

By Jeff Bailey Aug. 14, 2025 5:30 am ET

Cities are facing a two-wheeled traffic jam.

Across the country, the streets of metro areas are filling with powered vehicles that are neither bikes nor Harleys but something in between—low-cost scooters, minibikes, electric bikes, skateboards and more, often with surprising speed. Some varieties top out at 20 mph or 28 mph, while others can hit 40 to 60 mph. As ridership has grown, these two-wheelers are all crowding into bike lanes—when they aren't zipping through traffic or hopping up onto the sidewalk. And they are making traffic enforcement challenging, threatening pedestrian safety and complicating life for transit planners.

"We didn't know we were building the bike lanes for scooters," says Laura Dierenfield, bike infrastructure chief in Austin, Texas, who is overseeing a build-out of bike paths.

Dierenfield sees the arrival of scooters, e-bikes and other two-wheeled vehicles as a plus overall, because they are less polluting and cause many fewer deaths than cars. But, she says, Austin is starting to see the need to separate different two-wheelers by speed. Just how to do that is to come; the city hasn't developed a strategy yet.

Crowded roads

Whether a city has established bike lanes or has yet to delineate space for two-wheelers, the traffic jam has only begun. McKinsey, the consulting firm, estimates that global "micromobility" sales—including everything from powered scooters and skateboards to mopeds and e-bikes—will hit \$340 billion by 2030, more than doubling from \$160 billion in 2022. And, McKinsey says, 46% of people in a global

survey said they would consider replacing their current private vehicles, mostly cars, with micromobility ones.

The U.S. lags behind Asia and Europe in two-wheeler adoption, so people aren't accustomed to dealing with the vehicles in such abundance. Their presence often surprises drivers, pedestrians and conventional cyclists, and many locales are still

trying to work out how to regulate the two-wheelers.



e-bike in Manhattan. PHOTO: JONAH ROSENBERG FOR WSJ

Requirements on age, licenses and helmets vary from place to place, not to mention rules about where the vehicles can travel. Many of them end up traveling in bike lanes, which would be a challenge to safety even if all the riders were experienced, courteous and patient. And often they aren't.

"Many of our riders are new," says Calvin Thigpen, director of public partnerships and policy research for scooter-rental company Lime. He says scooter riders have an overwhelming preference for bike lanes, but end up on sidewalks when bike lanes are lacking. "They encounter a very hostile car environment," he says.

Lime, like some other rental companies, uses technology on the scooters to limit their maximum speed.

Among powered two-wheeler riders, erratic riding and failure to follow traffic laws can be particularly dangerous to others. In New York, some 65,000 food-delivery workers ply the streets, bike lanes and sidewalks on a range of two-wheelers, alongside an increasing number of commuters and others, also on a range of two-wheelers. Steve Vaccaro, a New York lawyer who represents cyclists and pedestrians injured in crashes, used to litigate mostly against drivers of cars and trucks. Increasingly, he says, his clients were hit by someone on a two-wheeler.

"I have seen an explosion of novel, motorized two-wheelers in New York City traffic over the last five to 10 years," Vaccaro says.

Vaccaro, who is also an avid cyclist and cycling activist, says the city has been slow to make clear which traffic rules apply to which devices, and in how it enforces the rules. The city has of late launched a variety of enforcement efforts, including setting a 15 mph speed limit on e-bikes. Vaccaro and some others want food-delivery-app companies made legally responsible for the conduct of their drivers. A spokesman for delivery service DoorDash says that the company doesn't tolerate unsafe driving. If it receives a police report about rule-breaking, it warns the driver to follow regulations and drive safely at all times. Repeat offenders are removed from the platform.

Relative risks

Of course, conventional motor vehicles exact a greater toll than the two-wheelers, <u>about 40,000 deaths</u> a year. For 2022, deaths from motor-vehicle crashes included about 7,500 pedestrians and more than 1,000 cyclists.

A 2020 <u>international study</u> found that about 80% of crashes that result in the death of a bike or scooter rider involved a car or truck. (Data on crashes in which two-wheelers hit pedestrians is spotty.)

"A trip by car or by motorcycle in a dense urban area is much more likely to result in the death of a road user—this includes pedestrians—than a trip by a microvehicle," according to the report, written by Alexandre Santacreu, a French transit-policy analyst. Getting more people onto scooters and bikes, and out of cars, "can thus make a city safer."

But accommodating the variety of two-wheelers takes space, be it a shared, wider bike lane or an altogether separate lane.

