

**Conversation with Cedric Ward about the new guidance for R4-11 and W16-1(3) signs.
June 19, 2012**

Jim Titus: Let's start out by clarifying what we mean by "signs may be placed where the lane is no wider than 13 feet". Does that mean from the left-lane stripe to the curb, the edge of the pavement, or to the fog line?

Cedric Ward: The guidance means 13 feet to the edge of the pavement. Do you think that the language is not clear?

Jim Titus: My concern here is that AASHTO measures bike lanes from stripe to curb, so some people will assume that the 13 feet includes the gutter.

Stripes are often 4 inches wide. Does the 13 feet mean from the edge of the pavement to the center of the line, or does it include the width of the line? AASHTO says center of the line.

Cedric Ward: To the center of the line.

Jim Titus: At the meeting last fall in Greenbelt about the R4-11 sign, which Michael Jackson also attended, we agreed that signs would be posted for roads up to 14 feet plus gutter. Now you are shrinking that by a foot. I'm concerned because especially when there are trucks or buses, or a lot of traffic, often people pass too closely even with 14 feet, so you have to take the lane. I understand that perhaps you wanted to reduce the cutoff to 13 feet at first to ration how many R4-11 signs you post, but I really think you need a way for the guidance to at least include the yellow signs when we have 14 feet plus gutter.

Cedric Ward: Actually, 14-foot lanes are problematic. If you find any, please let me know.

Jim Titus: I know of one in Montgomery County, or plans for one, but it is a county road. It will have a 4-foot bike lane and 10-foot travel lanes. Some of the advocates wanted bike lanes there, but I was thinking "yikes".

Cedric Ward: (Chuckling a bit). I know what you mean.

Jim Titus: But even if you don't have 14-foot lanes, think of the roads where you intend a 13' lane, but it gets striped at 13'1". We need to be able to use the full lane there, whether it is the R4-11 or the yellow sign.

Cedric Ward: I follow your point.

Jim Titus: Getting back to the first bullet: What does it mean by "entry points onto the State Highway System"? Are county roads part of the state highway system?

Cedric Ward: No, the state highway system is numbered routes and interstate highways.

Jim Titus: So the R4-11 signs would be posted at the state line. But are you really going to post the signs at intersections with county roads?

Cedric Ward: No, not in general.

Jim Titus: So you do not really mean “entry points on the State Highway System,” you mean jurisdictional boundaries. What about where roads with wide shoulders cross jurisdictional boundaries. We don’t really need the R4-11 sign there.

Cedric Ward: We would still post the R4-11 signs there if there is not a bike lane, but those shoulders will eventually be marked as bike lanes.

Jim Titus: But you won’t be posting these signs along interstate highways or other expressways where bikes are prohibited, right.

Cedric Ward: That is correct.

Jim Titus: I think that rather than roads with wide shoulders, a higher priority would be exits from expressways that people take into the state. I guess you would put them at exits from the B-W Parkway under the guidance since it is not part of the state highway system, but the signs are just as important at exits from interstate highways, especially those with a lot of drivers from Virginia, Delaware, or New Jersey.

Cedric Ward: I understand your point.

Jim Titus: Then the guidance talks about places where there are a lot of bikes turning left. Why would you need an R4-11 sign there?

Cedric Ward: We were thinking of places where lots of bikes are crossing the lane.

Jim Titus: Yet this is a conflict point, or spot problem. Would you want a regulatory sign or a warning sign where you have a single conflict point, or spot problem?

Cedric Ward: Probably a warning sign.

Jim Titus: But here you have guidance for the R4-11. Why not move this to the guidance for the warning sign?

Cedric Ward: I understand your point.

Jim Titus: Let’s come back to the third bullet: “At the beginning of a section of roadway where curbside parking or other encroachments narrow the width usable for travel to 13 feet or less.” What does usable width of 13 feet mean?

Cedric Ward: If there are parked cars, and the cars extend 7 feet from the pavement edge, then 13 feet of usable width would mean 13 feet to the left of the parked cars.

Jim Titus: So if the edge of the parked cars might be along a parking line that is 8 feet from the curb, then usable width of 13 feet means that the lane is 21 feet from the curb, or 20 feet from the edge of the pavement.

Cedric Ward: That's correct.

Jim Titus: Where do you think the cyclist will ride?

Cedric Ward: He could use the full lane.

Jim Titus: Well let's add a foot. So we have 14 feet of pavement to the left of the car. Then where is the cyclist supposed to ride? I think that the cyclist still needs to use the full lane.

Cedric Ward: How would you phrase the guidance.

Jim Titus: I would change the 13 feet to 16 feet.

Cedric Ward: A 16-foot lane would cause real problems.

Jim Titus: We are not talking about how wide we want the lanes. We are talking about the lanes we have, and where to post the signs. If you have no lanes with 16 feet to the left of the parked cars (20 to 23 feet from the pavement edge), you would not have to post the signs anyway. But some of the counties do, and you may.

The thing to remember here is that parked cars reduce usable space more for a bike than for a car. A cyclist may be willing to ride less than one foot from the pavement edge, but not a parked car. A driver may be willing to drive 1 or 2 feet from a parked car, because the worst that could happen is that someone opens their door, and that open door gets knocked off the car. But for the cyclist, the worst that can happen is that the door opens, the cyclist is deflected 20 degrees to the left as she falls, and then she is run over by the car with whom she was sharing the lane side-by-side. So usable roadway needs to be measured from the edge of the open door, or 16 feet from the parking stripe, or 23 feet from the pavement edge.

Cedric Ward: I follow your point.

Jim Titus: OK good. One final suggested change: The word "extraordinary" in the W16-1(3) sign needs to be moved to modify "other conditions", not "hazards". The signs along Glenn Dale road are not warning about an extraordinary hazard—the 10-foot lanes are common. But "other extraordinary conditions" would make sense.

Cedric Ward: I follow your point.

Jim Titus: I guess I'll send you an email about this, or I can wait to see how you change the guidance.

Cedric Ward: The guidance is final so we won't be making changes.

Jim Titus: Well MBPAC will be commenting on the design guidance. I guess that will be the time for public comment. So hopefully you can think about this between now and then.