The SHARE THE ROAD Sign



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Introduction

This paper discusses the "SHARE THE ROAD" combination sign and its misinterpretation, and proposes eliminating the supplemental W16-1 SHARE THE ROAD plaque.

History

The W16-1 SHARE THE ROAD plaque was first used in 1987 by the North Carolina Department of Transportation Office (now Division) of Bicycle and Pedestrian Transportation as a supplement for the already existing W11-1 bicycle crossing warning sign.



According to the 1994 *North Carolina Bicycle Facilities Planning and Design Guidelines*, the SHARE THE ROAD plaque is

"...intended to increase bicyclists' visibility without designating the signed roadway a preferred route. It is intended for use on roadways with high levels of bicycle traffic but relatively hazardous conditions for bicyclists. Its intention is not to encourage inexperienced bicyclists to ride on the roadway as a preferred route. This sign is especially useful in cities and towns where there are large numbers of bicyclists riding on streets which are unsuitable for designation as preferred bicycle routes due to factors such as narrow lanes, high speed traffic and/or high traffic volumes."

In 1997 an amendment to the 1988 *Manual on Uniform Traffic Control Devices* (MUTCD) was finalized, adding the W16-1 SHARE THE ROAD plaque. http://mutcd.fhwa.dot.gov/pdfs/95-8.pdf

"Request II–228(C)—Share the Road Warning Signs
This amendment to the MUTCD adds a new section 2C–39 to include a
discussion regarding the "Share the Road" word message sign (W16–1) which
may be used with the farm machinery symbol (W11–5), the bicycle symbol
(W11–1), and other appropriate symbol signs where a need exists to warn drivers
to share the road with other modes of roadway transportation. The "Share the
Road" sign shall have a yellow background with black message and shall be
rectangular as shown below."

The SHARE THE ROAD plaque was included in the December 2000 MUTCD full revision. http://mutcd.fhwa.dot.gov/pdfs/millennium/12.18.00/9.pdf

It was described in both Chapter 9 which is Traffic Controls for Bicycle Facilities and in Chapter 2C which is for general Warning Signs.

"Section 9B.15 Bicycle Crossing Warning Sign (W11-1)

The Bicycle Crossing Warning (W11-1) sign alerts the road user to unexpected entries into the roadway by bicyclists, and other crossing activities that might cause conflicts. These conflicts might be relatively confined, or might occur randomly over a segment of roadway.

A supplemental plaque with the legend AHEAD or XXX METERS (XXX FEET) may be used with the Bicycle Crossing Warning sign.



Section 9B.16 Other Bicycle Warning Signs:

In situations where there is a need to warn drivers to watch for bicyclists traveling along the highway, the SHARE THE ROAD (W16-1) plaque may be used in conjunction with the W11-1 sign.

Section 2C.47 SHARE THE ROAD Plaque (W16-1):

In situations where there is a need to warn drivers to watch for other slower forms of transportation traveling along the highway, such as bicycles, golf carts, or farm machinery, a SHARE THE ROAD (W16-1) plaque may be used."



Recent Background

The latest 2009 MUTCD has added wording describing the use of the W11-1 and SHARE THE ROAD (now labeled the W16-1p) signs, but the substance from previous editions is the same.

http://mutcd.fhwa.dot.gov/pdfs/2009/part2c.pdf

The NCDOT now maintains a website dedicated to the SHARE THE ROAD sign. http://www.ncdot.org/bikeped/safetyeducation/signing/

The website expands and elaborates on the wording from the 1994 *North Carolina Bicycle Facilities Planning and Design Guidelines.* Full text of the website is shown in Appendix C.

The MUTCD also says,

"Section 1A.02 Principles of Traffic Control Devices

02 To be effective, a traffic control device should meet five basic requirements:

- A. Fulfill a need;
- B. Command attention;
- C. Convey a clear, simple meaning;
- D. Command respect from road users; and
- E. Give adequate time for proper response."

The MUTCD further notes, "The use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs."

Discussion

"However beautiful the strategy, you should occasionally look at the results."

Winston Churchill

The W11-1 bicycle icon sign is intended to warn of bicyclists crossing the road.

The W16-1 SHARE THE ROAD supplemental plaque was created with admirable intentions. Its MUTCD description says it may be used in addition to the W11-1

"In situations where there is a need to warn drivers to watch for bicyclists **traveling along the highway**,..."

So why doesn't the plaque instead say the more accurate and unambiguous USING THE ROAD? Figure 1.

If we assume that there are situations with a need to warn motorists of downstream bicyclists traveling along the highway, is there then a need for a supplemental plaque to the W11-1, or can the W11-1 stand alone?

While the W11-1 is called the bicycle "crossing" warning sign, it is unlikely that motorists interpret the sign as a warning for only bicycle crossings. They may be just as likely to interpret the graphic to mean that bicyclists are operating longitudinally along the roadway, i.e. using the road.

