

The Collapsible Helmet That Could Revolutionize Bike-Share Safety

We have entered [bike-share boom times](#): a combined fleet of over one million bikes now ferry people through over 900 cities across the globe. But among bike-sharers, helmet-wearing is not exactly in vogue. A [Georgetown University study](#) on D.C.'s Capital Bikeshare found that while 71 percent of D.C. commuters on private bicycles wore helmets, only 33 percent of Capital Bikeshare commuters put a buffer between their skulls and street.

This disparity makes sense: Grabbing a bike can be a game-time decision, and no one wants to lug around a helmet if they don't have to. Industrial designer [Isis Shiffer](#) faced this conundrum when traveling throughout Europe and Japan two years ago for her masters program. Shiffer, a seasoned urban cyclist now based in Brooklyn, wanted to make use of the local bike-share systems she encountered. But she didn't have a helmet, and she was nervous.

She had a thought: Why didn't the bikes just come with helmets?

So Shiffer got to work and devised the [EcoHelmet](#)—a collapsible shield made of waterproof paper and adhesive fashioned into a hexagonal honeycomb pattern. It folds up to roughly the size of a banana. Following the product launch timed for early next year, Shiffer envisions the helmets being made available at bike-rental stations, or sold on the cheap in shops—she estimates that each helmet could retail for no more than \$5, a fraction of the cost of a standard helmet.

At first, it looks strange. Unfolding across the head like an accordion, the EcoHelmet is a far cry from the hard-shell headgear favored by bike commuters.

“But paper honeycomb is incredible,” Shiffer says. This is the stuff used by the military to shield supplies dropped from helicopters; for a bike helmet designed to last one impact, Shiffer says, it's more effective than the bottom-of-the-line polystyrene options sold in shops, and she aims to make the disposable lids 100 percent recyclable.

Shiffer is working to secure investor funding and a large-scale manufacturer—right now, she's fabricating the helmets herself. Already, she's been contacted by several bike-share programs about the possibility of implementing the EcoHelmet on a wide scale.

While the debate rages on over whether helmets [actually improve cyclist safety](#)—they do not, for example, exert a force field precluding any contact with a car—bike-sharers' cavalier attitude toward wearing them has left bike-share companies in a quandary. There is no nationwide law requiring cyclists to wear a helmet; [state and city laws vary](#), but most regulations only apply to cyclists under 18. [The New York Times](#) points to research indicating that helmet laws discourage people from cycling, which creates a Catch-22: Lower numbers of ordinary cyclists on the road “makes it harder to develop a safe bicycling network.”

Bike-shares have been caught in the middle of all of this. Without a state or local law in place to mandate helmet use, programs generally do not require riders to wear one, but as a recent \$60 million lawsuit in New York City makes evident, companies can be exposed to liabilities in the event of a collision. Overturning the previous ruling on the case, a Manhattan appellate-court judge recently took the side of the plaintiff, a 75-year-old man who claimed he lost his sense of smell after a CitiBike crash. [According to Technical.ly Brooklyn](#), the judge reasoned that CitiBike should have forced the man to wear a helmet, and argued that the company's reluctance to do so out of fear of losing membership was a liability.

Speaking to [The New York Post](#), cyclist-lawsuit attorney Daniel Flanzig says that the ruling “solidifies any claim against any bike rental company that does not make helmets available to the rider.”

For bike-share companies, then, Shiffer's EcoHelmet is a deus ex machina of an invention: Certainly relative to the sums paid out for lawsuits, it's mercifully inexpensive, and compared to the [full-size helmet vending machine](#) attached to the bike-share program in Seattle—one of the only bike-share cities in the U.S. with [a mandatory helmet law](#) for all riders—it's both streamlined and hygienic.

Helmet-wearing, Shiffer says, “is a very emotional topic for people. A lot of people think helmets are stupid, or that they don't do anything to protect them,” she adds. In a sense, the detractors have a point: Infrastructure, as [CityLab previously reported](#), has the final say in cyclist safety. But helmet use plays a role in shifting the culture toward safe cycling practices, and underpinning all of the complaints about headgear is the very real inconvenience of lugging your helmet around everywhere. The ease and unobtrusiveness of EcoHelmet would render those gripes obsolete, and make cyclists and bike-share companies alike breathe a little easier.