

ACHIEVEMENT AWARDS



SUBMISSION FORM

All submission forms must include the following information. Separate submission forms must be turned in for each eligible program. **Deadline: July 1, 2023.** Please include this submission form with the electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact [Gage Harter](#).

PROGRAM INFORMATION

County: Arlington County

Program Title: Vision Zero Program: Saving Lives from Transportation-Related Crashes

Program Category: Transportation

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Name: Mark J. Schwartz

Title: County Manager

Signature: 
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Arlington County's Vision Zero Program: Saving Lives from Transportation-Related Crashes

Executive Summary

Arlington County recognizes the urgent need to address the issue of transportation-related crashes resulting in severe injuries and fatalities. On average, 55 severe injury crashes and four fatal crashes occur per year on County roads. Arlington County implemented the Vision Zero program in 2019 with the goal in mind to eliminate severe and fatal transportation-related crashes by 2030. Now five years into the program, the Vision Zero team has demonstrated how local transportation safety can be improved with proper planning, collaboration, and transparency.

The Vision Zero team published an Action Plan which set over 90 action items to target and track progress. Community engagement and collaboration have been at the core of Arlington's Vision Zero program. County staff has sought community input through various initiatives, including annual safety feedback efforts, community meetings, and online feedback opportunities. From the development of the Vision Zero Action Plan to the public input on transportation safety projects, the community has been a critical part in helping these safety initiatives move forward.

Stakeholder involvement is another essential component of Arlington's Vision Zero program. The External Stakeholders group, comprising of community leaders and industry professionals, provides guidance and support for education and engagement programs. The Interdepartmental Stakeholders Group facilitates collaboration among different departments within the County. The interdepartmental collaboration includes close partnerships with groups such as the Arlington County Police Department (ACPD) and Arlington Public Schools to ensure safety improvements throughout the County.

Arlington County collaborated and maintained partnerships with neighboring jurisdictions, authorities, agencies, and organizations. The Metropolitan Washington Council of Governments (MWCOG) has provided funding for safety projects. Additionally, the Vision Zero team engaged in monthly coordination calls with other local Vision Zero program coordinators fostering discussion and support.

Data analysis plays a crucial role in Arlington's Vision Zero approach. Data analyses have led to initiatives that identify intersections, streets, and locations that need to have implementation of safety improvements. The Vision Zero team receives data from our partners from ACPD as well as community members.

The Vision Zero program has a focus on equity which has uncovered how certain communities are disproportionately affected by vehicle crashes. These groups tend to be more racially diverse or come from lower socioeconomic backgrounds. Vision Zero is dedicated to addressing these inequities and prioritizing safety projects in these communities to counteract unequal structures in our society.

By prioritizing safety projects, engaging stakeholders, and implementing data-driven strategies, Arlington County is committed to reducing severe and fatal crashes. The Vision Zero program remains dedicated to achieving its goal of zero critical crashes while promoting equity and safety for all residents, workers, and visitors in Arlington.

A brief overview of the program

[Vision Zero](#) is an internationally recognized strategy to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. There are 45+ “Vision Zero” communities in the US, including Arlington County, VA. In May 2021, the Arlington County Board adopted a five-year [Vision Zero Action Plan](#). The plan identifies key safety target areas, proposes over 90 action items to improve safety in each target area, and creates measures for tracking progress

Arlington’s Vision Zero program team is responsible for carrying forward the Vision Zero message and managing the implementation of the 90+ action items. Key responsibilities of the Vision Zero team are to (1) engage with the community and key stakeholders to collaboratively achieve safety goals, (2) analyze data and report on critical crashes on an annual basis, and (3) promote equity to ensure there is no undue safety burden for any of Arlington’s community members.

In 2022, the Vision Zero team reached 150,000+ community members with safety messaging, analyzed hundreds of crashes for safety needs, guided the implementation of 100+ small-scale engineering projects (infrastructure or signal adjustments), implemented five pilot projects to test new safety strategies, retrofitted 17 school zones, worked on two [Regional Roadway Safety Program](#) projects, and reduced speed limits on 7 roadways – making it so that no roadways owned by Arlington have a speed limit above 30mph. Arlington County’s Vision Zero team has helped to shift the conversation about transportation safety and ensure safety first on all County projects, policies, and plans.

