



Photo by: Christian Scheja

Traffic Gardens Teach Safety and Engineering to Kids as Biking Surges

By Ethan Goffman - January 20, 2021

Bicycling has been surging in the pandemic and children are huge beneficiaries. Biking is not only fun, but it also empowers children and youth, making them masters of their own mobility while boosting their health. But the rules of the road are difficult for children to master, involving complex decisions, especially at intersections, that only seem easy to adults because we have spent years absorbing them. Indeed, from 1961 to 2009 the number of children biking and walking to school plummeted, from 42 percent to 16 percent. In an environment filled with menacing cars, how does one teach children to become safe, confident cyclists?

One answer is to create miniature towns, complete with streets and rules of their own, for kids to practice. Known as traffic gardens, these installations are becoming popular in northern Virginia and Washington, DC, spurred on by the efforts of one woman: Fionnuala Quinn. Traffic

gardens not only inculcate the rules of the road, but their development can also spur a lifetime interest in transportation and city planning.

A street safety advocate with a background in civil engineering, Quinn began six years ago with the Bureau of Good Roads, a broader bicycle- and pedestrian-education effort that worked with schools and community groups. But the response was tepid, at least until Quinn introduced the idea of traffic gardens, which she remembered fondly from her childhood in Dublin, Ireland. The idea quickly took off, and in 2019 Quinn founded a small business, Discover Traffic Gardens, to assist jurisdictions, local organizations, or even individuals, in creating traffic gardens.

A Brief History

Traffic gardens, one of a related family of miniature training grounds for children and youth learning to navigate confusing streets, have long been popular in Europe. In the United States, a similar program, known as Safety Towns, was started in 1937 by an Ohio police officer, but was more car oriented. Safety Towns were a response to a rash of traffic injuries beginning in the 1920s, as automobiles became the dominant mode of U.S. transportation and, not surprisingly, came into increasing conflict with pedestrians. With children dying, Safety Towns helped teach about the rules of the road. The towns include stop signs, stop lights, mock-ups of buildings, and instruction from adults, often a police officer, in the rules of the road. The Safety Town idea also appeared in England around the same time.

In northern Europe, particularly Denmark and the Netherlands, traffic gardens have been educating children and youth about bicycles since the 1950s. However, because traffic gardens and Safety Towns sometimes employ pedal cars, they might also have reinforced the idea that streets are primarily for cars. Thus, a 2009 article about bicycles in Utrecht explains that “None of the kids want to be the pedestrian,” that they all “want to drive the ambulance . . . below that is a police car, a bus, a car, a bike, and so on.” These programs clearly teach kids about traffic safety but might end up discouraging mixed modality.

The traffic gardens Quinn oversees, however, are about bicycles. Enthusiasm for traffic gardens in the planning community began to spread following a 2009 Federal Highway Administration report about a Swiss traffic garden. Quinn helped develop the first two such facilities in Washington, DC in 2019, as part of the city’s Vision Zero program, meant to eliminate traffic fatalities and serious injuries. She has since helped to start several in Virginia. Indeed, traffic gardens have been a boon during the pandemic, when many forms of entertainment,

and social interaction, are forestalled. Because they are outdoors, and bicyclists generally maintain a distance of six feet or more, traffic gardens are generally safe even during a pandemic.

Learning in a Miniature World

Safety, of course, is the initial educational goal of traffic gardens. With traffic more dangerous than ever, and parents more protective, children today “aren’t being given freedom to get themselves places, they’re not able to easily cross the street,” said Quinn. “We actually expect them to learn these very complicated interactions on our streets but they’re being driven around.” In a traffic garden, said Charles Denney, President of Potomac and Chesapeake Cycling, kids learn to “negotiate in the streets and around their community. . . in a contained, safer environment” where they can “learn what a stop sign means, what a yield sign means, to stay to the right side of the road.” In an environment designed for cars, it is imperative that bicyclists and pedestrians understand the rules of the road, pedal and walk defensively, and negotiate traffic successfully.

Quinn’s process for designing traffic gardens begins with children, and this is where the educational element of city planning comes in. Working to create “a little world for children,” she starts with a competition among the kids to create the best plan for a traffic garden in a given space, with each child employing the same set of criteria. This is perhaps the ultimate form of local, community-engaged development. The children even meet with an engineer to explain their projects and are given the opportunity to improve them. “Within a short while,” said Quinn, “they get to see something on ground the ground that’s real and tangible that they get to see other people use, and that they have gone through the process of giving design input. And I have used the real concepts, to their most bare bones, minimum level, but these are huge concepts.”

