

PROMISING LOCAL PRACTICE IN ROAD SAFETY: **A Primer for Safer Streets**

America has reached the highest number of fatalities on roads since 2007. In the United States, [46,000 people](#) died on our roads in 2021, a nine percent increase from 2020.

Black, Hispanic, and Native populations are more likely to experience a pedestrian accident that results in a death compared to their total percentage of the population. From the [2020 data](#), fatality impacts were up 23 percent for non-Hispanic Black people. Neighborhoods experiencing poverty are also [disproportionally impacted](#).

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The federal government, through the Department of Transportation, is enhancing coordination of its existing and new programs on road safety into a comprehensive [National Roadway Safety Strategy](#) (NRSS). The NRSS is a roadmap for reducing the country's injuries and deaths on highways, connector roads, and local streets using a [Safe Systems Approach](#). Their toolbox for local leaders includes:

- ◆ A [Local Road Safety Plan](#): a do-it-yourself (DIY) website that allows local officials to create a road safety plan that fits their community.
- ◆ The Federal Highway Administration's [Proven Safety Countermeasures Initiative](#) (PSCI), updated in 2021 to accelerate strategies in reducing roadway fatalities and injuries on highways.
- ◆ [Road Safety Audit](#) to assist local governments in conducting an independent safety examination on existing or future road planning by an independent, multidisciplinary team.
- ◆ The expansion of federal funding for local governments through several grants in the Bipartisan Infrastructure Law (BIL) including the [Safe Roads and Streets for All](#) program that gives local road safety initiatives \$5 billion to prevent deaths and serious injury on roads and streets.



When it comes to discretionary grants . . . safety, state of good repair, economic strength, resilience — these are national priorities, and administration priorities, and things that will certainly guide me within the parameters of the law in our decisions.”

Transportation Secretary **Pete Buttigieg** said at a Congressional hearing during March 2022, that he would consider safety, among other factors, in awarding billions of dollars in grants.



Source: U.S. Department of Transportation

NLC's Safety First Challenge

The National League of Cities is building a coalition of cities and towns to highlight road safety solutions. The Safety First Challenge cities commit themselves to one of seven actions that have proven effective among city leaders. Participants are collectively demonstrating local leadership to increase road safety and benefit from peer engagement and access to safety experts.

Vision Zero Network

Vision Zero got its start in Sweden during the 1990s and has expanded to the U.S. Vision Zero is not a plan but a movement focusing on community safety through system designers and policymakers who share the responsibility to ensure safe travel. The approach recognizes that people will make mistakes and so systems should be designed in a multidisciplinary approach to minimize those mistakes.

Complete Streets

Complete Street began in the 1970s at the state and local levels. At the federal level, the Department of Transportation defines Complete Streets as roadways designed and operated to enable safety and mobility for all users regardless of age, ability, or mode of transportation. Complete Streets are designed to reduce traffic accidents and lower pedestrian and bicyclist risk when using public spaces.

Case Examples

Kansas City, MO

Kansas City, Missouri created its own [Vision Zero road safety program](#) which integrates safe traffic signals, Complete Streets for All, and a bicycle Master Plan into the initiative. This initiative builds upon the 2017 adoption of a Complete Streets Ordinance. In addition, Kansas City collaborates with a broader regional initiative led by The Mid-America Regional Council (MARC), the metropolitan planning organization, which also has a Vision Zero plan.

In response to the 20 percent rise in traffic crash fatalities and serious injuries in Kansas City between 2010 and 2020, city leaders in May 2020 adopted a Vision Zero resolution to eliminate all traffic fatalities and serious injuries by 2030. One year later, the city was implementing the associated action plan to meet the goals. The initial actions focused on:

- ◆ Intersection design improvements at 6 pilot locations based on high crash and injury rates
- ◆ Traffic signal upgrades at 50 locations citywide to improve pedestrian safety (Lead Pedestrian Intervals giving pedestrians extra time before cars can move through the intersection)

- ◆ Protected bike lanes connecting over 30 miles of streets over the next two years as part of a bicycle master plan
- ◆ Speed humps at 50 locations in neighborhoods that submitted requests
- ◆ Intersection video detectors for bicyclists at pilot locations
- ◆ Traffic calming measures to slow traffic on neighborhood streets.