If the W11-1 can be used to warn of crossing conflicts that



Figure 1. It says what it means.

"... might occur randomly over a segment of roadway,"

it can justifiably also be used by itself to warn of random same direction bicycle traffic. From the motorists' point of view, random crossing bicyclists over a segment of roadway appear similar to random bicyclists traveling along the road segment. It doesn't matter how motorists interpret the W11-1 sign with regard to bicyclist direction.

Similarly, optional supplemental AHEAD or NEXT X MILES plaques equally convey to motorists that bicyclists are either crossing or using the road.

What does "SHARE THE ROAD" mean?

The "share the road" message seems like a positive affirmation, but what exactly does it mean and how is it interpreted?

There are 2 ways to "share": sequentially one-after-another, or simultaneously side-by-side. Note also that there are roads and *lanes* marked on the road.

Drivers of motor vehicles "share" marked lane space with other motorists sequentially, one-after-another. But because a bicycle is so narrow, "sharing" with bicyclists has also typically come to mean simultaneously, side-by-side partially or fully within the lane depending on its width.

The NCDOT originally wrote that the combination sign was to be placed on roads with

"...narrow lanes, high speed traffic and/or high traffic volumes..."

Such roads are not amenable to simultaneous side-by-side, within-lane sharing.

Thus, the SHARE THE ROAD message should be to alert motorists to "share" the lane one-after-another with bicycle users, as is done with other motorists. However, the SHARE THE ROAD plaque is misinterpreted to reinforce side-by-side lane sharing.

There are no operational advantages to bicyclists for allowing their lane to be shared with motorists, particularly if the lane is narrow or if there are multiple lanes enabling lane changes. Under such conditions, knowledgable bicyclists do not enable sharing of their lane. They do this by assuming a more assertive leftward lateral position that compels motorists to slow or wait behind, and to change lanes to pass.



Figure 2. The sign says SHARE THE ROAD, but the lanes are not wide enough to share side-by-side within the lane. Estes Drive Ext., Carrboro, NC.

As narrow, 2-wheeled vehicle operators, bicyclists and motorcyclists have much in common. Motorcycling education has long advanced the safety benefits of lane management. For example, the NCDOT's *Motorcycling Handbook* says:

"KEEPING YOUR DISTANCE

The best protection you can have is distance — a "cushion of space" — all around your motorcycle. If someone else makes a mistake, distance permits you:

- Time to react.
- Space to maneuver."

"LANE SHARING

Discourage lane sharing by others. Keep a center-portion position whenever drivers might be tempted to squeeze by you."

The benefits of lane management also apply to bicycling.



Figure 3. The countermeasure for these risks is for the bicycle driver to USE FULL LANE to create a "cushion of space" all around the bicycle and to prevent in-lane passes.

If there are "...narrow lanes, high speed traffic and/or high traffic volumes..." and a "...need to warn drivers that bicyclists are traveling along the highway...," the lane should not be shared side-by-side, making the "SHARE THE ROAD" message counter to best practices.

What does the SHARE THE ROAD plaque mean to motorists?

How motorists interpret the sign has not been vigorously evaluated. Yet the sign is widespread, and the NCDOT wrote in its Conclusions and Recommendations,

"Share the Road" signing projects are a low-cost way to increase the awareness of motorists and enhance the safety of cyclists."

There is no credible evidence to indicate that the W16-1 SHARE THE ROAD placard improves the W11-1 bicycle icon warning sign or makes bicycling safer. In contrast, there is evidence and rationale that the "SHARE THE ROAD" message is not received as intended by some motorists, and bicyclists. See Appendix A for the results of a flawed study, and my critique.

The SHARE THE ROAD sign ostensibly is intended to alert motorists to the presence of downstream bicycle users. But by suggesting that motorists should SHARE THE ROAD, the implication is that motorists "own" the road or lane and have a choice to share or not share. In contrast, by virtue of being in front, the bicyclist has a superior right to the lane space. See Appendix D for an essay by an Ohio lawyer.

Some motorists interpret the sign to mean "share the lane," and that they are entitled to pass bicycle drivers within what is rightfully the bicyclist's lane. Some motorists believe that the sign is directed toward bicyclists, informing bicyclists of a duty to share the lane space. Motorists' yells to bicyclists to "Share the road!" support this misinterpretation.

