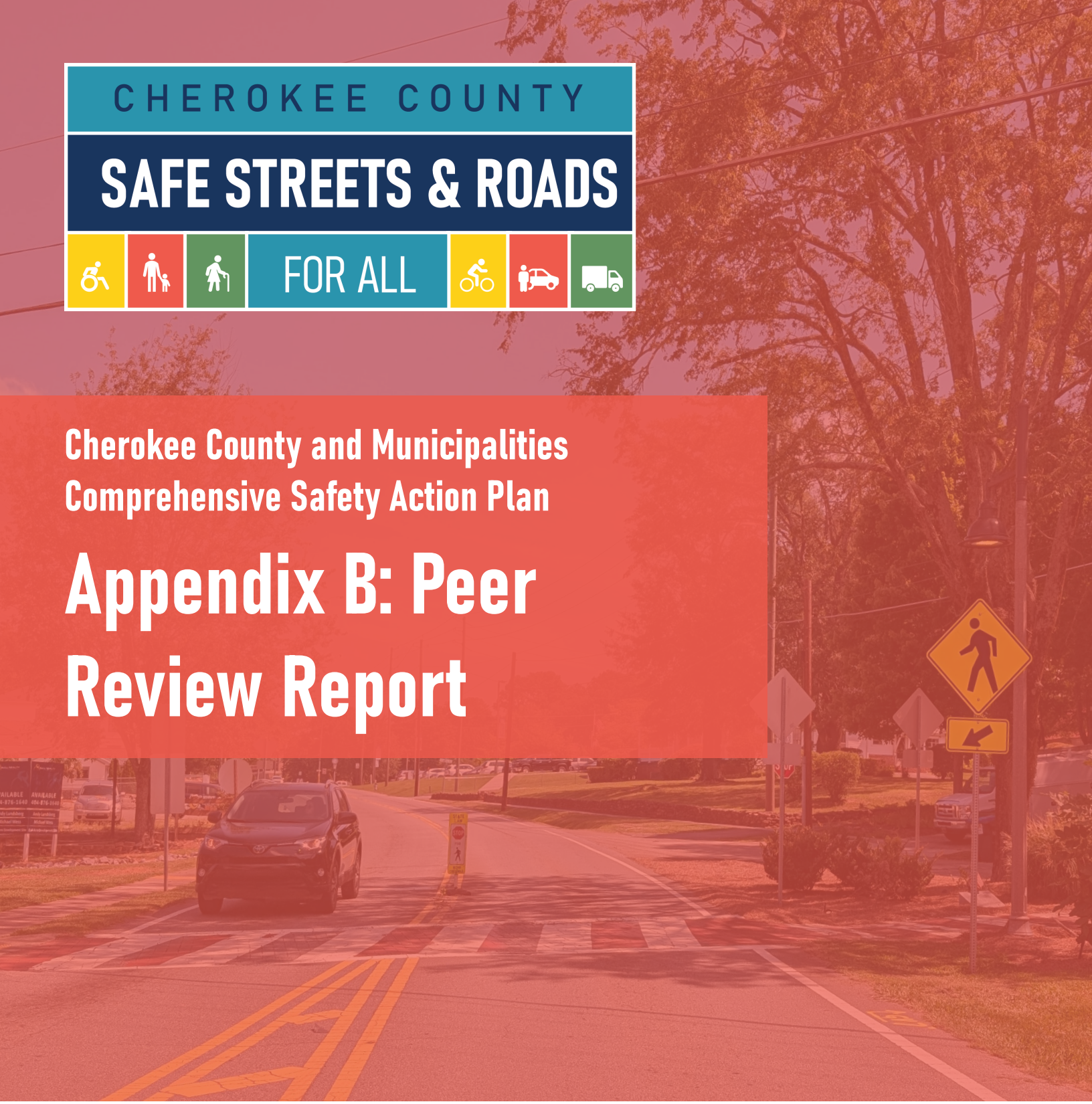
CHEROKEE COUNTY

SAFE STREETS & ROADS FOR ALL

## Cherokee County and Municipalities Comprehensive Safety Action Plan

# Appendix B: Peer Review Report



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# Memorandum

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| **TO:** | **Brantley Day, Cherokee County**<br>**Kat Onore, AICP, Pond**<br>**Wade Carroll, AICP, Pond** |
| **FROM:** | **Alex Henry, AICP, Benesch** |
| **SUBJECT:** | **Cherokee County SS4A Action Plan: Peer Review Report** |
| **DATE:** | **May 28, 2024** |

## Introduction

In support of the creation of the Cherokee County Safe Streets and Roads for All (SS4A) Action Plan, Benesch has been tasked with conducting a peer review of similar safety action plans and highlighting trends and notable practices.

