

# Bicycling

## A LIVABILITY FACT SHEET

Half of all trips taken in the United States are three miles or less, yet most Americans drive — even to the closest destinations. Only 3 percent of commuting trips in the U.S. are by bicycle, compared to up to 60 percent in The Netherlands.

Still, it's not unreasonable to believe we can improve our numbers. The popularity of bicycling has been on the rise. The number of bike trips doubled between 1990 and 2009, and many communities and the federal government are embracing the bicycle as a transportation solution for a healthy and viable future.<sup>1</sup>

Surveys show that 60 percent of Americans would ride a bicycle if they felt safe doing so, and eight out of 10 agree that bicycling is a healthy, positive activity.

Although issues related to bicycling continue to be debated, experience shows that bicycle-friendly features increase safety for all road users, including motor vehicles.<sup>2</sup>

In 2010, New York City removed a traffic lane and painted a two-way bicycle path with a three-foot parking lane buffer alongside Brooklyn's Prospect Park. Weekday

bicycling traffic tripled, speeding by all vehicles dropped from 74 to 20 percent, crashes for all road users dropped 16 percent and injuries went down 21 percent, all without a change in corridor travel time.<sup>3</sup> Throughout New York City, deaths and serious crashes are down 40 percent where there are bike lanes.<sup>4</sup>

Bicycling also provides economic benefits: Two-thirds of merchants surveyed on San Francisco's Valencia Street say that bike lanes have improved business. In North Carolina's Outer Banks, bicycle tourism has already generated \$60 million in annual economic activity on its \$6.7 million bicycle infrastructure investment. In 2009, people using bicycles spent \$261 million on goods and services in Minnesota, supporting more than 5,000 jobs and generating \$35 million in taxes.<sup>5</sup>

Building bike infrastructure creates an average of 11.4 jobs for every \$1 million spent. Road-only projects create 7.8 jobs per \$1 million.<sup>6</sup> The average American household spends more than \$8,000 a year on its cars; the cost to maintain a bicycle is about \$300 a year.<sup>7</sup>

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2. Marshall, W, Garrick, N. (March 2011), "Evidence on Why Bike-Friendly Cities Are Safer for All Road Users," *Environmental Practice* 13 (1)
3. Newmann, A., Steely-White, P. (February 2011), "Battle of the Bike Lanes." *Bicycle Times*. Issue 009; and New York City Department of Transportation. Retrieved February 25, 2014 from <http://www.nyc.gov/html/dot/html/bicyclists/prospectparkwest.shtml>



This path in New Smyrna Beach, Fla., is part of a Volusia County plan to link schools, parks and businesses through interconnected paths. Fifteen miles were completed by 2012 with overwhelming public support. (Image: bikeflorida.net.)

## MYTH-BUSTING!

### ■ “Bicyclists don’t follow rules.”

While there are bicyclists who do break the law, a large Federal Highway Administration study found that motorists failed to yield the right of way in 43 percent of crashes; bicyclists were at fault 36 percent of the time.<sup>8</sup> Since the 1982 passage of Idaho’s “stop as yield” law, which allows cyclists to treat stop signs as yield signs, there has been “no discernible increase in injuries or fatalities,” according to the Idaho Department of Transportation.<sup>9</sup>

### ■ “Bicyclists don’t pay their fair share.”

All road users — cars, trucks, bicycles, pedestrians, buses, light rail — are subsidized to some extent by society at large. Funding for U.S. roadways comes partly from vehicle taxes, fuel taxes and tolls, which together account for up to 60 percent of direct costs. General taxes and fees pay the remaining 40 percent. The federal gas tax of 18.4 cents per gallon has not been raised since 1992. Cars, buses and trucks impose much higher maintenance and capital costs on roads than bicycles do, and they benefit from subsidies that are

not directly paid by motorists.<sup>10</sup> In 2009, the Seattle Department of Transportation paid only 4 percent of its road expenses with the gas tax while non-motor vehicle funds paid for the rest.<sup>11</sup> Motor vehicle crash injuries cost society \$99 billion in 2010 due to medical expenses and lost productivity.<sup>12</sup> Pedestrians and bicyclists bear a larger share of costs than they impose.<sup>13</sup>

