

Bike Lanes at Intersections with Right Turn-Only Lanes

Follow up letter and Bike Delaware News
Submission

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We can (and should) combine bicycle lanes with right turn-only lanes

After an exhaustive input and review process, Bike Delaware has officially submitted their position statement "Bike Lanes at Intersections with Right Turn-Only Lanes" to DeIDOT for review and consideration in Delaware's Manual of Uniform Traffic Control Devices (MUTCD). It is no secret that this provision, requiring little more than a striping alteration, increases safety and comfort levels for both bicyclists and motorists. It allows for correct positioning at both intersections and side streets, and increases the likelihood riders will obey the law. It reduces the threat of "right hooking", cited as a serious safety threat in a recent survey. It also provides legal and defensible space, since bicyclists are routinely forced to use right turn-only lanes as shoulders. The question now is, will DeIDOT adopt this design guidance – or a similar remedy - in the spirit of Complete Streets and/or Routine Accommodation? Several other states, including neighboring MD (below), already have.

Shared Right Turn Only Lanes with Through Moving Bicyclists

In locations where it is not possible to provide a separate through bicycle lane or at locations that have a low volume of right turning vehicle movements, a shared right turn only/bicycle through lane may be provided. For this treatment, a 3 foot pocket lane with dash lane markings is provided on the left side of the right turn only lane as shown in Figure 3.24. While a separate through bicycle lane (as described previously) is preferred, this design helps to reinforce proper bicyclist operating position when continuing straight through the intersection. It is preferable to provide a wide right turn lane to allow safe sharing of the lane.

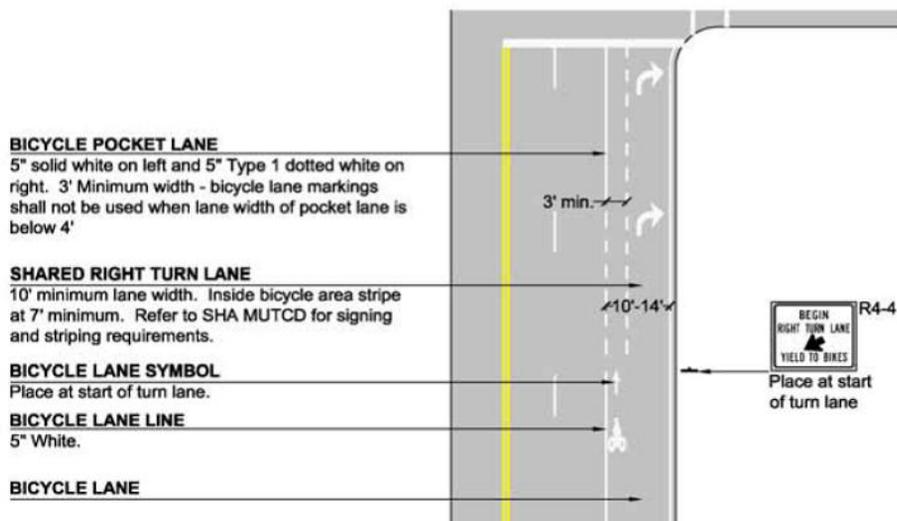


Figure 3.24 - Example of Shared Right Turn Lane with Bicycle Pocket Lane

Chapter 1 of DelDOT's current **Road Design Manual** makes the case for flexibility, and "sound engineering judgment" as long as documentation is thorough. Clearly, DelDOT engineers are given the green light to call on a host of different manuals and resources when unique circumstances call for it. Indeed, there are a few examples already where engineers went "outside the box", including full sharing of the shoulder as both a bike and right turn lane with positive results.



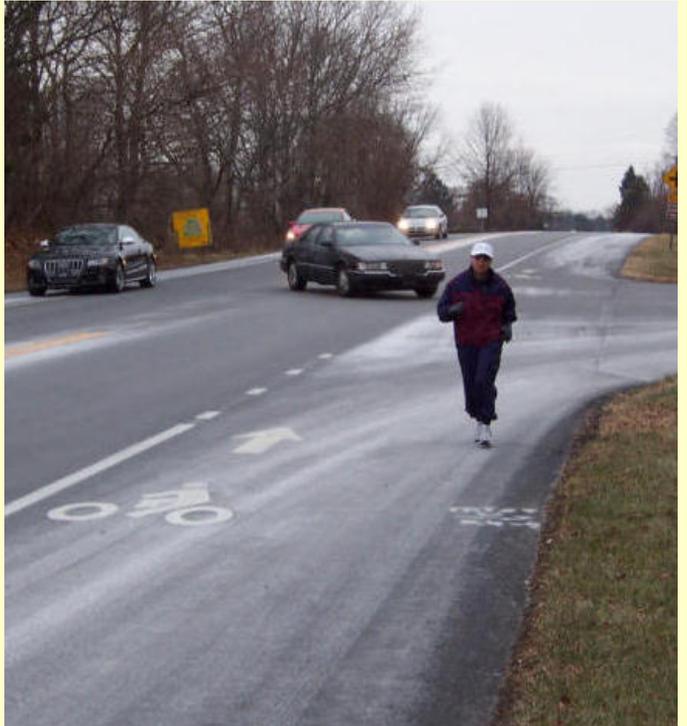
Our most famous example of a shared bike lane/right turn lane is down south on **Route 1** in Rehoboth, which also includes buses in a 3-way share mix. As a result, it went from having the highest bicycle fatality rate in the state to zero.

Old Baltimore Pike between Rt.72 and Rt.273, a "minor arterial" pictured below, is included in Wilmapco's Congestion Management System. The goal of the CMS is a "systems" approach to identifying and addressing congestion in our region, and this road – as well as Red Mill and Polly Drummond Hill Roads, is included as in need of mitigation. According to the last available data (2004-2006), Old Baltimore Pike came in at 0.59 crashes per million vehicles entering its intersections, while Red Mill Rd/Polly Drummond Hill Roads – with shoulders sacrificed for right turn-only lanes and no bike lane treatments – came in at 0.64. While these numbers are relatively close, we believe this (and other similar examples found in Delaware) provides the evidence that bike lanes can and should exist in a share of open right turn lanes. There is no data that suggests such a design increases crash rates or in any way endangers road users. According to multiple studies on bike lanes in general, the opposite is true; crash rates, even for pedestrians, can be reduced by as much as 40%.



Old Baltimore Pike at Torington Way, on the ground and from the air, with its shared bike lanes/right turn-only lanes.





Other examples of shared right turn-only lanes with bike lanes in Delaware.





Polly Drummond Road, with right turn-only lanes not shared with bicyclists.

We realize **DeIDOT's** commitment to facilitate alternate modes of transportation, in this case bicycling. They have held steadfastly to the state's Bicycle Policy, maintained right of way for bicycles in lane expansion projects, and altered guidelines to ensure channelizing islands no longer encroach on shoulders through intersections. For these we are very grateful. The missing piece of the puzzle, however, is defining this space. This includes shared bike and right turn-only lanes available to engineers and planners in the Delaware MUTCD. It is entirely possible to define safe entry and delineation where traditional bike lanes cannot be installed due to lane width restrictions. We also ask that it be included in DeIDOT's Road Design Manual, or ultimately, in a dedicated Delaware Bicycle Design Manual unique to our state.

References (to be hyper linked)

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- http://www.deldot.gov/information/pubs_forms/manuals/road_design/pdf/01_introduction.pdf
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