Among the newest implemented strategies are High Activation Crosswalk Signals (HAWK Signals). These visual and audio signal devices alert drivers to pedestrians in a crosswalk via overhead flashing lights and cue pedestrians with audio commands to either “wait” or “walk.”

The regional transportation safety blueprint, helmed by the Mid-America Regional Council, is a comprehensive mobility safety plan for the two-state region (Missouri and Kansas). It provides information about the current state of roadway safety, presents strategies for the reduction of fatalities and serious injuries setting targets for both, and identifies priority focus areas for improvement. The plan presents crash data by state and county as well as for the entire region.

Somerville, MA

Somerville, Massachusetts adopted Vision Zero in 2017. Over the next three years, the city staff worked with residents on a Vision Zero Task Force serving Somerville and the greater Boston region to develop an action plan which outlines a strategy for eliminating traffic deaths and serious injuries by 2026.

A strong feature of Somerville's effort is their [online web portal](#). Via the webpage residents can review the road safety action plan, track progress, report a safety concern, and monitor the vision zero dashboard. Residents also can complete a petition requesting the installation of a traffic calming device (such as a speed hump) on a street.

Somerville's Vision Zero Dashboard contains all road crashes from 2014- 2019 and is visualized by mode of travel (bicyclist involved, motor vehicles only, and pedestrian-involved). The creation of the dashboard is a part of Somerville's effort to identify major crash intersections, high injury circumstances, and/or communities of concern. Using this data, the city is developing a toolbox to address these issues.

The first Vision Zero Progress report contains a list of what has been accomplished during 2020 and describes the focus in 2021. The four objectives that are contained in the report are:

- ◆ Create a robust data framework
- ◆ Design safe streets
- ◆ Operate safe streets
- ◆ Create a culture of safety

Within “design safe streets”, Somerville has implemented 5 quick-build intersection safety improvements, rehabilitated 2 miles of sidewalk, installed permanent safety or accessibility improvements at 3 bus stops, and much more. To see all the projects the city has completed, view the [Mobility and Safety Improvement Projects Map](#).



Tampa, FL

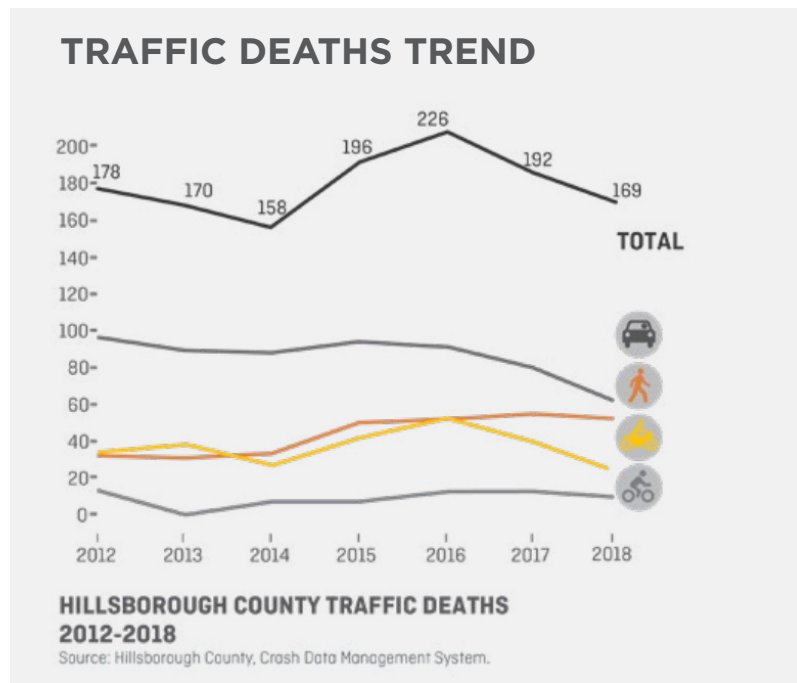
The City of Tampa, Florida is working closely with both their county (Hillsborough) and Metropolitan Planning Organization to lower the number of traffic accidents and increase road safety. Tampa passed their [Vision Zero resolution](#) in December 2015 with Hillsborough County passing theirs the following month. Since the adoption of the Vision Zero resolutions, traffic deaths have decreased in the County.

