been working to expand its limited number of bicycle lanes since the adoption of a new bike plan in 2005. Buffered bike lanes and cycle tracks are a part of this expansion. "Separated bike lanes have been installed with great results in other cities and they are the logical next step here in the District as well," said Department of Transportation Director Gabe Klein.