Vision Zero in Arlington

Every year on Arlington County roads, transportation-related crashes lead to severe injuries and sometimes deaths. According to the [Vision Zero Crash Dashboard](#), on average the County experiences about 55 severe injury crashes and four fatal crashes per year. In previous years, about a quarter of the total number of crashes involved speeding and nearly a third of alcohol-related crashes lead to an injury. The share of all crashes involving a bicycle or pedestrian is about 7% per year. While 7% may seem like a small figure, these populations are more susceptible to severe injuries or fatalities. These figures demonstrate the urgent need to address transportation-related crashes in Arlington County. The County has taken a stance that crashes are unacceptable and is implementing strategies to reduce these critical crashes to zero.



In 2019, the Arlington County Board adopted a resolution committing to a Vision Zero transportation safety strategy, giving a greenlight to the creation of a five-year action plan. Following a robust interdepartmental and community-driven effort, the County finalized its first [Vision Zero Action Plan](#) in 2021. During the creation of the plan, the team conducted an in-depth review of severe and fatal injury crashes to identify common circumstances and factors involved in the County's most critical crashes. The most common circumstances and factors were recognized as "key safety target areas" – areas where Arlington can improve safety through engineering, education, engagement, enforcement, and policy.

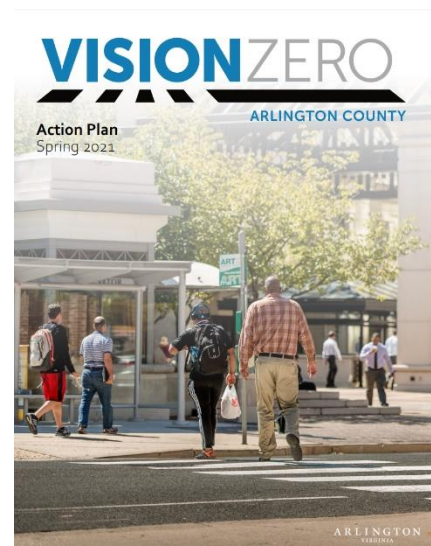
Driven to address these key safety target areas, the plan identified over 90 action items and a timeline to achieve the goal of eliminating severe and fatal crashes by 2030. While developing this plan, county staff recognized the importance of (1) community, stakeholder, and regional collaboration, (2) data-driven solutions, and (3) attention to equity in every program initiative to make the county safer for everyone that lives, works, or visits Arlington.

Community, Stakeholder, and Regional Collaboration

Community Engagement & Communications:

From the genesis of the Vision Zero program, the team has relied on community input and collaboration. This included the development of the Vision Zero Action Plan. From January 2020 through February 2021, the Vision Zero team hosted three phases of community engagement to steer the development of Arlington's safety plan.

The extensive outreach and engagement early in the evolution of Arlington's Vision Zero program established a strong foundation of community awareness and support. This community-centric approach continues to be a critical component of the program:



- Each spring, the County hosts an annual community engagement focused on gathering people's experiences and perceptions related to transportation safety. This includes an open house community meeting, several community pop-up events, and an online or mail-in feedback opportunity. Over 1,500 individuals participated in the 2023 Vision Zero Annual Safety Feedback effort. This annual effort provides valuable input as the team plans safety interventions throughout the county.
- Arlington also hosts an annual, county-wide [Critical Crash Mitigation](#) communications campaign aimed at changing human behaviors that can often lead to critical crashes. The campaign runs in the latter half of the year. Each month focuses on a different safety target area. For example, in 2022, targeted actions were speeding, driving under the influence, pedestrian awareness, awareness while turning left, and bicycle awareness. The 2022 campaign had an estimated reach of anywhere from 100,000 to 150,000 views per month.
- To communicate progress on each of our Vision Zero action items, the team publishes mid-year and annual progress reports. The most recent is the [2022 Annual Report](#).
- To keep community members involved year-round, the Vision Zero team shares a monthly newsletter with program and project highlights. These newsletters reach over 2,000 subscribers and are provided in both English and Spanish.

Stakeholder Involvement:

Arlington's Vision Zero team manages an [External Stakeholders Group](#) to seek technical guidance from community leaders and industry professionals. The External Stakeholders Group is comprised of about 25 representatives from existing committees, commissions, and community organizations. The group meets twice a year to support the County's Vision Zero program. Members assist the Vision Zero team with education and engagement programs, helping guide public outreach, messaging, and strategies related to Vision Zero, and providing insight, feedback, and local knowledge to the County's Vision Zero team.