### ■ “Bicycling is only for middle-class white males in Spandex.”

Six in 10 young bicycle owners are women, eight out of 10 American women have a positive view of bicycling and two out of three believe their community would be a better place to live if biking were safer and more comfortable. Between 2001 and 2009, the fastest growth in bicycle use in the U.S., from 16 to 23 percent, occurred among self-identified Hispanics, African-Americans and Asian-Americans, 86 percent of whom have a positive view of bicyclists.<sup>14</sup>

### ■ “Bicycling is too dangerous.”

Bicycling does tend to have higher fatality rates per mile than motorized travel, but a typical motorist drives five to 10 times more miles than

a typical cyclist. Bicycling risk can be significantly reduced through improved infrastructure and a greater numbers of bicycles on the road.<sup>15</sup> Bicycling also imposes minimal risk to other road users and provides significant health benefits that can offset crash risks.<sup>16</sup> There were no bicycling fatalities in bicycle-friendly Portland, Ore., in 2013 even though bicycling accounts for at least six percent of all trips. By comparison, 21 people were killed inside motor vehicles that year.<sup>17</sup>

### ■ “Bicyclists slow down cars and create congestion.”

Average traffic speeds in Manhattan’s primary central business district south of 60th Street has increased nearly seven percent since the installation of bike lanes in 2008.<sup>18</sup> Bicycles take up less road space than motor vehicles and cyclists tend to avoid congested roads that don’t have bike lanes.<sup>19</sup>

### ■ “Bicycle lanes hurt business.”

After the installation of protected bike lanes on New York City’s 8th and 9th avenues in the fall of 2007, retail sales increased 49 percent in those areas compared to 3 percent in the rest of Manhattan.<sup>19</sup>

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## HOW TO GET IT RIGHT



Bicycle parking promotes riding. Racks can be placed on the street. One car parking space can hold 12 bikes.

To encourage bicycling and bicycle-friendly streets and communities, try the following:

### ■ Embrace a public process and build support

Develop an education and awareness campaign prior to implementation, and reach out broadly to community members, elected officials and municipal leaders.

Government officials may need to see public support before acting. Toward that end, advocates can share this fact sheet, talk to neighbors, build community support and then meet with decision makers, the media, experts and others to discuss the benefits of bicycling. Agency staff can engage residents by hosting workshops to build acceptance and understanding.

### ■ Start with a pilot project

Do a simple, low-cost project, such as striping a bike lane in an area with high bicycling potential and an existing right of way. This can help residents become comfortable with bicycling and enable municipal staff to document what works and what doesn't. Promote the pilot as a road improvement project rather than only as a bicycle project.



This raised cycle track in Missoula, Mont., is an example of a grade-separated, protected bike lane.

### ■ Provide adequate bicycle parking

Bicycle racks encourage bicycling. Well-placed racks provide a secure place for parking bicycles while shopping, working or playing. Racks can be located inside buildings or bolted into sidewalks or even the street. A single parking space can hold up to 12 bicycles on staple racks (they look like an inverted "U" shape) mounted in a row.

### ■ Create routes and wayfaring signs

Develop a system of routes cyclists can follow to get around town safely. Install highly-visible wayfaring signs that indicate distances, destinations and street names and install signs at all important crossings.

### ■ Establish a bike share

More than 500 communities worldwide, including at least 50 in the U.S., have a short-term bicycle rental or "bike share" program.<sup>20</sup> (New York City and Washington, D.C., feature popular bike share networks.) People can join a share program for the day or a full year by paying a nominal fee. To participate, a rider checks out a bicycle from a computerized kiosk and then returns the bike at a share program rack near his or her destination.

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## SUCCESS STORIES

### ■ Palo Alto, California: Bicycle Boulevards

Bicycle boulevards are low-volume, low-speed streets that have been optimized for bicycle travel. Palo Alto has an extensive network of paths, bike lanes and boulevards, including connections to schools throughout town. Data from the 2010 Census showed 7.1 percent of residents commuted to work by bicycle, an increase from 5.6 percent in 2000. The city continues to provide facilities, services and programs to promote travel by bicycle.

### ■ Indianapolis, Indiana: Cultural Trail

An eight-mile, \$63 million walk-bike Cultural Trail was completed in May 2013, having been financed by both public and private dollars. The trail winds through the downtown of this automobile-oriented city (home of the Indy 500), connecting the city's center to a half-dozen emerging cultural districts, a 1.5 mile section of the historic Indianapolis Canal and to White River State Park, a former industrial wasteland now filled with museums, lawns and attractions. By April 2014 the trail had generated more than \$864 million to the local economy.