A combined city-county initiative is a Speed Limit Reduction Program. A block-by-block review of posted speeds was conducted. Since the re-evaluation began, Tampa has reduced the posted speeds on 17 miles of roadway within city limits. These speed reductions are accomplished through a combination of physical road design changes such as reducing lane widths, adding bicycle facilities, pedestrian crosswalks, on-street parking and other measures. As the city continues to re-evaluate posted speeds of 35, 40, and 45 mph it is doing so with a lens toward increasing safety without delaying travel time throughout the city.

Another unique program that is inspired by Vision Zero is the Safe Access to Parks Pilot study. Led by Hillsborough County, the pilot developed a process to calm speeds and improve safety on

major roads adjacent to parks. The study looked at three parks, two in the city of Tampa and one outside the city. The pilot developed a toolkit to improve safety not only at those three parks but other parks within the county.

The next steps include updating Tampa's land development code to incorporate Vision Zero and complete street principles, engaging community members on safety and dynamic street spaces, and creating the role of Vision Zero Coordinator for the city to champion and shepherd this work.



Source: Hillsborough Metropolitan Planning for Transportation

Greenville, NC

Greenville, North Carolina for years was ranked number one in the state for traffic crashes of cities with a population of 10,000 or more. This prompted Greenville to create a traffic safety task force comprised of Department of Transportation specialists, chief of police, East Carolina University officials, hospital representatives, and city planners. A Vision Zero framework was adopted to guide their actions in 2018.

A [red-light camera program](#) was adopted in 2019 which installed five red-light cameras at dangerous main thoroughfares. Since installation of these devices, the city has experienced a 27 percent reduction in the number of crashes within 150 ft of the intersections, a 22 percent reduction in rear-end collisions, a 23 percent reduction in red-light citations, and a four percent recidivation rate reduction of repeat red light ticket offenders.

Physical infrastructure changes to promote road safety throughout the city of Greenville also have been implemented. Using automobile crash data, the city identified ten high crash areas and

installed permanent roadway delineators, which prevent dangerous left turns and early lane changes. Since the delineators were added, there has been a reduction in the number of crashes at these locations. Near the main campus of East Carolina University, the city and university partnered to add six flashing beacons on main crosswalks. Near the main crosswalk to the football stadium, the city has installed flex posts to prevent lane changes from occurring as drivers approach intersections. The safety education programs for the student population are ongoing to instill the habit of using the signal activation buttons at the crosswalk before entering the intersection.

With these changes, the city of Greenville in 2020 has improved its road safety conditions and its level of fatalities as compared to cities of similar size. The next phase of their work is a [“road diet”](#) which reduces the number of lanes used by vehicles to allow for changes to the streetscape of the roadway.



Cleveland Heights, OH

Cleveland Heights, Ohio began its [Complete and Green Streets](#) (CGS) approach in 2012. The discussions centered on road safety and expanded to include a sustainability or “green” policy framing to address stormwater overflow issues. The combination of a Complete and Green Streets policy is unique as it addresses both road safety and environmental management, in this case, a goal to reduce, accommodate and slow stormwater runoff.

Using these policies, the city adopted a new master plan in 2018. The plan requires that all city and non-city-funded projects (public or private) must adhere to Cleveland Heights’s CGS policy. Any investments made since the policy’s adoption are to be mapped, quantified and evaluated to ensure equity in all neighborhoods and that no community is subject to disinvested or underinvested. The ordinance also adopted standards for policy guidance including the Federal Highway Administration’s Designing for

Pedestrian Safety. Land and zoning ordinances are to be revised or must fit with the CGS vision, including promoting dense mixed-use transit-oriented development. When road work occurs in any location, Cleveland Heights’s CGS policy requires safe walking and biking conditions during construction. Finally, the ordinance includes 16 evaluation measures, such as miles of bike lanes, number of ADA compliant curbs, and the net number of street trees planted to be reported annually.