The Vision Zero team also hosts an Interdepartmental Stakeholders Group consisting of representatives of various disciplines and departments within the County. The Interdepartmental Stakeholders Group meets every other month, collaborates on ongoing Vision Zero Action Items, and supports the Vision Zero team in cross-county communications.

The interdepartmental collaboration includes close coordination with the Arlington County Police Department to ensure strategic, safe, holistic, nonbiased, and data-driven enforcement and education within the community. The Vision Zero team has worked hand in hand with ACPD to move forward both the County's [red light camera and speed camera programs](#), which are focused on providing safety results.



This also includes close collaboration with Arlington Public Schools. In 2022, the Vision Zero team finalized [Arlington's school zone guidelines](#), which include specifications for setting speed limits in school zones. The team subsequently updated the County Code to allow for permanent 20mph speed limits on neighborhood streets within 600 feet of a school access point. The team is working with faculty members at each school in the County to review their existing school zone, retrofit the zone to match the new guidelines, and address other noted safety needs in the process. So far, the Vision Zero team has

facilitated the update of 17 school zones and plans to update all remaining school zones within the next year.

About 20% of roadway centerline miles in Arlington are owned and operated by VDOT. This mileage includes major interstates (I-66 / I-395) and a few major arterial roads (Arlington Boulevard/Route 50, Langston Boulevard/Route 29, and Glebe Road). Anytime Arlington works on a VDOT-owned road, the County must coordinate plans and permits before taking action. The Vision Zero team hosts safety-focused meetings with VDOT on an ad-hoc basis to coordinate safety needs and projects, accounting for two meetings so far in 2023.

Regional Collaboration:

One of the County's goals was to maintain an effective partnership with neighboring jurisdictions, authorities, agencies, and other organizations that want to work on addressing safety concerns. Arlington County experiences traffic activity that not only affects residents but also impacts people who commute or visit from other places. That is why the team has set up partnerships with organizations such as the Metropolitan Washington Council of Governments (MWCOG) to help achieve Vision Zero goals. MWCOG provides application-based funding through its [Regional Roadway Safety Program](#), which Arlington County has relied on for several recent safety projects.

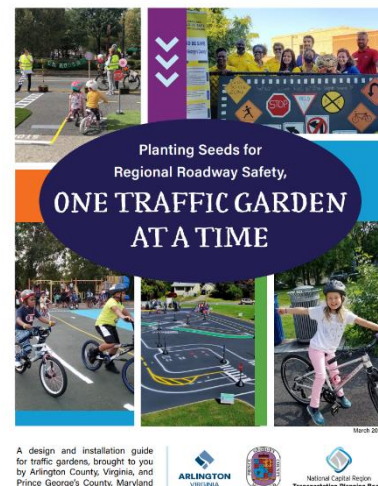
Arlington County, in conjunction with Prince George's County in Maryland, worked on an MWCOG-funded project to develop guidelines for building traffic gardens. A traffic garden is a small-scale street network that provides a safe space for children to practice active transportation. The outcome of the grant was a ["how to" guide](#) that provided steps from planning to implementation of traffic gardens. The guide was published in 2023 and is available to download by anyone who is interested in implementing a traffic garden in their own locality. The Vision Zero team believes that distributing these resources will be beneficial for other communities that are tackling transportation safety efforts.

Arlington County staff also received funding from MWCOG for a Data-Driven Anti-Drunk Driving Campaign project. Last year, there were three fatal and nine severe-injury, alcohol-related crashes in Arlington. Further, MWCOG identified that alcohol was a contributing factor in one out of five fatal crashes in the region. The upcoming project will benchmark the state of practice on reducing impaired driving, conduct a market research report to identify patterns and locations of alcohol-involved crashes and identify action items for regional municipalities to augment their existing campaigns to reduce drunk driving.

In addition to participating in the MWCOG Regional Roadway Safety Program, the Arlington County Vision Zero team participates in monthly coordination calls with the other local Virginia-Maryland-DC Vision Zero program coordinators. These calls allow for collaborative discussion and cross-jurisdictional support in achieving Vision Zero goals.

Data-Driven Approach

The Vision Zero team relies on data analysis to reduce transportation-related crashes. Vision Zero represents a transition from a historically reactive program (response after crashes



happen) to both a proactive and responsive program (using data to identify and address risks to prevent crashes).

