

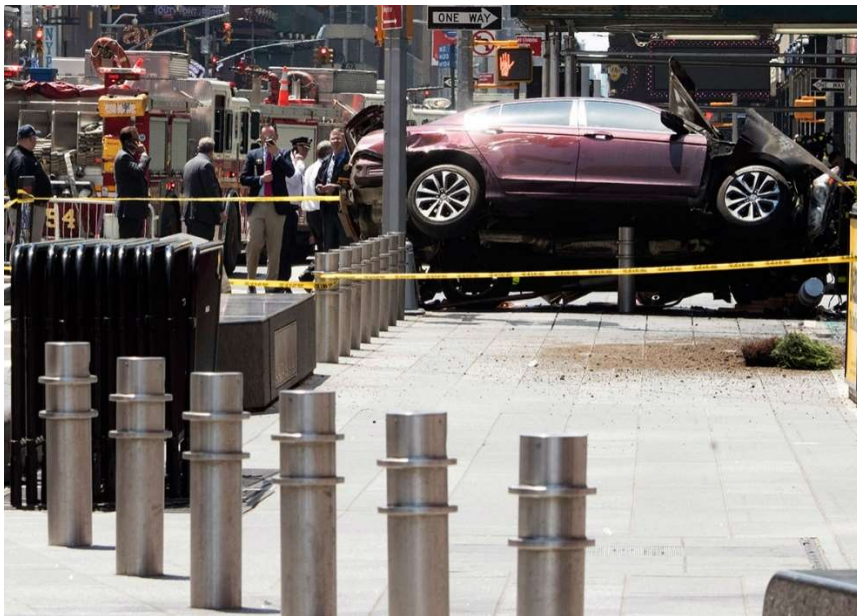
Slate

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How Can You Stop Cars From Plowing Into Crowds?

The sturdy posts called “bollards” are our best defense against the use of vehicles as weapons. They’re also the rare anti-terrorism policy that makes cities more pleasant.

By [Henry Grabar](#) Aug. 30 2017 3:01 PM



A car rests on a security barrier in New York's Times Square after being driven through a crowd of pedestrians, injuring at least a dozen people, on May 18. Mary Altaffer/AP

After terrorist attacks in [Berlin](#), [Barcelona](#), and [Charlottesville](#), Virginia, local officials in three countries were confronted with the same question: Where were the bollards? *Bollard* is a fancy word for the sturdy posts deployed in and around cities, generally intended to nudge entitled drivers not to park on the sidewalk, drive in bike paths, or turn into pedestrian plazas. But in recent decades, the bollard has shouldered a new burden: It's seen as the cheapest, simplest way to prevent terrorists from using vehicles as lethal weapons. City officials around the world are under pressure to install them anywhere a car could potentially plow into a crowd—which is to say, basically everywhere.

“I understand the debate, but this is not practical ... we can't fill up Barcelona with bollards,” Catalan minister Joaquim Forn recently [told](#) Spanish radio. *We can't put bollards in every Christmas market in Germany*, the Berlin police chief explained to reporters in December after a jihadi drove a truck into the fair at Breitscheidplatz, killing 12 people and injuring dozens. “My initial inclination is we should keep striking a balance between public safety in our civic spaces with an eye toward having an open society rather than a closed one,” said Charlottesville Mayor Mike Signer a few weeks ago. But if recent incidents of vehicular terrorism are any guide, that defensive post-attack posture will yield to a familiar response across all three cities: Glistening allées of bollards flanking the roadways. And from an urban design perspective, that wouldn't be the worst thing.

Counterterrorism is generally hostile to architecture and urban design. After the 1983 bombing of the U.S. embassy in Beirut, for example, the U.S. revised its [design protocols](#) to call for suburban, walled embassy compounds set far away from center cities. “We are building some of the ugliest embassies I've ever seen ... I cringe when I see what we're doing,” then-Sen. John Kerry said in 2009. Other counterterrorism innovations in public space have included the shuttering of the courtyard at the Washington, D.C., headquarters of the FBI and the phalanx of metal detectors that force fans to line up for a half-hour before entering Yankee Stadium in the Bronx. Fear tends to make places more closed, more distant, and more private. Bollards just might be the exception: A security protocol that could be making the world both a safer and more pleasant place.

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Rob Reiter is a bollard guy. He's the chief security consultant for Calpipe Security Bollards, one of about two-dozen major U.S. bollard manufacturers, and the firm that installed the bollards in Times Square that halted the carnage when a rampaging driver drove onto a Manhattan sidewalk in March, killing one and injuring 22. Reiter is also a co-founder of the Storefront Safety Council—whose mission statement is “working to end vehicle into buildings crashes”—and has collected more than 10,000 news items about cars running into commercial buildings. “Dunkin' Donuts gets hit about four times a week,” he says. “7-11 gets hit about 1.3 times per day.”