Countries like the Netherlands, Denmark and Norway have been taking roadway from cars and giving it over to bikes and pedestrians for more than 50 years. But even the Dutch, who place bikes at the top of their transportation setup, haven't conquered the problem of proliferation of two-wheeled vehicles traveling at varying speeds. The country's ubiquitous bike paths—which essentially connect all points within and between cities—are increasingly home to faster-going scooters, mopeds and e-bikes.



Amsterdam is testing the idea of directing faster two-wheelers into normal traffic lanes used by cars. PHOTO: ANP/ZUMA PRESS

"This is the major challenge of Dutch cities in 2025," says Chris Bruntlett, international-relations manager for the Dutch Cycling Embassy, a government-supported organization in the Netherlands.

For its part, Amsterdam is experimenting with new regulations and signage that direct the faster two-wheelers into normal traffic lanes used by cars. Meanwhile, the speed limits in those car lanes have been lowered to 20 mph—making it easier to integrate two-wheelers. Helping things further: Dutch drivers are already accustomed to being surrounded by bikes. (The country, in fact, has more bikes than people.)

The road ahead

In the U.S., some experts argue that the problems will diminish with time, as people replace car trips with two-wheeler trips, and local officials learn how to regulate the various streams of traffic.

Kersten Heineke, a Frankfurt-based partner who co-leads McKinsey's micromobility practice, says the U.S. is merely early in a transition that other countries have made. U.S. cities are generally still 90%-car reliant, he says, while a European city well into transit investment is at 50% or less.

U.S. localities need to look to the example of Amsterdam in slowing cars and then integrating them with two-wheelers, Heineke says. What's more, he says, technology already exists to speed-limit two-wheelers and other vehicles based on their location, using governing devices that work with GPS.

"It's a matter of regulation," Heineke says. As two-wheeled transit grows—both motorized and conventional—the idea of taking space from cars should be less of a hot topic. "You can repurpose lanes. You just need some paint," he says. Ultimately, "we won't be in a world where we have three different lanes," says Heineke. "Two is enough."

In the U.S., where many city avenues hum along at 45 mph, and speed limits often are disregarded, slowing cars will be a tall order. So will expanding bike lanes, in a country where carving out even a single bike lane is often met with driver and voter hostility.

For now, that leaves every two-wheeler on his or her own. Nicole McSpirit—a Denver school crossing guard and e-bike enthusiast—has a Dutch model that tops out at 16.5 mph. The city has well over 100 miles of bike lanes, though many are merely a line of paint a few feet from the curb and are along major thoroughfares, offering little real protection from cars and trucks.

Like a lot of experienced city bicyclists, McSpirit avoids those bike lanes and winds her way through the city on quieter side streets, when possible. "Drivers think the roads are for them," she says.

Here are some of the new vehicles zipping everywhere from city streets to bike paths:

- E-bikes: Depending on power and throttle, these generally top out at 20 mph or 28 mph, but some less-common high-speed models can travel as rapidly as 60 mph.
- Typical scooters: Rental company Lime says its stand-up scooters in the U.S. typically are speed-limited according to local government rules, ranging from

a low of 10 mph in Washington, D.C., to 15 mph to 18 mph elsewhere. (The Insurance Institute for Highway Safety warns that speed caps on scooters tend to bring them back onto the sidewalk, where collisions with pedestrians occur.)

- Faster scooters: Some scooters can go much faster. Voro Motors, a Panorama City, Calif., firm, sells a \$1,495 Roadrunner V3 that tops out at 34 mph, the firm says in its product description. (Confusingly, the word scooter is also used for a moped-like motorcycle alternative with a step-through frame.)
- Mopeds: These two-wheelers, lightweight motorbikes that have a low-powered gas engine or electric motor and in some cases can be pedaled, can reach 40 mph or faster, and in many locales, they are supposed to be in traffic lanes with cars, but they seem to spend a lot of time in bike lanes, too.
- Electric minibike: Sold as starter vehicles for kids, but at times ridden by adults, these go up to 20 mph. Souped-up ones can go faster.
- Single-wheel electric skateboard: Some models have a top speed of 22 mph. Electric unicycles: 28 mph.
- Meanwhile... conventional bikes: A clunky cruiser or heavy, upright Dutch model might poke along at 10 mph to 12 mph. Road bikes can zip along at 15 mph to 20 mph or faster, and some cyclists consider city bike paths fair game for their workouts.