## RESOURCES

1. **Whose Roads? Defining Bicyclists' and Pedestrians' Right to Use Public Roadways.** Litman, T. Victoria Transport Policy Institute (November 2004), <http://www.vtpi.org/whoserd.pdf>
2. **Bicycling Means Business: The Economic Benefits of Bicycle Infrastructure.** Flusche, D. League of American Bicyclists, Advocacy Advance (2009, 2012), [http://www.advocacyadvance.org/site\\_images/content/Final\\_Econ\\_Update\(small\).pdf](http://www.advocacyadvance.org/site_images/content/Final_Econ_Update(small).pdf)
3. **Urban Bikeway Design Guide.** National Association of City Transportation Officials (NACTO Sept. 2012), <http://nacto.org/cities-for-cycling/design-guide/>
4. **Pedestrian and Bicycle Information Center.** [www.pedbikeinfo.org/](http://www.pedbikeinfo.org/)
5. **Alliance for Biking & Walking.** Resource Library, <http://www.bikewalkalliance.org/resources/resource-library/>
6. **Safe Routes to School National Partnership.** <http://www.saferoutespartnership.org/resourcecenter/National-Learning-Network/Library-of-Resources>
7. **Association of Pedestrian and Bicycle Professionals.** <http://www.apbp.org/?page=Library>
8. **Fundamentals of Bicycle Boulevard Planning & Design.** Portland State University, Initiative for Bicycle and Pedestrian Innovation (2009)
9. **Bicycling and Walking in the United States: 2014 Benchmarking Report.** <http://www.bikewalkalliance.org/resources/benchmarking>
10. **Protected Bike Lanes Mean Business** <http://www.bikewalkalliance.org/resources/reports/protected-bike-lanes-mean-business>
11. **National Complete Streets Coalition.** <http://www.smartgrowthamerica.org/complete-streets>

### ■ Memphis, Tennessee: Broad Avenue

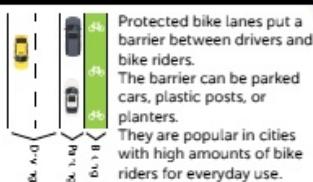
Bike lanes are part of the city's Broad Avenue Arts District initiative, which revitalized a struggling commercial and residential area. The project's popularity exploded when the focus was expanded to include bicycles. "The lanes slowed down traffic and people started noticing the businesses more," says Pat Brown, co-owner of T Clifton Art Gallery. "Our revenues have grown on average 30 percent per year. Yes, that's for an art-related business in a tough economy." The district has seen more than 15 new businesses and nearly 30 property renovations. Restaurants report a growth in business due to bicyclists.

## WHY IT WORKS

Protected bike lanes can feel more comfortable and are safer, especially for beginners, seniors and children:

## WHY BUILD PROTECTED BIKE LANES?

### WHAT ARE THEY?



### GOOD FOR BUSINESS



A Portland study found bike riders will **go out of their way** to a street with good bike infrastructure. That's more business exposure.<sup>3</sup>



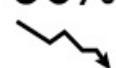
Pedestrians and bike riders in Toronto **SPENT THEMOST MONEY** and visited stores more often.

Maybe because it costs less to walk or bike?

### GOOD FOR SAFETY

89%

fewer injuries among bike riders on streets with protected bike lanes.<sup>2</sup>



Bike- and pedestrian-friendly street design leads to less collisions, even when there are more people out!<sup>4</sup>



**DRIVERS** don't have to worry about unexpected bike maneuvers. **PEDESTRIANS** don't have to worry about bike riders on the sidewalks.

### GOOD FOR LAWFULNESS



In Chicago, protected bike lanes have resulted in a 161% increase in the number of bike riders obeying the stoplight.<sup>5</sup>

### GOOD FOR EVERYONE

71%

of Americans have expressed interest in riding a bike more often, but find it unsafe.<sup>3</sup>  
Are you one of them?



Each bike on the road is one less car in traffic, causes less pollution, less wear on the road (and therefore less taxpayer-funded maintenance), and creates a healthier population.

### LIKE PROTECTED BIKE LANES? TELL YOUR LOCAL ELECTED OFFICIALS!

[Transitized.com](http://Transitized.com)



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