This peer review is focused on highlighting key trends and notable practices related to the eight SS4A Action Plan components identified by the United States Department of Transportation (USDOT). Action plans must adequately address all eight components for subsequent projects to qualify for SS4A Demonstrational Activities or Infrastructure funding. The components include:

- Leadership Commitment and Goal Setting
- Planning Structure
- Safety Analysis
- Engagement and Collaboration
- Equity Considerations
- Policy and Process Changes
- Strategy and Project Selections
- Progress and Transparency

The peer review includes an analysis of 10 safety action plans from across the Southeastern United States. The action plans were selected with the intention of providing diverse examples from a variety of different states, jurisdiction types, and populations. Action plans that have been leveraged for subsequent SS4A Demonstrational Activities and/or Infrastructure grant funding were also prioritized. A summary of selected action plans is included in **Table 1**.

**Table 1: Peer Reviewed Action Plans**

| Action Plan | Jurisdiction Type | State | Population (2020) | S44A Implementation Award | S44A Demonstration Award |
|---|---|---|---|---|---|
| Arlington County | County | Virginia | 238,643 | - | - |
| Atlanta | City | Georgia | 499,586 | Yes | |
| Burlington-Graham MPO | MPO | North Carolina | 187,251 | - | Yes |
| Cobb County | County | Georgia | 762,944 | - | - |
| Forward Pinellas | MPO | Florida | 976,802 | Yes | - |
| Metro Nashville | City/County | Tennessee | 694,176 | Yes | - |
| Orlando | City | Florida | 307,603 | - | Yes |
| Richmond | City | Virginia | 226,670 | Yes | - |
| Savannah | City | Georgia | 147,701 | - | - |
| Tampa | City | Florida | 383,980 | Yes | - |

To provide additional context, the peer review will also reference guidance and best practices from USDOT and the Vision Zero Network. The Vision Zero Network is a non-profit organization that promotes the adoption of Vision Zero and Safe Systems policies across the United States. They support agencies working to develop safety action plans by providing detailed guidance and highlighting national best practices.

## Leadership Commitment and Goal Setting

Obtaining support and commitment from leadership and decision makers is an integral component of the safety action planning process. Leadership can provide the resources, political support, and the mandate to implement that is critical to the success of any safety action plan.

The Vision Zero Network echoes the importance of high-level support and includes leadership commitment as one of its "Nine Key Components of a Strong Vision Zero Commitment", stating that the most effective commitments should include a clear public policy laying out actions, a timeline for implementation, stakeholders to be involved, and a commitment to community engagement[1]. The guidance also acknowledges that the most effective forms of leadership commitment continue throughout the action planning process, and into plan implementation.

This section includes a summary of how each of the plans reviewed approached leadership commitment and goal setting and highlights notable practices. A detailed summary of each plan's commitment type and target timeline is included as **Table 2**.

### Public Commitment

All the action plans reviewed included documentation of leadership commitment. Most of the plans prominently feature a letter from a chief executive or a representative from a legislative body or governing board. Support for many of the plans were also codified via an official resolution or ordinance or were adopted as official policy be a governing board.

1Vision Zero Network: 9 Components of a Strong Vision Zero Commitment | Vision Zero Network

### Goal Setting

USDOT guidance states that an agency's public commitment must also include a target date by which the community aims to eliminate traffic fatalities and serious injuries2. Of the action plans reviewed, this target date ranged from 5 to 28 years from the adoption of the plan with an average of 15 years.

