

COMMUNICATIONS

Do Bike Paths Promote Bike Riding?

ERIC JAFFE FEB 24, 2012 COMMENTS



The "[fundamental law of road congestion](#)" tells us that building roads creates traffic. There's such a latent demand for space on the highway that no sooner does it appear than it's filled. But whether or not a similar law applies to bike paths and bike lanes remains a mystery.

A recent study of Seattle residents found that those living near bike paths had an [increased likelihood of riding](#), but saw no effect for bike lanes. Then again, a study in Minneapolis reached the [opposite conclusion](#). Some recent work has [found no connection](#) between bike lanes and ridership levels at all. In short, the research picture is far from settled.

A new study published in the March 2012 [issue of the journal *Transportation*](#) attempts to clarify the confusion. Ralph Buehler of Virginia Tech and John Pucher of Rutgers analyzed a new batch of 2008 data on bike lanes (that is, on-road routes) and bike paths (off-road ones) in 90 of the largest cities in America. Even after controlling for a number of factors — including land use, climate, socioeconomic status, gas prices, public transport and bike safety — they still get a clear result: "cities with a greater supply of bike paths and lanes have significantly higher bike commute rates." They continue:

[W]e find that the supply of bikeways per capita is a statistically significant predictor of bike commuting. By including separate variables for paths and lanes ... our analysis is able to examine each type of facility separately and finds that they do not have significantly different associations with levels of bike commuting among cities.

Buehler and Pucher report that bike commuting in cities with the most bike lanes per 100,000 residents was three to four times higher than in cities with the fewest, and twice as high in cities with the most bike paths. They also found three to four times more bike commuting in cities with the most combined path and lane mileage compared to those with the least.

In other words, when the opportunity is there — whether on an off-street beaten path or a freshly painted road lane — city residents ride their bikes more often. That isn't causation, of course, but it is "consistent with the hypothesis that bike lanes and paths encourage cycling," the researchers conclude.

So that debate's settled, right? Well, sort of. A more localized study in Stafford, England, [scheduled for publication](#) in *Transport Policy*, complicates the situation.

Tim Jones of Oxford Brookes University examined the National Cycle Network - a 13,000-mile system of paths and lanes established by Sustrans that claims to be within a mile's reach of half the British population. While the system exists both on and off roadways, it's the traffic-free paths in urban areas separated from motor cars that are the most popular, carrying two thirds of all the network's bike trips.

The idea for building traffic-free paths is to wean people in cities back on bikes through recreational riding, so that in time they become full-fledged bike commuters. The first part of this effort has been a success. While the route length of urban, traffic-free paths grew roughly 98 percent between 2000 and 2005, usage rose about 135 percent:

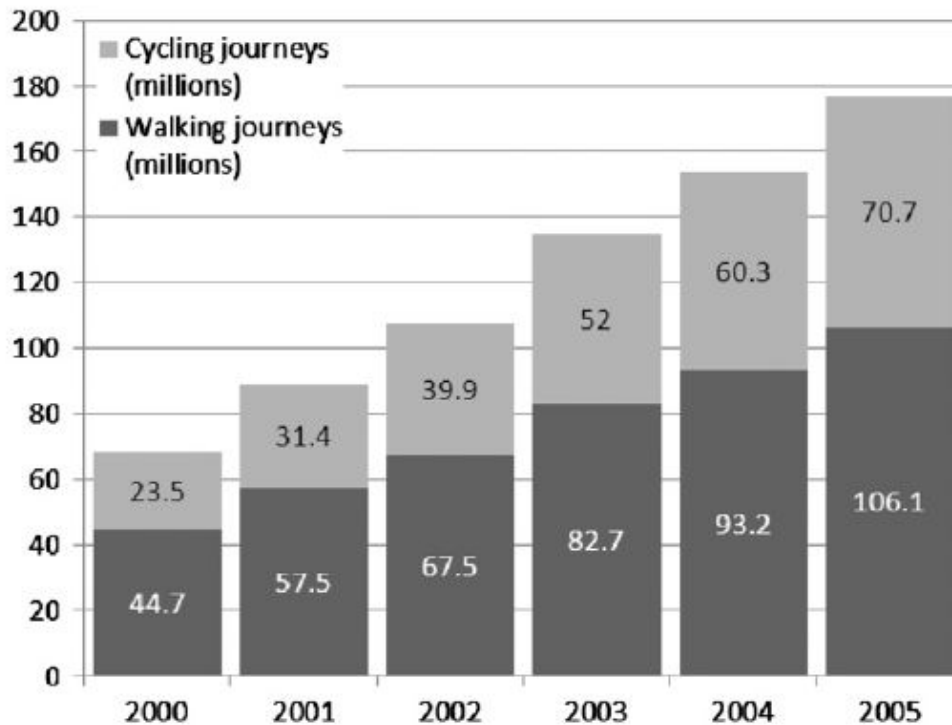


Fig. 4. Growth in walking and cycling on urban traffic-free sections of the National Cycle Network over the period 2000 to 2005.

Source: Sustrans.

But the conversion to bike *commuting* didn't quite take. As a point of comparison, Jones studied two suburban Stafford neighborhoods, Beaconside and Rickerscote, that are similar in most respects except one: Beaconside residents have easy access to a network traffic-free path that leads 2 miles into central Stafford, and Rickerscote residents don't.

As expected, Jones found that levels of bike commuting were higher in Beaconside (6 percent) than in Rickerscote (2 percent). But those figures were at or below levels from the 2001 Census: 7 and 2 percent, respectively. So bike commuting hadn't changed much in Beaconside since the traffic-free path was finished in late 2005. If anything it might have gone down.

In sum, traffic-free paths connecting suburbs and cities "would appear to be insufficient in encouraging a shift from car travel to cycling for everyday practical journeys," Jones concludes. The important lesson for policy makers is that bike paths and bike lanes may both increase ridership, but in different ways. While the former may encourage recreational riding, that doesn't necessarily translate into everyday cycling.

To do *that*, writes Jones, probably requires a "broader, multi-faceted approach":

More specifically, provision of good quality separate cycling facilities alongside heavily travelled roads and linking to everyday facilities that people need to use, self-enforcing speed restrictions using traffic calming and more intelligent design across residential neighbourhoods, *coupled with* making driving expensive and inconvenient in central urban areas through various restrictions on car use and car parking. Encouraging the public on to the 'nursery slopes' of Sustrans style traffic-

free paths in order to acquire the skills for cycling on the road network for everyday purposes seems unlikely to create a mass modal shift away from journeys by car.

On the face of things, the studies only seem to confuse the matter. Buehler and Pucher found a connection between bike paths and bike commuting, while Jones did not. On closer inspection they aren't as far off as they seem. The point here is not for all bike research to align precisely; British towns and American cities are different, after all, and single-city and multi-city analyses have different aims.

Rather, with each study of this kind that's completed, it seems more clear that in many cities, for many different purposes, there does appear to be some fundamental demand for sustainable transportation just waiting for a share of the urban landscape. In some places, tapping that potential just means adding a bike path. In others, it may take a bit more.

Photo credit: Kai Pfaffenbach/Reuters

Keywords: Minneapolis, Seattle, England, Bike Commuting, path, lane



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Keenplanner

Michigan Complete Streets Coalition



A project of the League of Michigan Bicyclists, Michigan Environmental Council & AARP

www.MICompleteStreets.org

November 3, 2011

Clay Pearson
City Manager
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Mark Sporn

Dear Clay,

On behalf of the Michigan Complete Streets Coalition (MCSC), congratulations on becoming one of the latest communities in Michigan to officially endorse Complete Streets! We are extremely excited that you have joined the ranks of over 48 communities across the state who have made a commitment to Complete Streets through the passage of a resolution and nine communities who have codified Complete Streets into law through ordinances.

MCSC is a broad group of over 100 diverse organizations and businesses that have been working since 2009 to encourage Michigan communities to adopt Complete Streets policies – that is, policies that direct transportation planners to accommodate all users of all ages and abilities, including pedestrians, bicyclists, transit users and those with disabilities, in addition to automobiles. After all, safe walkable communities are magnets for the kind of talented workforce this state seeks to attract to reinvent our economy.