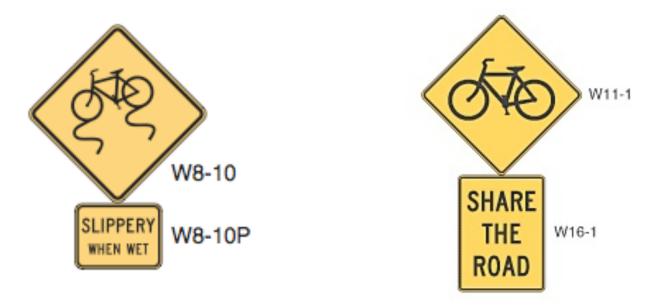


Figure 4. Sign Comparison. The W8-10 and W8-10P signs are directed to bicyclists. The similar looking W11-1 with W16-1 can be misinterpreted to be directed at bicycle users. BICYCLISTS: SHARE THE ROAD, or more colloquially, SHARE THE **LANE.**

What does the SHARE THE ROAD plaque mean to bicyclists?

Although the plaque is officially directed at motorists to warn them of downstream bicyclists, there can be little doubt that bicyclists are affected by the sign.

Since the W16-1 SHARE THE ROAD placard does not say "MOTORISTS: SHARE THE ROAD," it *technically* is applicable to all road users, including bicycle drivers. But a bicycle driver does not have to be warned "...to watch for bicyclists traveling along the highway...," the alleged meaning of the plaque.

The R5-3 sign is clearly directed at motorists only. But the SHARE THE ROAD sign is universal, by default directed at all road users including bicyclists, although that is not its officially stated intention.



R5-3



Figure 5. What does it mean? Courtesy Andy Grell.

Bergen County, New Jersey uses a nonstandard SHARE THE ROAD sign paired with a RIDE IN SINGLE FILE plaque. With this plaque, this government further distorts the ambiguous SHARE THE ROAD message to apply to bicycle users.

Bicyclists are told to RIDE IN SINGLE FILE seemingly so motorists can "share" the bicyclists' lane. Or are both vehicle types supposed to operate single file?

The SHARE THE ROAD plaque conveys to bicyclists that they should share the *lane* by operating far right. Do some bicyclists misinterpret the sign to mean that the road is better for bicycling, a "...preferred route?" This would be in opposition to its intended meaning. Conversely, do some believe that the sign is placed only on "... roadways with ... relatively hazardous conditions for bicyclists." and therefore avoid such roads? This would be a miscarriage of bicycling promotion.

Does the W16-1 SHARE THE ROAD plaque "Fulfill a need?"

Is there "a need to warn drivers to to watch for bicyclists traveling along the highway?"

There is much contradiction in NCDOT's justification for the SHARE THE ROAD plaque. For example, if high levels of bicycle traffic exist on a road, how can the road be presumed to be unsuitable for bicycling? Clearly, those factors such as narrow lanes, and high speed or volume traffic must not be as dangerous as supposed. And if high levels of bicycle traffic exist, the presence of bicyclists alerts motorists to other bicyclists, negating the need for a warning sign.

The NCDOT website says,

"The sign should not be used to designate a preferred bicycle route, but may be used along short sections of designated routes where traffic volumes are higher than desirable."

But if BIKE ROUTE signs already exist, they should be sufficient to warn motorists of downstream bicyclists.



D11-1

Such contradictions further call into question the need for and usefulness of the SHARE THE ROAD plaque.

The SHARE THE ROAD plaque is supposed to "...warn drivers to watch for bicyclists traveling along the highway...," presumably so they will not fail to detect a bicyclist and sideswipe or strike him or her from behind.

Overtaking type collisions in which the motorist allegedly Failed to Detect the bicycle driver are rare, accounting for just 1.3% of all crashes in a 1996 nationwide study. Of these, 54% occurred during Darkness. It's probable most bicyclists were not lawfully illuminated. Of the remaining 46%, in 28% of these collisions the motorist was blinded by the sun. The sign would have limited effectiveness under those conditions.

http://www.fhwa.dot.gov/publications/research/safety/pedbike/96104/13.pdf http://www.fhwa.dot.gov/publications/research/safety/pedbike/96104/13b.pdf

Roads are designed so that lawfully operating drivers can come to a complete stop before striking a stationary object, with margin for error built in. A forward moving bicyclist provides considerable added margin for error, and the motorist needs only to slow to bicyclist speed rather than stop to avoid collision.

Thus, any sign warning of downstream bicyclists would potentially be effective in avoiding very few collisions.

Does the SHARE THE ROAD sign "Convey a clear, simple meaning?"

A supplemental warning plaque to the W11-1 with a "...clear, simple meaning..." "...to warn drivers to watch for bicyclists traveling along the highway,..." would not say SHARE THE ROAD. There are clearer, simpler messages.