**Table 2: Leadership Commitment and Goal Setting Summary**

| Action Plan | Commitment Type | Target Timeline (years) |
|---|---|---|
| Arlington County | Letter from County Administrator, County Board Resolution | 9 |
| Atlanta | Letter from Mayor, City Ordinance | 17 |
| Burlington-Graham MPO | Transportation Advisory Committee Resolution, MPO Board Adoption | 28 |
| Cobb County | County Commissioners Resolution | 17 |
| Forward Pinellas | MPO Board Adoption | 24 |
| Metro Nashville | Letter from Mayor, City/County Council Adoption | 5 |
| Orlando | Letter from Mayor, City Council Resolution | 19 |
| Richmond | Letter from Mayor, City Council Resolution | 12 |
| Savannah | Mayoral Resolution | 5 |
| Tampa | Letter from Mayor, Multi-jurisdictional Resolution | 14 |

### Notable Practice: Multi-Agency Resolution

As different agencies are responsible for different aspects of the transportation system, strong multi-disciplinary collaboration is needed to ensure the success of a safety action plan. This was the case in Tampa, Florda who found during the development of their action plan that only 30% of the city's traffic fatalities occurred on roadways within the city's control. To achieve zero fatalities and serious injuries, close collaboration with their jurisdictional partners in Hillsborough County and the Florida Department of Transportation (FDOT) would be paramount.

After including Hillsborough County and FDOT decision makers as members on their task force, the City of Tampa codified this shared partnership and commitment by issuing a multi-agency resolution. The resolution was signed by the Mayor of Tampa, the Chair of the Tampa City Council, the Chair of the Hillsborough County Board of County Commissioners, and by the local FDOT Secretary. This joint resolution signaled unified support for the plan, and a clear mandate that all involved agencies would work together towards plan implementation.

2 USDOT: SS4A Action Plan Components

*Tampa's Mayor and FDOT's local District Secretary sign a multi-agency Vision Zero resolution. (Source: City of Tampa)*

## Planning Structure

USDOT defines planning structure as "a committee, task force, implementation group, or similar body charged with oversight of the Action Plan development, implementation, and monitoring"[3].

The Vision Zero Network identifies the commitment to a strong and active multi-agency task force as one of the most important factors in a Vision Zero program's success. Because a Safe Systems based approach addresses interconnected systems addressing traffic safety, it is critical that a diverse, multi-disciplinary task force be put in place to guide the development and implementation of an action plan. task force members should include high level personnel who have the authority to make decisions within their agency and who have access to their agency leader[4].

This section includes a summary of each action plan's approach to creating a task force and highlights notable practices.

### Task Force Composition

All the action plans reviewed included a task force that was convened to guide plan development. Representatives from other internal departments, partner local agencies, state DOT's, and law enforcement were the most commonly included.

Half of the action plans reviewed included representation from the office of the jurisdiction's chief executive (mayor or county administrator). The Vision Zero Network cites this as a best practice as it sends a clear message that the action plan is an administration priority and helps to maintain momentum throughout the plan development process and into implementation. Three of the action plans reviewed included elected officials on their task force, further demonstrating a commitment from political leadership[4].

Most of the plans reviewed also included representation from citizen's groups on their task forces. Representatives from local walk/bike advocacy groups were among the most frequently included.

A summary of each action plan's task force composition is included in **Table 3**.

### Meeting Cadence

The cadence of task force meetings in the action plans reviewed varied, with the task forces most commonly meeting either bi-monthly or quarterly. Task force meetings most often coincided with key project milestones.

3 USDOT: SS4A Action Plan Components
4 Vision Zero Network: From Planning to Practice: The Role of Collaboration in Vision Zero Planning

**Table 3: Task Force Composition**

| Action Plan | Internal Departments | Office of Chief Executive | Partner Local Agencies | State DOT | Transit Providers | Law Enforcement | Fire/ EMS | Public Health | Elected Officials | Economic Development | Community Groups |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arlington County | Yes | Yes | No | No | No | Yes | Yes | Yes | No | Yes | Yes |
| Atlanta | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | No |
| Burlington-Graham MPO | Yes | - | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes |
| Cobb County | Yes | No | Yes | Yes | No | Yes | No | No | No | No | No |
| Forward Pinellas | Yes | - | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Metro Nashville | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes |
| Orlando | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes |
| Richmond* | - | - | - | - | - | - | - | - | - | - | - |
| Savannah | Yes | Yes | No | No | No | No | No | No | No | No | No |
| Tampa | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |

**The existing Richmond Safe and Healthy Streets Commission served as the task force for the City of Richmond Safety Action Plan. No information was provided in the plan regarding the makeup or representation of this commission.*

**Notable Practice: Task Force Subcommittees**

Although half of the action plans reviewed were guided by one overriding task force, other jurisdictions chose to split their task forces into multiple groups or subcommittees.

