



Creating a foundation for systemic safety improvements where children walk and bike

*Members of the Saratoga Elementary School community in Lincoln, NE, traverse a crosswalk following infrastructure improvements in the school zone.
Source: The City of Lincoln.*



Lincoln, NE



AROUND THE U.S. AND WORLD, communities are committing to eliminating traffic fatalities and serious injuries, often as part of Vision Zero initiatives. A growing group of these cities is focused on improving safety on school routes and other places where children and youth walk and bicycle. In some places, youth are actively working with cities and other partners to effect this change.

Vision Zero for Youth recognizes that starting with youth can be the catalyst to build community support for Vision Zero; that Vision Zero should include a focus on youth and that youth voices can play an important role in creating safer streets.

Vision Zero for Youth supports a Safe System approach to reaching zero serious injuries and deaths on roads. The Safe System approach is a shift away from a focus on the behavior of individual road users to a focus on changing the system to provide safer environments for all road users. Equity and consideration for underserved communities is a part of each of the key components of Vision Zero for Youth:

- **INFRASTRUCTURE IMPROVEMENTS** to calm traffic, improve crossings, and provide safe spaces for all users.
- **POLICIES AND PROGRAMS** focused on core issues such as slowing vehicle travel speeds.
- Use of crash **DATA AND PATTERNS** to identify problems, assess risk factors and apply solutions in a systemic way.
- **PARTNERSHIPS** with education, transportation, law enforcement, local safety and health organizations, community members, elected officials and advocates.
- **ENGAGEMENT** of the community around a culture of road safety, with an emphasis on youth empowerment.

LINCOLN, NEBRASKA: 2023 VISION ZERO FOR YOUTH U.S. LEADERSHIP AWARD RECIPIENT

The purpose of the Vision Zero for Youth U.S. Leadership Award is to both give recognition for noteworthy road safety practices and inspire other cities to take bold steps to reach zero traffic deaths among children and youth. It is presented by the Vision Zero for Youth initiative, led by the National Center for Safe Routes to School with support from the FIA Foundation and the UNC Highway Safety Research Center. In 2023, the U.S. Award program was informed by an advisory committee including ITE, NACTO, Safe Kids, FHWA, Safe Routes Partnership, FIA Foundation, Atlanta DOT, COMTO, NHTSA and others.

Cities recognized with Vision Zero for Youth U.S. Leadership Award have taken impressive action to improve walking and biking safety for their children and youth with the goal of building safer, healthier communities for everyone.

Past recipients include the City of Los Angeles and L.A. Unified School District; New York City and its Vision Zero Task Force; the City of Fremont, CA; and the City of Seattle and Seattle Public Schools.

To learn more about the U.S. Award, visit: www.visionzeroforyouth.org/awards/us.



Drone footage provides an aerial view of a midblock pedestrian crossing near Saratoga Elementary School following infrastructure improvements. Source: The City of Lincoln.

LINCOLN, the capital city of Nebraska, is home to approximately 300,000 residents. Located about an hour from Omaha in eastern Nebraska, Lincoln is the state’s second most populous city. Recognizing the importance of maintaining a safe and efficient transportation network and infrastructure as the community continues to grow, the City routinely evaluates safety and crash risks and opportunities to establish systemic safety improvements at locations in Lincoln with similar crash risks over a period of time. To this end, the City of Lincoln Transportation and Utilities (LTU) Department conducted a School Zone Study in 2018. The study was completed with the assistance of a variety of partners including elected officials, Lincoln Public Schools (LPS), and the public. The study’s goal was to use feedback gained from these stakeholders and collected data to make streets safer for all road users, especially young pedestrians and bicyclists, near schools. As a result of the findings of the School Zone Study, the City produced its **School Zone Standards report** in 2019, detailing standards for school zones, school-related crosswalk treatments, and reduced-speed zones to be applied around all schools within the City of Lincoln. The safety improvements made as part of this implementation project are expected to systemically enhance the pedestrian environment for school-aged children by implementing traffic control devices and traffic calming measures in school zones citywide.

Setting the stage for citywide school zone improvements

The multi-year project to implement the School Zone Standards is currently underway and is expected to improve the safety and function of school zones and walking routes for students and pedestrians at all public and private schools in Lincoln, while enhancing traffic consistency citywide so that all road users will know what to expect in school zones. Moreover, the standards, “allow [the City] to apply [improvements] more equitably but also in different

contexts and different travel patterns,” according to LTU Transportation Planner Roberto Partida. The standards have also given a place for discussing school walking routes during the school siting phase. To date, 21 schools have had safety improvements implemented including Saratoga Elementary, which has been used as a model for schools citywide in terms of both the improvements made and the community engagement process surrounding them.



Low-cost pedestrian median island at Rousseau Elementary. Source: Nancy Pullen-Seufert.

Saratoga Elementary School is a Title I school with a large percentage of children from low-income households located within a highly disadvantaged Census Tract as defined by the United States Department of Transportation (USDOT), with disadvantaged health, environmental, economic, resilience, and equity indicators. It is adjacent to two major arterial roadways that average over 10,000 vehicles per day.

Prior to school zone safety improvements, the arterial roadway adjacent to the school, South 13th Street, had a speed limit of 35mph with two travel lanes in both directions that narrow to a three-lane section. South 13th Street also had a signalized midblock pedestrian crossing in front of the school, which was underutilized as school staff, caregivers, and community members felt unsafe using the crossing. Safety concerns at the crossing included heavy traffic, speeding, length of crossing distance, and red light violations. Moreover, student pedestrian crashes took place in both 2016 and 2021 at this crossing.