Reiter's case for bollards is less about terrorism, which remains rare, than about the everyday chaos we accept in exchange for a society where everyone between the ages of 16 and 100 steers a multi-ton chunk of metal around town. “For most folks in my line of work, the thing that crystallized this about vehicles was Santa Monica,” says Reiter. In July 2003, an 86-year-old

man at the wheel of a Buick [plowed](#) through the Santa Monica farmers market in California, killing 10 people and leaving 63 injured in less than 20 seconds. Defense lawyers said it was “pedal error”; the city and other defendants wound up paying \$21 million to settle lawsuits.

Before it was the anti-terror device du jour, then, the bollard was merely a device to help planners reclaim public space from wayward cars. But fear of terrorism drives changes to the built environment in a way that city planners cannot. After Richard Rojas jumped the sidewalk on 42nd Street, prompting fears of another vehicular terrorism attack, New York City Mayor Bill de Blasio and New York Gov. Andrew Cuomo were on the scene within the hour. And yet Reiter observed: “One killed, 20 injured? That’s an average day in New York [traffic].”

The threat of terrorism is a powerful force for galvanizing changes to public spaces. At first, those changes are ugly, like the scene outside Trump Tower in New York, where dump trucks full of sand lined 5th Avenue during the president’s recent visit. But as time goes on, pressure from business interests and civic groups mounts, and more elegant solutions take their place. The New York Stock Exchange, ensconced by a cavalcade of concrete Jersey barriers along Wall Street after 9/11, is now protected by a row of elegant crystalline Nogo bollards, costing between \$5,000 and \$8,000 a piece. “A bollard for security is like Chairman Mao’s little black suit—one size fits all,” [Nogo architect Rob Rogers](#) told the *Chicago Tribune*. At the other end of the spectrum of famous American streets, the Las Vegas Strip is installing \$5 million of bollards in what county chairman Steve Sisolak has [called](#) “a matter of life or death.”

Strong evidence for the alliance between city-builders and counterterrorism experts is on display in Washington, which in addition to serving as the nation’s capital may be the world’s pre-eminent museum of security architecture, from the onerous to the invisible. The Washington Monument is encircled by an award-winning arc of high-security “ha-has,” recessed trenches with roots in English garden design. A good example is the stretch of Pennsylvania Avenue that runs just north of the White House. Shut down in the mid-2000s behind a militarized cordon, it has since evolved into a pleasant and popular public space bounded by rows of bollards.

“What they indirectly did was create a people street,” says Gabe Klein, the former D.C. transportation commissioner. “I sort of like it! I find it to be a nice, peaceful place to hang out. People play roller hockey there.” Other times, the city took the lead, and federal security officials nodded their heads in approval, like when planners installed a bike lane lined by plastic bollards on 15th Street adjacent to the Treasury Department. “We thought they’d hate it,” Klein recalled. Instead they said, “We’ve been looking at how to push traffic away from that building, and we like that idea.”

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Not everyone loves the bollard. Bollarded landscapes like the U.S. Capitol, which is said to be surrounded by approximately 7,000 four-foot bollards, can be monotonous. The period after 9/11 in particular was marked by an overreaction, says Jean Phifer, an architect and former president (between 1998 and 2003) of the New York City commission that reviewed streetscapes. “When

people saw how extreme too many bollards were, they used other elements like newsstands, trees, benches so you had a more mixed urban streetscape thing going on.”

That was a change that Klein pushed for during bollard-mania, too. “We didn’t want it to feel like a police state, or a place that people should be fearful,” he says. These days, you’re just as likely to see planters functioning as vehicle barriers—flowers against terrorism.

Bollards can be beautiful, insists Andrew Choate, the world’s foremost bollard photographer (Instagram: [SaintBollard](#)). He argues that architecture really begins with bollards. “They’re the first thing you see. You can look at them as an invasive species of architecture, but if you incorporate them into the environment they can become something meaningful, not only as protection but as design and aesthetics,” he explains. “Whether the top is tapered or bulbous or has some insignia, there’s certainly a lot of freedom in there.”

There’s freedom in the area enclosed by bollards, too. Well before Barcelona become the latest site of a horrific vehicle attack, the city had plans to [transform](#) the street grid by turning more than half its streets over to pedestrians and cyclists, creating a grid of superilles (or superblocks). Traffic accidents (9,095 last year, 27 of which were fatal) were among the reasons the city cited in addition to pollution, obesity, and quality of life. In this, Barcelona joins a number of European and American cities—like Charlottesville— that have dedicated central areas to pedestrians.

The attack on Las Ramblas will likely spur that effort. The following night, Madrid placed big flowerpots at the Puerta del Sol. Florence, Italy announced two weeks ago it [would](#) begin rolling out giant flowerpots “coherent with our ideal of beauty,” according to the [city council member](#) charged with security. In Nice, France, where a man killed 86 people on Bastille Day in 2016 by driving a truck down the city’s famous waterfront promenade, the city has invested millions in bollards and fences.

Sometimes, of course, those countermeasures do make public space less public. The base of the Eiffel Tower is now isolated behind fences, prompting complaints from Parisians that the monument has been [transformed](#) into a bunker. But just as often—whatever happens inside the perimeter—the bollards themselves become places to eat or hang out. For years, cities deployed hostile architecture to discourage this kind of loitering. But a good number of bollards encourage it. Counterterrorism, and a place to sit.