

An Analysis of “Bike Wars”

by Jennifer Dill, Ph.D.

Kyle Cassidy’s “Bike Wars” in the Summer 2009 issue of Metroscope® is the most controversial article ever to appear in the magazine over its seventeen years of publication. It has received both praise for calling attention to a looming problem and disapproval for factual inaccuracy. While not seeking to resolve the dispute, the editors sought the unbiased opinion of an expert on bicycle transportation about the value of the article as a contribution to the understanding of the issue it highlights. Among the faculty and researchers in the College of Urban and Public Affairs (where the magazine is based) who study bicycling, Dr. Jennifer Dill, Associate Professor of Urban Studies and Planning, is an acknowledged expert in the field. She has published several scholarly articles on bicycling based on original research. She also serves as chair of the Transportation Research Board’s Committee on Bicycle Transportation. As director of the Center for Transportation Studies at PSU, she oversees the Initiative for Bicycle and Pedestrian Innovation (IBPI). One of the goals of IBPI is to further high-quality research that helps in public decision making, including building transportation infrastructure that is safe and comfortable for people who decide to walk or bicycle.

—the Editor

While the article raises important questions about building facilities that will reduce conflicts and improve safety, the writer incorrectly bases the article on a notion that increasing the number of bicyclists increases conflict and decreases safety. He does so by drawing conclusions from anecdotes of conflict recently appearing in the media. For example, after recalling an incident in Toronto, he states that “This type of thing just wasn’t happening ten years ago; it’s a new phenomenon...” There are two additional statements in the article that assert that there is an increase in conflict:

During the cycling boom last year, incidents of tension between cyclists and motorists grew proportionally to the increase in riders. (p. 7)

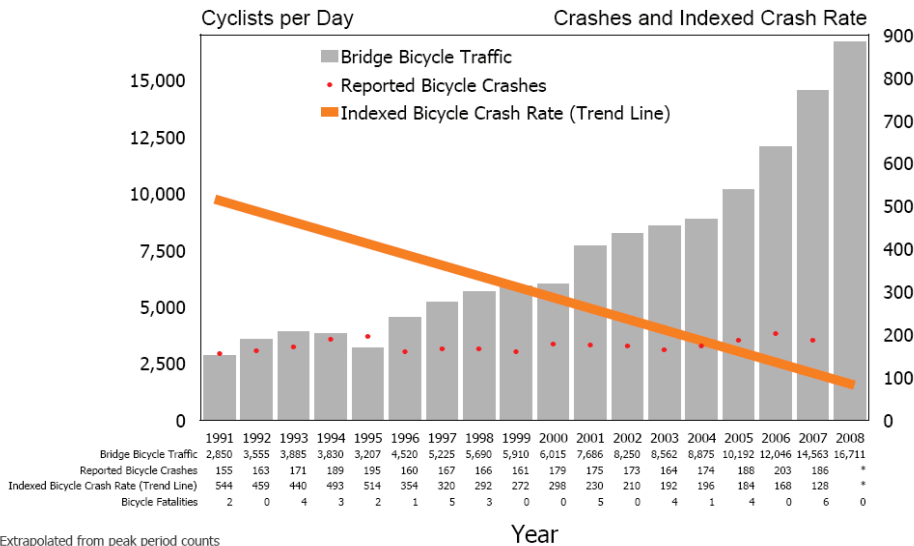
The increase [in the number of bike commuters] has, similarly to Portland, led to an increase in incidents between motorists and bicyclists. (p. 8)

However, he does not cite any facts to back up these statements. The reason he does not is that there are no reliable statistics to support the statements. Public agencies or other reliable sources do not regularly track the types of road rage conflicts described in the article. So there is no way to know whether the number or rate of such incidents is going up, down, or remaining stable. Without data, we do not know if there really are more incidents or if people think that there are more incidents because more incidents are reported in the media and easily disseminated via the internet. It is not uncommon for people to think a trend of any type is increasing simply because it is getting more attention. Moreover, it is important to distinguish between increases in the number and increases in the rate, or number of incidents per cyclist or per mile bicycled. For example, if the number of bicyclists went up 100%, but the number of incidents only increased 50%, the rate of incidents is going down – an improvement.

The author also incorrectly states that “... paradoxically, as Portland’s bicycle-friendly streets encourage more riders, the streets become less safe for riding” (p. 10). Again, the author has no facts to back up the statement. Worse, in this case there are data that lead to the opposite conclusion – that there is “safety in numbers.” Data from the City of Portland directly conflict with Cassidy’s statement. Between 1996 and 2007, the number of bicycles crossing the bridges to/from downtown increased over 400%, from 2,850 to 14,563. This is one of the best indicators the City has on the overall numbers of bicyclists. Over that same time, the number of reported bicycle crashes increased from 155 to 186, only a 20% increase. This means that the likelihood of a bicyclist being in a crash declined, e.g. bicycling became safer as it increased.

Moreover, as shown in the City’s figure (next page), the trend in reported crashes is relatively flat over the time period, as is the number of fatalities. One potential reason for this relationship is that as more people bicycle, motorists become more aware and watch out more for bicycles. In addition, more motorists may be bicyclists themselves, making

Combined Bicycle Traffic over Four Main Portland Bicycle Bridges Juxtaposed with Bicycle Crashes



Extrapolated from peak period counts
 Crash Rate represents an indexing of annual reported crashes to daily bicycle trips across the four main bicycle bridges.
 *2008 Reported Bicycle Crashes data not yet available

them more cautious when they drive. At least two peer-reviewed research articles support the “safety in numbers” theory with data from other US cities and internationally. Peter Jacobsen¹ used five different datasets and found that the “likelihood that a given person walking or bicycling will be struck by a motorist varies inversely with the amount of walking or bicycling. This pattern is consistent across communities of varying size, from specific intersections to cities and countries, and across time periods” (p. 205). In a 2009 article, Rune Elvik² concluded that “transferring a substantial part of trips made by motor vehicles to walking or cycling may lead to fewer accidents. ...The explanation of the surprising finding is the non-linearity of risk: the more people walk or cycle, the safer walking or cycling becomes” (p. 852).

Cassidy’s primary focus on infrastructure is also unfortunate. He makes an analogy with the movie, *Field of Dreams* – “if you build it, they will come.” While infrastructure, including bike lanes and boulevards, is important, my research and that of others shows that it’s just one part of increasing bicycling and improving safety. Education,

enforcement, advocacy and interest groups, speed control, and programs (e.g. Sunday Parkways) all play important roles. The fact that the number of cyclists in Portland has increased more than the number of miles of facilities indicates that infrastructure alone is not the reason. Therefore, any effort to address potential conflict and safety must take a more comprehensive approach.

In addition to the important point Cassidy makes about designing facilities to reduce conflict and improve safety, the article reveals the lack of good data on conflict and safety. There are data on fatalities, yet many injuries are not reported, and incidents of road rage or other conflicts not resulting

in fatality or injury are not tracked. Moreover, to really understand safety we need to know how much cycling is occurring. We are fortunate that the City of Portland regularly counts cyclists on many streets and bridges; few cities do so. But even in Portland we do not know how many miles people bicycle. On the other hand, there are good statistics for all metropolitan areas on the number of miles driven in motor vehicles. The lack of good, comprehensive, longitudinal data on bicycling (and walking) is one barrier to improving planning for these modes and improving safety. Faculty and researchers at PSU are working to improve the data and research on these topics. To find out more, please visit the IBPI website at <http://www.ibpi.usp.pdx.edu/>.

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¹*Injury Prevention*, 2003, 9: 205-209

²*Accident Analysis and Prevention*, 2009, 41: 849-855