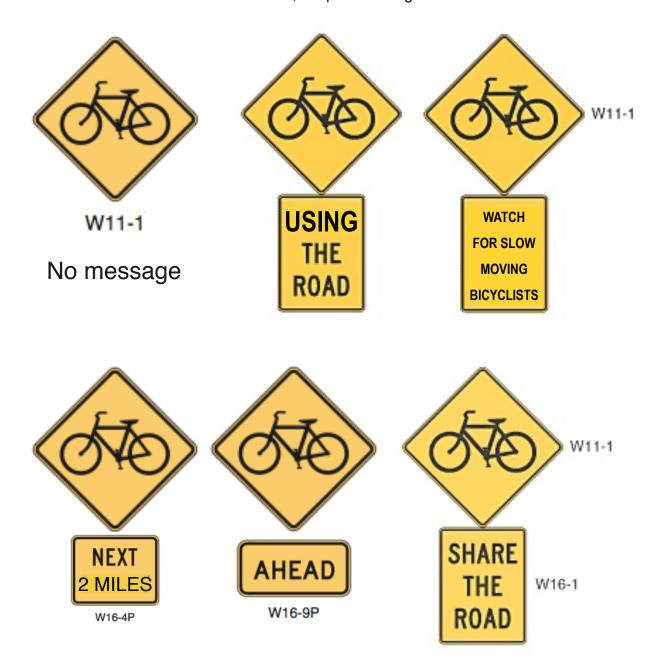


Figure 6. Which can be misinterpreted to the detriment of bicycle users?

The NCDOT enters into extra-legal speculation by claiming on its website that the SHARE THE ROAD warning sign

"...serves to make motorists aware that bicyclists...have a legal right to use the roadway."

The SHARE THE ROAD is a yellow **warning** plaque that says nothing of rights, nor does it have the force of law. If the intent to is advertise bicyclists' legal right to use the roadway, a white **regulatory** sign saying as much is appropriate.

STATE LAW BICYCLE DRIVERS HAVE EQUAL RIGHT TO THE ROADWAY

Figure 7. A regulatory sign patterned after the "Move Over" sign (below), would be unambiguous affirmation of bicyclists' rights.

MOVE OVER OR REDUCE SPEED FOR STOPPED EMERGENCY VEHICLES

Figure 8. The "Move Over" sign carries the force of law.

Does the SHARE THE ROAD sign "Command respect from road users?"

"Respect" implies that the officially intended audience — motorists — obey the message.

How exactly should motorists obey a SHARE THE ROAD warning plaque?

If motorists pass bicyclists without fully changing lanes is that obeying or disobeying the SHARE THE ROAD warning? If motorists yell "Share the road" to bicyclists does that mean they've misinterpreted the message or interpreted it correctly?



Figure 9. Partially sharing the lane on a multi-lane road. Such roads are intended for changing lanes to pass slower users. Why didn't the pickup driver fully change lanes into the empty left lane? Is the motorist respecting or disrespecting the sign? MLK Jr Blvd., Chapel Hill, NC.

The 2009 MUTCD contains a new unambiguous regulatory sign.

The R4-11 BICYCLES MAY USE FULL LANE sign can be used in situations that are nearly identical to what is described for the SHARE THE ROAD warning plaque.

"Section 9B.06 Bicycles May Use Full Lane Sign (R4-11)

The Bicycles May Use Full Lane (R4-11) sign may be used on roadways where no bicycle lanes or adjacent shoulders usable by bicyclists are present and where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side.

The Bicycles May Use Full Lane sign may be used in locations where it is important to inform road users that bicyclists might occupy the travel lane."



Pairing the bicyclists MAY USE FULL LANE sign with a supplemental plaque saying CHANGE LANES TO PASS would add further unambiguous education. The CHANGE LANES TO PASS plaque could also be paired with the W11-1 bicycle icon sign.



Figure 10. Clear instruction.

Compare and Contrast

As a bicyclist, which would you rather see?



MAY USE FULL LANE CHANGE LANES TO PASS

TYPE: Warning.

USE: "...where there is a need to warn drivers to watch for bicyclists traveling along the highway,..."

ROAD TYPE: "...on streets which...narrow lanes, high speed traffic and/or high traffic volumes." [NCDOT description]

TARGET: Officially motorists; unofficially bicyclists.

AMBIGUOUS: Yes.

IMPACT: Conveys to motorists and bicyclists that bicyclists should operate far right to share their lane. It can be an indirect way for governments to restrain bicyclists.

TYPE: Regulatory.

USE: "...where it is important to inform road users that bicyclists might occupy the travel lane."

ROAD TYPE: "...where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side."

TARGET: Motorists and bicyclists.

AMBIGUOUS: No.

IMPACT: Conveys to motorists and bicyclists that bicyclists are equal road users. It's a way for governments to remove social and institutional discrimination against bicycle drivers.

The SHARE THE ROAD sign is obsolete.

The clear choice is black and white.

Conclusions

The W16-1 SHARE THE ROAD plaque does not "convey a clear, simple meaning" as required of a traffic control device in the *MUTCD*. The message has troubling ambiguities and inconsistencies. It can be misinterpreted completely opposite its officially intended meaning by both motorists and bicyclists. How can such a sign "command respect from road users," and how would that respect be measured?