Christine Mayeur, Complete Streets Program Manager of the City of Alexandria, told me they employed just this process in Mount Jefferson Park in the Del Ray neighborhood. Around 20 kids participated in the planning, which began with a scale kit provided by Quinn, although they could also draw free form. The process provided “a little taste of what government is like. They were at different stations coming up with a concept, designing their idea,” building a 3-D model and earning approval from adults acting as city officials. The idea is to teach “how government works” and “how our streets are designed.” During design kids could contemplate, for instance, the implications of a straight street with no stop signs, versus curves and stop signs, Mayeur explained.

Some children even get to see their plans constructed and put to daily use by their peers. The girl who designed Mount Jefferson Park traffic garden lives just down the street and uses it regularly, said Mayeur. “This really sparks something in them that I’m guessing they haven’t had before,” said Quinn.

As an engineer, Quinn would like to gather hard data on educational outcomes—and a George Mason University study is beginning to do so. Anecdotally, traffic gardens may be the start of a brilliant career in some children, and active civic engagement in others.

Traffic Gardens in Northern Virginia

The Mount Jefferson Park installation, Northern Virginia’s first traffic garden opened in late 2019, requires no formal supervision, Mayeur explained, although parents are often attending. Children “learn conflict resolution in these spaces and use those opportunities where intersections come together to talk about ‘Oh wait, I thought I had the right of way.’”

A second Alexandria installation opened in December 2019 at Jones Point Park beneath the Woodrow Wilson Bridge just south of Old Town Alexandria. This one is a little different, as it is much larger and used by adults as well as children, with separate lanes for different types of vehicles to further simulate actual streets. The plan was to have supervised classes at both installations, provided by teachers, the Safe Routes to School program, and the Washington Area Bicycle Association. The pandemic, however, has put these on hold.

The pandemic has also slowed the opening of a planned third traffic garden at Cora Kelly School. In the longer run, Mayeur would like to see a whole network of traffic gardens at neighborhood parks and at schools with open playgrounds. She also sees opportunity for pop-up traffic gardens wherever there is under-used asphalt in an area safe from traffic.

Arlington, meanwhile, opened its first pop-up traffic garden on October 31, 2020 in the Barcroft neighborhood. Working with [Phoenix Bikes](#), a local nonprofit that helps low-income kids repair and acquire bikes, set up “pop-up” gardens primarily with duct tape and spray chalk. A dozen volunteers, mostly teenagers, installed a traffic garden in a few hours at the Women’s Club of Arlington explained Denney, who volunteered to help set up the program. A couple of additional traffic gardens, planned in conjunction with the Arlington Public Schools Safe Routes to School program, have been delayed until this spring due to technical concerns.

Bicycling in a Pandemic

During the pandemic, bicycling has surged. Quinn has found traffic gardens particularly useful, since “children were at home, they weren’t getting P.E., they weren’t getting their normal active transportation.” Denney explained that with people cooped up and “with so many parking lots sitting vacant . . . the whole concept of the pop-up really made a lot of sense.” People can get outside, “they can get the kids active, they can stay socially distanced, they can be learning something, they can have some fun.” Indeed, with the boom in biking, as a safe, healthy recreational activity that families can undertake together, kids could become more independent. “At first you could see them being a little more tentative, but by the end of the summer I saw groups of kids out riding around on their own, looking confident,” said Denney. Even makeshift traffic gardens provide a way for kids to get more comfortable riding during the pandemic, and to move away from the need for close parental supervision. Of course, these traffic gardens take precautions, with posted signs to wear a mask and maintain social distance, said Denney.

Quinn has continued to experiment during the pandemic, helping to design and implement several pop-up Traffic Gardens herself, the first just outside her house, in the city of Reston. These are bare bones, using just spray marking paint and a small team of neighborhood volunteers. Still, they do the trick; “there are some families that come every single day.” For safety’s sake, Quinn recommends keeping these installations to low speed, closed streets. And Denney hopes that at least some of these makeshift traffic gardens become permanent, with “paint on the ground as opposed to duct tape or chalk” and “actual stop and yield signs” as well as small buildings, “to make it feel more like a real environment.”

Designing for the Future

Setting up traffic gardens has too often been a do-it-yourself project for every jurisdiction. To ease the process, Quinn’s organization Discover Traffic Gardens acts as a clearinghouse, providing instructions, including a twenty-page guide to designing pop-ups, and making available basic design and installation material, such as printable traffic signs. The company also consults to help with every stage of the design process.

Perhaps someday traffic gardens will be regular feature of every major city in America and kids will return to the bicycling days of yore. Quinn looks back fondly at a time when “children were given more freedom” to hike, bike, and explore. Traffic gardens might help speed a return to olden days, empowering children to step—and pedal—outside their parents’ car (and also freeing some parents in the process). And, in these days of rising pedestrian and bicycle deaths, there’s another lesson Quinn hopes kids—and the adults who supervise them—learn from traffic gardens: “maybe we really need safer streets”!

Photo Credit: Christian Scheja

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