Engaging the community and taking action

In November 2021, a month after a 10-year-old Saratoga Elementary student was struck by a southbound vehicle that violated the red light, LTU was invited to attend a School Neighborhood

Advisory Committee (SNAC) meeting where caregivers, school staff, school district staff, and neighborhood residents were able to voice their road safety concerns. Community members noted concerns around the signalized midblock pedestrian crossing located in front of Saratoga Elementary where the 2016 and 2021 pedestrian crashes occurred. Caregivers described feeling unsafe when using this crossing and, consequently, avoiding the crosswalk all together.

After that meeting, LTU prioritized the evaluation of Saratoga Elementary for school zone safety improvements. At the same time, conversations began with stakeholders to build public support for changes while also engaging with Saratoga families and educating users about road safety. Those conversations spanned several months and resulted in the development of a school safety day and the creation of a "Safe Routes to School Parent/Guardian" survey.

The school safety day took place in April 2022 and allowed for City staff and partners including the local Safe Kids Coalition and Lincoln Lancaster Health Department to engage with Saratoga students to discuss road safety. School staff, LPS staff, caregivers, and City staff all volunteered and made the day a huge success with students being engaged and learning about traffic safety.

The parent/guardian survey was distributed in Spring 2022 to gain insight into the number of students walking or biking to school and obstacles preventing other students from walking or biking. The survey was a crucial tool in obtaining qualitative data that influenced the needed school zone safety improvements. The survey showed that over 70% of students were arriving to/leaving school by car and that 47% of students had asked permission to walk or bike to school. The survey also suggested that implementing safety improvements could increase the number of students walking or biking to school, as 73% of caregivers indicated that they would allow students to bike or walk if safety issues were addressed.

Before the fall semester started at Saratoga Elementary, LTU attended another SNAC meeting to discuss the proposed traffic safety improvement plans, which were identified based on many factors including a traffic study, crash analysis, school zone evaluation and qualitative data obtained from meetings and survey responses. The plans included using a variety of low-cost, quick to install measures: reducing the number of lanes on South 13th Street to reduce crossing distances and exposure for students, installing school zone flashers, decreasing the speed limits to 30mph on collector streets and 20mph in school zones during school arrival/dismissal, installing high-visibility crosswalks, extending a southbound bike lane adjacent to the school, and installing delineators and pavement markings to channel and calm traffic. The plan was positively received by the community and implementation started in August 2022.

Maximizing limited resources

With no dedicated funding for school zone improvements, LTU relies on three strategies. First, they look to low-cost strategies. LTU Traffic Engineering Manager Dan Carpenter noted that low-cost strategies allowed for the “greatest impact sooner.” For example, a traditional pedestrian median would cost the city \$20,000 to \$30,000 but they could construct one using low-cost materials for \$6,800. The City expanded their signing and marking staff and equipment so they could do more work internally. Second, they identify planned construction adjacent to the schools to do more cost sharing with those projects. Having the school zone

standards in place has allowed the City to “be much more intentional when looking at improvements we can make” whenever the department has a project adjacent to a school, according to Melissa Ramos-Lampli, LTU Sr. Traffic Technician. Finally, they seek grant opportunities from Federal, Metropolitan Planning Organization (MPO) and state funding.

Conducting post-implementation observation and making project adjustments

After completion of the safety improvements, LTU observed Saratoga Elementary to see how families, students and other road users navigated the changed built environment. During this time, LTU noticed that students were waiting for over a minute at the signalized midblock crossing before crossing the street. City staff quickly changed the pedestrian signal timing during dismissal to encourage additional use of the signal. Additionally, LPS worked with the school to provide funding for staff members to observe students in aiding them to cross safely.

According to LTU’s data collection, vehicle speeds decreased in all scenarios since the safety improvements were implemented. The most significant vehicle speed reduction (-11.36%) occurred during the activated school flasher intervals. This reduction indicates that the recent project has played a significant role in improving road safety both for students and for motorists.

The City plans to make accessibility improvements to the sidewalk ramps at this location in the future.

Using policy to support systemic improvements and institutionalizing community engagement

The success of the Saratoga Elementary School project highlights the importance of the School Zone Standards report. The report provides a systemic approach to traffic safety strategies and solutions that can be implemented at different schools. The strategies utilized at Saratoga Elementary can now be replicated at other schools with similar built environment constraints. The project highlighted that the use of quick-build strategies can allow for modifications that aren’t strictly construction related and create opportunities for proactive approaches that lead to improved safety outcomes.



Mayor Leirion Gaylor Baird and LTU Director Elizabeth Elliott accept the 2023 Vision Zero for Youth Leadership Award surrounded by members of the Saratoga Elementary School community during a ceremony at the school on March 28, 2023. Source: The City of Lincoln.

“ Making sure Lincoln’s littlest residents can safely walk, bike or ride to school is a priority we all share. As a community, we work together to deliver on this priority, knowing that, as adults, we have a special responsibility to help safeguard our children’s lives as they grow.

– **GAYLOR BAIRD**, MAYOR OF LINCOLN, NEBRASKA

For example, the quick-build strategies implemented at Saratoga Elementary allowed for additional on-street bike infrastructure and enhanced pedestrian infrastructure. The public engagement efforts and partnerships fostered through this project will have lasting impacts for all school zone improvement projects moving forward. Additionally, the community engagement process is now an internal department practice, so what began as a practice for school travel is now impacting citywide practices.

There’s a clear understanding of the importance of qualitative data in providing additional context into how pedestrians and bicyclists interact with the built environment. All school zone evaluations will include parent/guardian surveys, engagement and involvement from the school and community.

By establishing strong school zone standards, Lincoln has set the stage for improving safety around all school communities in the City.



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