The SHARE THE ROAD plaque is intellectually dishonest. It doesn't clearly say what it means. It can be misintended and misinterpreted as a backhanded message to individual bicyclists and groups to oblige them to share their lane. This has an inhibiting effect on bicyclists.

If a bicyclist or group uses the full lane—an established legitimate technique espoused in bicycling education courses—when the SHARE THE ROAD plaque is present, some motorists believe the bicyclist is being provocative and acting in opposition to the sign (i.e. not sharing), and find this objectionable. This can result in ill will or harassment toward bicycle users.

The placement of the sign is also often suspect. According to NCDOT, the SHARE THE ROAD sign

"...is typically placed along roadways with high levels of bicycle usage but relatively hazardous conditions for bicyclists."

Yet it is placed on lightly traveled rural roads and on roads with Bike Lanes (which are advertised as making it safe for bicyclists).



Figure 11. How would this sign be interpreted? Courtesy Dan Gutierrez



Figure 12. The SHARE THE ROAD combination sign used on a 25 mph road with a Bike Lane is a misuse of the sign. N. Greensboro St, Carrboro, NC.

The SHARE THE ROAD plaque does not definitively "fulfill a need," that being to warn motorists of downstream, same direction bicycle traffic. Such a need, if it exists at all, can be better accomplished with a stand alone W11-1 bicycle warning symbol. Unlike the W16-1 SHARE THE ROAD plaque, any ambiguities or misinterpretations of the W11-1 bicycle graphic sign are not detrimental to bicyclists.

If a supplemental plaque must be used with the W11-1 — a questionable premise — there are several possibilities with better wording than SHARE THE ROAD to convey that bicyclists are traveling along the highway. These are shown in Figure 6 on page 11. See Appendix B for other concept signs.

Ultimately though, if there is to be "sharing" of the lane it should be one-after-another for optimum safety and comfort of people on bicycles.

The R4-11 BICYCLES MAY USE FULL LANE regulatory sign reinforces the one-after-another paradigm, and supersedes the SHARE THE ROAD warning sign as the preferable message to motorists and bicyclists. A CHANGE LANES TO PASS supplemental plaque would provide added direction.

The BICYCLES MAY USE FULL LANE sign is evolution.



Appendix A

I found the following synopsis of a SHARE THE ROAD sign evaluation at: http://www.bicycleadvocacyic.org/colorado.html, but the link no longer exists and I can no longer find the study.

Executive Summary

"The Colorado Department of Transportation (CDOT) has concluded the "Share the Road" sign test study. The study was undertaken in cooperation with the Federal Highway Administration (FHWA) to determine if this new graphic and verbal message clearly send the message of bicycles and motor vehicles sharing the road, and therefore, should be considered for inclusion in the Manual for Uniform Traffic Control Devices (MUTCD).

The two-pronged study included the installation of 50 "Share the Road" signs along 64 miles of state highways along with an education campaign to inform the public about the signs and ask for their input via a written survey. The highways selected for testing the signs are narrow and have little or no shoulder which requires bicycle drivers and motor vehicle drivers to share the driving lane. The education campaign reached over a half million people through articles in The Denver Post, AAA's Rocky Mountain Motorist magazine, and the Bicycle Colorado magazine and newsletters. In addition, "Share the Road" brochures were distributed through a wide variety of outlets including the Colorado State Patrol, police and sheriff departments, bike shops and organizations, cities, counties, parks and recreation departments, schools, and trade shows.

From a CDOT maintenance perspective the signs receive mixed reviews based primarily on two test corridors where vandalism finally prevailed and no signs remain. Statewide, a total of 26% of the signs have be vandalized or removed. However, the signs on the other test corridors are relatively vandal free.

Citizens responding to the survey clearly have a more positive outlook on the sign than the vandals who removed the signs along Highway 105. In fact, 32% said the sign and the education campaign are an excellent idea and they would like to see more signs installed and the educational efforts increased. Survey responses were received from fifteen states and over fifty five cities in Colorado and 79% of the respondents drive a motor vehicle as well as a bicycle.

The sign and the share the road message was clear to over 92% of the respondents, only 3.6% said the message was not clear. Of that minority, some were protesting having another sign on the roadway, rather than objectively assessing this sign and its message. In addition, two important benefits of this study are that 21% of the respondents now know bicyclists have the same rights and duties as motorists on Colorado roads and 76% said they will be more considerate when sharing the road."

Share the Road Survey Results: 415 Respondents

Question ONE: I am a:

Answer Options	# of Respondents	# of Total Respondents
Motorist	59	14.2%
Bicyclist	14	3.3%
Both	329	79.2%
No response	13	3.1%

Question TWO: Prior to reading this information, did you know that bicyclists have the same rights and duties as motorists on Colorado roads?:

Answer Options	# of Respondents	# of Total Respondents
Yes	319	76.8%
No	85	20.5%
No response	11	2.7%

Question THREE: The sign and graphic clearly send the message of bicyclists and motorists sharing the road.