Last summer our Coalition won a major victory when Michigan legislators from both sides of the aisle voted to pass a package of bills (Public Acts [134](#) and [135](#) of 2010) to make streets safer and more accessible for Michiganders of all ages and abilities. We were proud to advocate for this Complete Streets legislation, and we are now working hard to educate government officials at all levels about how to implement policies in their communities.

Our education efforts are paying off, as Michigan now leads the nation with more local and regional policies than any other state! Local governments, metropolitan planning organizations, and county road commissions are recognizing that building streets for people, and not just cars, is one way that we can attract talented professionals and rebuild our communities to be safer and healthier.

We are writing today to congratulate you on adopting your Complete Streets resolution to share information about available resources, and encourage you to consider some next steps:

1. Resources

At the state level, there are a number of people that can serve as a resource should your community need technical assistance with crafting an ordinance.

- **Complete Streets Project Coordinator**
Holly Madill is the Complete Streets Project Coordinator for the Michigan Department of Community Health (MDCH). Holly works to help implement state and local Complete Streets policies and increase access to opportunities for physical activity in Michigan communities. She can be reached by phone at (517) 335-8372 or by email at madillh@michigan.gov.
- **Complete Streets Advisory Council**
One key provision of Public Act 135 of 2010 was the creation of a Complete Streets Advisory Council comprised of representatives from 18 statewide government and non-government stakeholder agencies. The Advisory Council is to provide education and advice to the State Transportation Commission, county road commissions, municipalities, interest groups, and the public on the development, implementation, and coordination of Complete Streets policies. The quarterly Advisory Council meetings are open to the public.

Visit MDOT's website at www.michigan.gov/mdot and enter "Complete Streets" to find meeting agendas and minutes. Please see the enclosed list of Advisory Council members and their contact information.

- *Model Policy*

Our Coalition is working closely with the Michigan Department of Transportation (MDOT) as they work to develop a model policy. Public Act 135 of 2010 requires that MDOT have a policy in place by August 2012, but we are hopeful that something will be implemented sooner. In the meantime, we encourage you to visit our website at www.MichiganCompleteStreets.org to find copies of ordinances that other Michigan communities have adopted, in addition to information on national best practices.

2. Training Opportunities

MDCH, Michigan Trails and Greenways Alliance, Michigan Association of Planning and numerous other partners have hosted numerous events this past year to help educate local elected officials, planners, engineers, and advocates about Complete Streets.

In addition, the Complete Streets Institute has developed a comprehensive and standardized 5-module training program designed to increase awareness of Complete Streets principles, support local advocacy efforts, and provide practical, realistic instructions and techniques to help communities create, adopt and implement Complete Streets policies and projects. All five modules were also recently presented as condensed webinars. To view recordings of these webinars please visit our partner at The Greenway Collaborative, Inc: <http://www.greenwaycollab.com/EducationTrainings/completestreets.htm>.

3. Resources

- *MichiganCompleteStreets.org*

The MCSC website has a wealth of resources including a listing of Complete Streets policies and nonmotorized plans from across the state, fact sheets, helpful links and much more. There you can also sign up to receive email updates on upcoming training opportunities and other Complete Streets related news as well as find links to our Coalition's Facebook and Twitter feeds.

Under the Resources section of the website you will also find a link to the *Building Healthy Communities Complete Streets Resource Package*. This comprehensive resource compilation by the Michigan Department of Community Health contains documents about policies, advocacy, funding, the transportation planning process, evaluation, reports, assessments, as well as a number of sample presentations. You may also request to have a CD version of these resources mailed to you by contacting Holly Madill at (517) 335-8372 or madilh@michigan.gov.

- *Complete Streets Community Forum – Coming Soon*

MCSC partners including the Michigan Municipal League, League of Michigan Bicyclists and Michigan Trails and Greenways Alliance are currently developing a Michigan specific online community forum. The forum will provide an environment where community leaders, planners, transportation officials and advocates can communicate directly with one another regarding Complete Streets best practices. Watch www.MichiganCompleteStreets.org for more details.