Work has already been done at Cedar Lee, Cedar, Fairmount, Coventry, Cedar Taylor, North Park, Edgehill at Overlook and Nobel streets where bike parking racks, bike repair stations, curb ramps installation or pedestrian or bicyclist amenities have been installed. Other amenities include customized bus shelters and landscaping. The city is currently implementing CGS work on Taylor and Compton Roads.



Hoboken, NJ

While Hoboken, New Jersey is regularly rated as one of the most walkable and bicycle friendly cities in America, a review of 5 years of traffic related injuries between 2014-2018 showed 376 traffic-related injuries and 3 fatalities. Crash analysis from the report showed that 76 percent of all bicycle-involved crashes resulted in an injury and 83 percent of all pedestrian-involved crashes resulted in an injury. In addition, the data identified the 10 street corridors where 40 percent of the injury and deadly crashes occurred and the 6 intersections which had ten or more crashes.

The resulting [Hoboken Vision Zero Action Plan](#) was completed in March 2021 and represents the work of an 18-member task force drawing on community feedback from over 2,200 people. The action plan is organized around six principal themes following a safe systems approach with layers of protection:

- ◆ Safe streets: roadway design to separate conflicting movements of people and vehicles
- ◆ Safe speeds: reducing vehicle speeds through policy change and public awareness
- ◆ Safe vehicles: crash reduction technology onboard all new city fleet vehicles
- ◆ Safe behaviors: traffic safety education that prioritizes vulnerable road users
- ◆ Post-crash investigations: identify lessons learned from crashes and share broadly
- ◆ Data driven decisions: measure performance against goals and crash investigation findings

Immediate tasks implemented following adoption of the Action Plan included a dedicated expenditure line item for bicycle infrastructure, development of a traffic calming master plan, a lower citywide speed limit but with a fines/fees structure that is not burdensome to low-income persons, purchase of city fleet vehicles with the latest crash reduction technology, prioritizing road safety over vehicle delay in road design, updating EMT training requirements, and conducting annual road safety audits.



Fort Collins, CO

Colorado has seen road fatalities increase faster than the national average. The number of pedestrians killed annually on Colorado's roadways has risen 89 percent between 2009 and 2018, far greater than the national increase of 55 percent during that same time, according to analysis by AAA Colorado. Fort Collins has been able to buck the state and national trend of increased fatalities, with crashes and serious crashes involving pedestrians generally trending down. In 2010, the city had 58 crashes involving pedestrians, including 39 that resulted in serious injury or death. In 2019, there were 49 crashes involving pedestrians, 21 of which were serious or fatal.

The City of Fort Collins has its own road safety programs and in 2016, the city became the first public local entity to join the Colorado Department of Transportation (CDOT) [Moving Towards Zero Deaths](#) initiative. Ft. Collins produces an annual traffic safety report and they have adopted their own Vision Zero Action Plan. The city maintains detailed data on traffic operations and has a more extensive data portal covering other areas of community concern.

The city is installing signalized crossings of arterial roadways at several locations. In 2021, two such crossings were completed near Colorado State University where students live and walk or cycle to campus. The city also has several grade-separated crossing projects in design and has completed two critical arterial sidewalk gaps along main arterial roads, widening high volume sidewalks.

The Fort Collins traffic signal operations team has enhanced safety at a handful of intersections through pedestrian-activated protected left turn phasing. This allows a pedestrian to activate a push button that then changes the yellow flashing arrow to red, creating greater left turn safety. Traffic signals also have been changed to give pedestrians a few seconds of a head start when entering an intersection with a corresponding green signal in the same direction of travel for vehicles. This enhances the visibility of pedestrians entering the intersection. Finally, the city is working to better protect school students through its [Safe Routes to School Program](#).



Join your peers in cities across America and become part of NLC's Safety First Challenge. This movement is a partnership with other communities taking steps to bring forward solutions for safer streets that will save lives.



INTERESTED IN JOINING NLC'S SAFETY CHALLENGE?

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