Answer Options	# of Respondents	# of Total Respondents
Definitely	312	75.2%
Somewhat	70	16.9%
Not at all	15	3.6%
No response	18	4.3%

Question FOUR: After reading about the intention of the Share the Road sign, will you be more considerate of bicyclists and/or motorists when sharing the roadway?

Answer Options	# of Respondents	# of Total Respondents
Definitely	260	62.6%
Somewhat	55	13.3%
Not at all	34	8.2%
No response	33	8.0%
Already am	57	13.7%

Critique of the Colorado "Share The Road" sign study.

The Executive Summary paints a positive picture of the sign's effectiveness, but critical examination of the study design and results suggests this is a false positive. There are at least two fatal methodological errors which render the study invalid.

First, any alleged effectiveness of the sign was confounded by the extensive publicity campaign accompanying its placement. Moreover, such a publicity campaign is a one time event, and any effectiveness of it is short lived, whereas a sign is intended as a stand-alone, long term intervention. Also, the MUTCD requires signs to "convey a clear, simple meaning." A sign shouldn't need a publicity campaign to explain its meaning.

Second, the survey sample was not an unbiased population. While the sign is intended to be an intervention to warn motorists, a very high 82.5% of survey respondents rode a bicycle. This biased population likely skewed the results: bicyclists might be expected to respond favorably to a bicycle related message. A more useful sample would have been only motorists who don't ride a bicycle, the target audience of the sign. But these comprised just 14.2% of respondents. Also, the survey did not consider non-respondents. Those who chose to respond were likely interested in the subject matter.

A specific criticism involves question THREE: "The sign and graphic clearly send the message of bicyclists and motorists sharing the road." This question does not address what "share the road" is supposed to mean or how respondents interpreted the message. Furthermore, it was found that only 75.2% of respondents, most of whom rode a bicycle, believed that the words "share the road" on the placard definitely clearly send the message of "sharing the road." 100% of road users should understand a sign.

Question FOUR is illustrative of the misinterpretation of the sign: "After reading about the intention of the Share the Road sign, will you be more considerate of bicyclists and/ or motorists when sharing the roadway?" Here respondents are asked whether they will be more considerate to motorists! And, the responses indicate that the sign does not command respect as is required by the *Manual on Uniform Traffic Control Devices*.

Appendix B

The roads and traffic law are designed to be a cooperative system without competition. The directive to COEXIST conveys this message. The COEXIST concept sign is inclusive, depicting universal symbols for pedestrians, cars, busses/trucks, and bicyclists. It's ambiguous, but can't be negatively interpreted. It's simple and attractive.

The STREETS ARE FOR EVERYONE concept sign offers a positive affirmation while also communicating the secondary vertical SAFE message. This sign is intended as a supplemental plaque to the COEXIST sign.

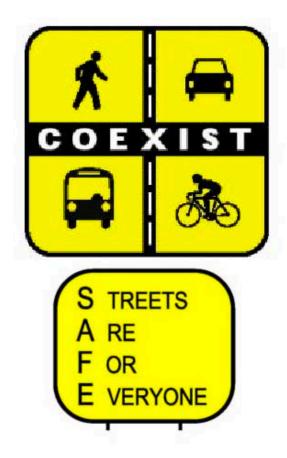


Figure 12. COEXIST concept sign with optional SAFE placard developed by the Chapel Hill, NC Bicycle and Pedestrian Board.



Figure 13. COEXIST bumper sticker admonishes religious and secular tolerance. The COEXIST message is widespread and universally well understood, if not practiced.



Figure 14. CITYWIDE: WATCH FOR PEDESTRIANS signs are placed on major Chapel Hill, NC entranceways. It could say AND BICYCLISTS. Instead of WATCH it could say YIELD. Martin Luther King Jr Blvd., Chapel Hill, NC.

Figure 15. A similar sign saying "BICYCLE CROSSING" would clearly indicate bicyclists are crossing the road.



Appendix C

http://www.ncdot.org/bikeped/safetyeducation/signing/

NCDOT Share the Road Signing Program

The North Carolina Department of Transportation Division of Bicycle and Pedestrian Transportation (DBPT) first installed "Share the Road" signs along designated bicycle routes in 1987. Funding was provided as part of the first annual allocation of <u>Bicycle Transportation Improvement Program</u> (TIP) funds received by the Bicycle Program, as DBPT was known at the time.

The Manual on Uniform Traffic Control Devices (MUTCD) specifies what types of signs can be installed along Federal Aid Highways. In 1987, no authorized sign with the "Share the Road" message had been approved. DBPT recognized the need for such a sign and worked within the MUTCD guidelines to develop a state "supplementary" sign. The design chosen utilized an approved yellow and black diamond-shaped bicycle warning sign (W11-1) with a supplementary "Share the Road" plaque. In 2000, the Secretary of Transportation decided to use a reflectorized bright yellow/green version of the sign to increase visibility. This design was adopted as a national standard in an update to the MUTCD in the 1990s.