The Vision Zero team's responsive safety initiatives include:

- **Critical Crash Follow Up:** *Every quarter*, an interdepartmental team meets to review all critical crashes from the previous quarter and identify immediate action to address severe and fatal crash locations. The Vision Zero team keeps a running list of locations, needs, and actions to track each improvement and flag any repeat intersections.
- **Hot Spot Program:** *Every two years*, the Vision Zero team identifies [crash hot spots](#) using crash and near-miss data. The team then reviews each location in detail to identify and implement safety improvements through tactical (signage / markings / bollards), quick-build (small-scale construction) projects, or longer-term projects.
- **High-Injury Network:** *Every three years*, the Vision Zero team updates the [Vision Zero High-Injury Network \(HIN\)](#), which identifies streets within the county that have a relatively high number of serious injuries and fatal crashes. [The current HIN \(adopted in 2023\) uses data from 2018-2022](#). The network covers 52% of all fatal, severe, or injury crashes in Arlington and 6.8% of all roadways.
 - The Vision Zero team conducts [safety audits](#), which are walking assessments, of HIN corridors to identify quick fix/build improvements and ensure future planning efforts consider large scale corridor needs.
 - The Vision Zero team also prioritizes quick-build and capital projects on HIN corridors, as well as pop-up engagement activities and education campaigns on these corridors.
- **Community Report-A-Problem:** *On a daily basis*, the team responds to safety concerns reported by community members through the [request for service portal](#) – often categorized as a “Transportation/Safety Investigation.” Staff review and triage community reports, which can then prompt an investigation, data collection, and implementation of recommendations.

Arlington's proactive safety initiatives include:

- **Systemic Assessments:** *On a semi-annual basis*, the Vision Zero team conducts [systemic assessments](#) of crashes or infrastructure to proactively improve safety. The systemic analysis concept centers around identifying a safety issue in one location, then identifying and improving other similar locations to prevent crashes.
 - When the team conducts a systemic crash review, they identify specific combinations of risk factors that resulted in crashes.
 - When the team conducts systemic infrastructure reviews, they look at a certain infrastructure characteristic (for example, multilane uncontrolled crossings) and then identify and prioritize locations for improvement (in this example, advanced yield



markings/signage and flashing crossing beacons).

- **Safety Equity Analysis:** *In 2023*, the Vision Zero team published the [transportation safety equity analysis](#). This data analysis carved a path forward for the Vision Zero program to
 - Be proactive in addressing infrastructure needs with an equity lens.
 - Prioritize safety projects in underserved neighborhoods.
 - Ensure that reporting channels are clear and accessible to all community members.
 - Track progress to reduce and rectify these disproportionalities over time.
- **Community Education:** The Vision Zero team is always working on community education, as described in the *Community, Stakeholder, and Regional Collaboration* section above.

ARLINGTON COUNTY EQUITY LENS



Another way the Vision Zero team demonstrates improvement is through Before and After Studies.

These studies use results from crash data, speed data, and even video footage analysis to determine if conditions have remained the same or improved after implementing changes to a site. On an ongoing basis, the Vision Zero team reviews the efficacy of transportation safety mitigation measures by assessing conditions before and after implementation, which will inform future policies and implementation of mitigation measures. [Before and after studies](#) have shown significant reductions in crashes at intersections where the team has installed safety improvements within the past two years.

Equity Emphasis

One of the six (6) goals of Arlington's [Vision Zero](#) program is to prioritize transportation safety investments equitably in Arlington's communities. While developing the [Vision Zero Action Plan](#), the Vision Zero team compared equity indicators to crash data to determine if/how imbalances in social opportunity relate to transportation safety. Findings showed a rough relationship between crashes and block groups with either more racial diversity or lower income levels.

To learn more, the Action Plan prescribed Action Item A4: Equity Analysis: to identify the inequitable impacts of transportation on safety in Arlington County communities and integrate this work with countywide efforts in furtherance of the County's Equity Resolution and [Realizing Arlington's Commitment to Equity](#) (RACE) strategic framework.

The Vision Zero team convened an interdisciplinary internal project steering team to refine the scope of work and contribute feedback throughout the entire analysis. This was the first investigation into transportation safety with an equity lens, setting a standard for integrating an equity framework into Arlington's transportation portfolio.