4. Advantages, Incentives & Promotions

- *Transportation Enhancement Priority*

There are several advantages to adopting a Complete Streets policy. First, if you plan to apply for federal Transportation Enhancement (TE) dollars, the major source of nonmotorized funding, the Michigan Department of Transportation (MDOT) is now giving preference to those communities that have Complete Streets policies. Amber Thelen, MDOT's TE Program Manager, states, "there's no guarantee for funds, but Complete Streets is good for the community and it improves your chances for a successful application." MDOT stresses that regardless if a community has passed a resolution or ordinance, their primary concern is whether or not a community can demonstrate a true commitment to the principles of Complete Streets in how they approach all transportation projects.

MCSC believes that communities with strong TE applications that also have adopted Complete Streets into law through an ordinance and regularly conduct comprehensive community engagement on transportation projects will be the best positioned to receive competitive TE funding.

- More Local Control

Second, if one or more MDOT trunklines is in your jurisdiction, Public Act 135 of 2010 requires that MDOT adhere to your local Complete Streets policy when making infrastructure improvements to that roadway. In other words, a local ordinance can give your community more control over how Trunkline facilities are designed. Similarly, townships that codify a vision for their community through a Complete Streets ordinance confirm their intent to be involved in transportation decisions on local roads with their road commissions.

- Bicycle Parking Discounts

MCSC partner, CycleSafe, Inc. is pleased to announce they are now offering discounts on their Michigan made bicycle parking products to municipalities that have adopted a Complete Streets resolution, ordinance or a bicycle parking ordinance. The promotion is tiered, offering communities with ordinances larger discounts over communities with resolutions. Communities that have adopted both a Complete Streets ordinance and a bike parking ordinance are eligible for the greatest discounts.

CycleSafe manufactures a wide range of bicycle parking products from bicycle lockers, bicycle shelters to decorative bike racks, utilizing Michigan vendors with products still in use for over 30 years. For Cycle Safe product information and to learn more about this new incentive, please contact CycleSafe by phone at (888) 950-6531 or by email info@cyclesafe.com or visit the website at www.cyclesafe.com. Please reference discount code *MI-2012CS* for the Complete Streets program.

5. Next Steps

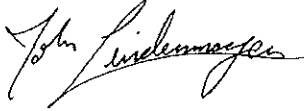
By adopting a resolution, you've joined dozens of communities that have recognized the value of providing transportation options for all roadway users. We strongly encourage you to consider several concrete next steps that can help move these ideas closer to reality in your community:

- Work toward adopting a stand-alone Complete Streets ordinance.
- Adopt design guidelines to govern Complete Streets implementation.
- Develop a checklist to ensure all projects meet your Complete Streets guidelines.
- Establish designated funding sources such as a policy that sets aside additional Act 51 dollars specifically for nonmotorized projects as has been implemented in other Michigan communities.
- Develop and host a public outreach and engagement process for all transportation projects.
- Update local zoning ordinances to support more walkable/bikeable mixed use development. —
- Create, adopt and implement a non-motorized plan that is integrated into your master plan. ✓
- Adopt a sidewalk snow/ice removal policy to ensure your community remains walkable year around.
- Adopt a bicycle parking ordinance requiring new development to provide secure bicycle parking. *with them*
- Endorse the new NACTO Urban Bikeway Design Guide (<http://nacto.org/nacto-endorsement-campaign>).
- Apply to be a Bicycle Friendly Community (www.bikeleague.org/programs/bicyclefriendlyamerica).
- Complete the Promoting Active Communities (PAC) assessment, facilitated by the Michigan Fitness Foundation, to evaluate what infrastructure and policies exist that enable or deter active behaviors and help define what steps can be taken to create a more active community (www.mihealthtools.org/communities).
- Initiate a Safe Routes to School program within your school district to make it safer for children to walk, bike, and roll to school (www.michigansaferoutes.org).

In closing, thank you for your leadership on this important issue. How we design infrastructure has a decades-long impact on whether our communities encourage healthy, active lifestyles, and whether children and adults can safely travel to school, work, and play. We encourage you to use the Coalition as a resource and to consider making Complete Streets law in your community by adopting a stand-alone ordinance.

We look forward to working with you to secure a safer, healthier, more vibrant future for Michigan communities.

Sincerely,



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PS: To see a complete list of MCSC partners please visit www.micompletestreets.org/partners.