The sign serves to make motorists aware that bicyclists might be on the road, and that they have a legal right to use the roadway. It is typically placed along roadways with high levels of bicycle usage but relatively hazardous conditions for bicyclists. The "Share the Road" sign is especially useful in cities and towns where a significant number of bicyclists utilize a roadway that by its nature is not suitable to be designated as a bicycle route, but which is an important connection for bicycle transportation. The sign should not be used to designate a preferred bicycle route, but may be used along short sections of designated routes where traffic volumes are higher than desirable.



How the Sign is Used

The North Carolina "Share the Road" sign is used along cross-state, regional and local designated bicycle routes on sections of roadway where traffic volumes are higher than desirable. These sections of roadway are typically less than a mile in length and serve to connect the more lightly traveled roads that comprise the majority of a given route. The signs are placed on the roadway in each direction, just before the bicycle route joins that particular road, so that motorists will be made aware that cyclists may be on the roadway. If a particular high-volume road must be used for a distance greater than two miles, additional signs are installed. These signs are placed where the greatest number of motorists will see them, based on turning movements off intersecting roads.

To elaborate, if there is a choice between placing a sign just before a secondary road with traffic volumes of 1500 cars versus placing it a short distance further along the route before a more major road with a traffic count of 5,000, choose the latter. Fieldwork and engineering judgment are necessary to fine-tune the placement of signs.

"Share the Road" signs have also been placed along roads that are not part of a designated bicycle route, both in towns and cities, as well as on rural roadways. Roads and bridges heavily used by cyclists, particularly where on-road improvements cannot be made, are prime locations for such signage. Some examples include a major road near a college or university where many students commute by bike; coastal or mountain roads in tourist areas where no alternate routes exist; or, on a bridge approach where no other convenient crossings provide an efficient transportation link.

Installation of "Share the Road" signs is an ongoing process. Each new route system that is developed is assessed for "Share the Road" signing needs. Periodic field inspections of existing routes are conducted not only to check the condition of existing signs, but to also identify areas where changing traffic conditions may warrant additional "Share the Road" signs.

Costs and Funding

Fabrication and installation of "Share the Road" signs ranges from \$200 to \$225 each. The reflectorized bright yellow/green sign costs about twice as much to fabricate as the yellow and black version.

Conclusions and Recommendations

"Share the Road" signing projects are a low-cost way to increase the awareness of motorists and enhance the safety of cyclists. The reflectorized bright yellow/green W11-1 signs are visible from a great distance.

Contact–Division of Bicycle and Pedestrian Transportation at (919) 707-2600 or <u>Contact Us</u>.

Appendix D

http://ohiobikelawyer.com/uncategorized/2010/09/share-the-road-stinks/

"SHARE THE ROAD" stinks....

Usually diamond-shaped and yellow, these "warning signs" caution drivers that the road is slippery when wet; there is an intersection ahead, the lanes narrow, or there may be bicyclists, farm animals, or wildlife on or near the roadway. Somehow cyclists are supposed to be comforted by the notion that Big Brother is "protecting" us by putting out a "warning" that we are nearby – as though we are a **hazard** to motorists, like deer leaping from the woods or kids darting out after a ball. They might as well put up "**Bikes Might Be In The Way**" signs…



The whole point of the "SHARED lane" marking is to indicate to motorists that they ought to "share THEIR lane" with cyclists. This entire line of thought has always baffled me, frankly, because it implies that motorists OWN the lane and must be told, or just asked, to "share" a bit of it with cyclists.

"Sharing" is not a concept mandated by law, but is an altruistic concept that relies upon the goodwill of the Share-or to give up a little bit of that which he owns to the Share-ee. No **law** says that the motorist owns the road and the cyclist may borrow it sometimes, IF the motorist feels like sharing. Yet, motorists frequently act like my two year old son did almost 20 years ago – he got in the face of the proposed "Share-ee" and said, "MINE!"

Indeed, if the law said you ought to "share" the space, a motorist might legitimately claim ownership of the road and say, "MINE!"

But this is not the law. Rather, the law is that a PERSON wishing to use the public roads has the right to CHOOSE the vehicle on, or in, which to travel. A bicycle and a car and a truck and a bus and an Amish buggy and a large piece of farm equipment are equally valid, legitimate and lawful choices as vehicles. When it comes to the right to be on the roadway, a person who chooses to ride a bicycle on the roadway has exactly and precisely the same quantity or bundle of rights as one who chooses to operate a car.

RIGHT TO TRAVEL – RIGHT TO USE THE ROADS
Remember this –> The rights belong to the person, not the vehicle. The RIGHT is the RIGHT TO TRAVEL on the public ways. The Right is not bigger if you choose a bigger vehicle...