Arlington's [Transportation Safety Equity Analysis](#), published in April 2023, confirmed that there are neighborhoods in Arlington that have historically been overrepresented in crash data and underrepresented in responses to transportation-related safety requests.

The recommendations create a path forward for Arlington to:

- Be proactive in addressing infrastructure needs with an equity lens
- Create a platform to prioritize safety projects in underserved neighborhoods
- Ensure that reporting channels are clear and accessible to all community members

By tracking progress overtime, the Visio Zero team is committing to reducing and rectifying these disproportionalities over time.

The Vision Zero program will continue to prioritize safety projects that reduce fatal and severe crashes. This analysis integrates equity into that prioritization process to ensure there is no undue burden on any of Arlington's community members.

The Vision Zero Team

The technical Vision Zero Team is currently comprised of four team members:

- Vision Zero Program Manager: Christine Baker
- Senior Design Engineer: Ana Mazidi
- Principal Planner: Laura Castro
- Data Management Intern: Caitlyn Mitchell

Vision Zero, however, is an all-county effort. The Vision Zero team coordinates heavily with other County staff in across different departments and teams. For example, all staff within the Transportation Engineering and Operations Bureau (the Design, Signals, Operations, Transit, and Parking teams) work on Vision Zero and safety projects every single day. All staff within the Division of Transportation are constantly ensuring that the goals and action items of Vision Zero are interwoven in all transportation plans, projects, and policies. Looking beyond just transportation, all staff in Arlington County are putting in the work every single day to work toward our goal of Vision Zero whether it be ensuring that their county vehicle is parked in a safe location, that there are accessible pathways for people walking and biking while they are working in the public right-of-way, that they are not using a phone while driving or crossing the street, or that they are educating others on the importance of safe travel behavior.

Vision Zero Program Funding

The Vision Zero program is funded through the Capital Improvement Plan that the County adopts every ten years. The robust data collection and analysis work, as well as strategic communications and outreach, are funded within the Strategic Network Analysis and Planning Program (funded at \$1.2 million in the last two-year budget cycle). All small-scale safety construction projects are funded through the Safe Streets Improvements Program (funded at \$3 million in the last two-year budget cycle). Any large-scale construction projects identified for safety improvements is budgeting into the Capital Improvement Plan individually. Other smaller scale activities and staff hours are covered under general operations funding.

Results:

While the Vision Zero target year is seven years away, the Vision Zero team has shown commitment to reducing critical crashes throughout Arlington. The Vision Zero program is still successfully ongoing because the team has collaborated effectively with local community members, state partners, and regional organizations to address transportation safety issues. The Vision Zero team has published all their work not only for transparency, but also to share lessons learned to other entities that may want to implement in their own version of the program. Analyzing data has been a key component in the program which has helped find and prioritize areas for improvement. In fact, data was crucial in continuing Arlington's commitment to equity. The equity component in this Vision Zero program has been integrated as part of greater County-wide effort to address unequal social imbalances.

In 2023, the Vision Zero team is continuing practices that were successful in the initial stages but is adapting to yearly changes and generating new projects as well. The results demonstrate the implementation of pilot programs, quick build projects, High-Injury Network safety audits, equity analyses, slow school zones, RRFB implementations to name a few of the program's successes. The Vision Zero program is committed to the reduction of severe and fatal crashes throughout Arlington County.

Applying the Results to Other Jurisdictions:

This program can be replicated in other localities, and in some ways it already is. Arlington's Vision Zero team has documented the program from the very beginning through the Vision Zero Action Plan. The Action Plan outlined goals and timelines for the program to complete which another locality may reference and adjust for their own needs.

Arlington's Vision Zero website is loaded with information about ongoing work and analysis. A specific example is Arlington's [Vision Zero Multimodal Safety Engineering Toolbox](#). This document explains each engineering tool that the County typically uses to address safety and explains the context and considerations that staff assess when identifying and placing the tool. The document makes it easy for any person—a transportation professional or a community member—to understand how to engineer a street safely and communicate safety needs. Another example is the [Maps and Safety Data page](#), which showcases the program's reliance on data. The analysis methodologies for these projects are available on the Vision Zero website along with a summary of the findings.

Every Vision Zero program is unique and requires an approach that will work in that respective community. The Vision Zero program in Arlington County can help guide other localities as they begin on their own journey.