In 1215, in merry old England, the <u>Magna Carta</u> enshrined the "right to travel" stating:

It shall be lawful to any person, for the future, to go out of our kingdom, and to return, safely and securely, by land or by water, saving his allegiance to us, unless it be in time of war, for some short space, for the common good of the kingdom: excepting prisoners and outlaws, according to the laws of the land, and of the people of the nation at war against us, and Merchants who shall be treated as it is said above.

The "right to travel" has been recognized by the U.S. Supreme Court in <u>U.S. vs. Guest</u> which held citizens maintain "... the constitutional right to travel freely from State to State and to use highways and other instrumentalities for that purpose..."

In <u>Packard v. Banton</u>, the Supreme Court said, "The streets belong to the public and are primarily for the use of the public in the ordinary way."

In <u>Kent v. Dulles</u>, the Court said, "...The Right to travel is part of the Liberty of which the citizen cannot be deprived without due process of law ..."

In Ohio, "...the right to intrastate travel is a fundamental right held by each citizen and cannot be deprived without the due process of law. State v. Burnett (2001), 93 Ohio St.3d 419, 428, 2001 Ohio 1581, 755 N.E.2d 857..."

The Virginia court said, in Thompson v. Smith: "The right of the Citizen to travel upon the public highways includes the right, in so doing, to use the ordinary and usual conveyances of the day, and under the existing modes of travel...." In this case the tension on the roads was

between cars and the horse/buggy configuration but the court's use of the phrase "ordinary and usual conveyances of the day" is certainly broad and bicycles, having been around longer than cars, certainly fit the bill!

With regard to the right to travel and move about the country, a Mississippi court held in <u>Teche Lines Inc. v. Danforth</u>, held as follows:

"...The right of a citizen to travel on public highway is a common right which he has under his right to enjoy "**life**, **liberty**, **and pursuit of happiness**," and the right to "travel," which means the right to go from one place to another, includes the right to start, to go forward on the way, and to stop when the traveler's destination has been reached, and also the right to stop on the way, temporarily, for a legitimate or necessary purpose when that purpose is an immediate incident to travel..."

Of course, good quotes cannot just be strung together to make a real argument and none of these cases are "bike cases." However, it seems very clear to me that virtually every court in the country would be forced to agree that you have a fundamental right to use the public way to move about the country. So long as your vehicle choice is one permitted by state law and you obey the traffic laws, you have the right to use most public roadways for bicycle travel.

RIGHT OF WAY LAW

So the PERSON, the "citizen," not the vehicle, possesses this "right to travel." But, once you've walked into your garage, looked at your car, your truck, your motorcycle and your bike and chosen to head out on the public way on your BIKE, what "rights" do you have on your bicycle? Most states say you have the SAME bundle of rights as the operator of other vehicles, and the same responsibilities. You don't get bigger rights because you choose a bigger vehicle!

The person driving in the front of the pack of traffic typically has the "right of way" and the rights of the operator of the vehicle operated behind, or passing, are subservient to the one with the right of way. The "right of way" is a very powerful collection of rights.

In Ohio, for example, the "right of way" is defined in O.R.C. 4511.01:

- UU) "Right-of-way" means * * * :
- (1) The right of a vehicle, streetcar, trackless trolley, or pedestrian to proceed uninterruptedly in a lawful manner in the direction in which it or the individual is moving in preference to another vehicle, streetcar, trackless trolley, or pedestrian approaching from a different direction into its or the individual's path;

Note – the word "share" is not in the law. There is no crying in baseball, and there is no "sharing" in the right of way law. So, really, this concept of "sharing the road" has absolutely no business being in the transportation lexicon. Advising a motorist who is coming up on a bicyclist from behind to "Share The Road" with the cyclist ahead is fundamentally and legally WRONG. You either HAVE the right of way or you don't.

The cyclist owns the right of way and does not have to share... in fact the cyclist shouldn't "share." Once the cyclist gets into a "sharing" mentality, the cyclist has lost the battle. You HAVE rights – the right of way. Maybe the motorist doesn't know this but you have to ASSERT that right. The fact that you have a right means nothing if you don't USE it.

Remember, the cyclist ahead of the motorist has the right of way – which is really a powerful collection of rights. The right to proceed ahead in an uninterrupted manner. The operator with the right of way has rights, as the

preferred vehicle, that are GREATER than other vehicles. A "Share The Road" sign may give the motorist behind the cyclist the wrong message that the motorist can choose to share, or not, since the implication is that the bigger car has bigger rights that supercedes the right of the cyclist.

The motorist is encouraged to view the cyclist as one who has actually SNATCHED HIS RIGHT TO DRIVE HIS CAR away, which ticks off the motorist, who may not WANT to "share" his roadway...

The Right of Way is valuable – it's important – and it's something cyclists should not SHARE.