Arlington County and Metro Nashville both established two separate task force groups, one consisting of internal staff from various departments, and a second group of external partners and stakeholders. Establishing a sperate multi-departmental committee of internal staff allows for a more in-depth exploration of needed agency policy, process, and cultural changes and can help to break down internal silos that may inhibit action plan implementation.

The City of Tampa took a similar approach by establishing a sub-committee focused on internal policy and process improvements. They also created two additional sub-committees focused on crash and countermeasures and equity and engagement respectively. These committees included a mix of internal staff and external stakeholders and allowed the city to engage a more diverse set of stakeholders while still holding focused conversations.

The Burlington-Graham MPO established a new MPO sub-committee to guide the development of their action plan, but also relied on feedback from their existing Transportation Advisory Committee and Technical Coordinating Committee, both of which comprise of staff and elected officials from partner agencies. This is an example of how existing groups, committees, and task forced can be leveraged to provide plan feedback.

## Safety Analysis

One of the most integral components of the safety action planning process is a detailed analysis of historic crash data to determine where fatal and severe injury (F/SI) crashes are occurring, how they are occurring, and who they are occurring to. This exercise allows agencies to identify clear priorities and focus on key locations, countermeasures, and communities. As crash data can often omit critical details, the Vision Zero Network also recommends supplementing crash data analysis with equity data, and community feedback[5].

This section summarizes the approach that each of the reviewed action plans took in their safety analysis process and highlights notable practices. A detailed summary of each action plan's approach is included in **Table 4.**

5 Vision Zero Network: Where to Start

**Crash Data Analysis**

Of the action plans reviewed, most included 5-6 years of crash data in their analysis with an average of 5.4 years. All the reviewed plans included the following elements in their crash data analysis:

- Total number of F/SI crashes
- Location of F/SI crashes
- F/SI crashes by mode
- F/SI crashes by type
- F/SI crashes by time of day
- F/SI crashes overlayed with equity data

Most of the action plans reviewed also include a more detailed analysis of the roadway characteristics at F/SI crash locations including:

- Roadway jurisdiction
- Roadway classification
- Number of lanes
- Posted speed limit
- Lighting condition

Conducting an analysis on common roadway characteristics in locations where F/SI crashes are occurring can help to highlight some of the systemic roadway design factors that are overrepresented in the crash data. This can in turn inform recommendations for specific engineering countermeasures to be applied systemically or identify high-risk locations that are not yet reflected in historic crash data.

Half of the reviewed action plans also included an analysis of behavioral factors that contributed to F/SI crashes. These include intoxication, seat belt use, distracted driving, and speeding. Understanding relevant behavioral factors can help to inform the focus of education and enforcement recommendations.

**High-Injury Network (HIN)**

HINs are a key strategy for agencies to begin to address traffic fatalities and injuries. HINs evaluate crash data, and sometimes other factors, to identify a core group of corridors or intersections that present an elevated safety risk. All of the action plans reviewed included the identification of a HIN.

Of the action plans reviewed, half determined their HIN solely based on concentrations of F/SI crashes per mile. Three action plans supplemented fatal and severe crash data with systemic risk factors, equity data, and/or community feedback. The two remaining action plans analyzed all crashes and assigned additional weighting to F/SI and/or vulnerable user crashes.

All the action plans reviewed identified roadway segments and included all roadways within their jurisdiction regardless of maintenance responsibility. 40% of the action plans included high crash intersections in addition to segments. 40% of reviewed action plans also split out their HIN by mode with separate networks for automobiles and vulnerable users. This can be an effective strategy in jurisdictions that include both urban and rural contexts, where F/SI crash types and corresponding countermeasures often vary.

**Table 4: Crash Analysis Summary**

| Action Plan | Number of Years Analyzed | Equity Analysis | Behavioral Factors | Roadway Characteristics Analysis | HIN Methodology | HIN Concentration | Multi-Jurisdiction HIN | HIN by Mode | High Crash Intersections |
|---|---|---|---|---|---|---|---|---|---|
| Arlington County | 3 | Yes | Yes | Yes | F/SI Crashes per mile | 7% of roadways | Yes | No | No |
| Atlanta | 6 | Yes | No | Yes | F/SI crashes per mile combined with systemic risk and community feedback | 10% of roadways, 73% of KSI crashes | Yes | No | No |
| Burlington-Graham MPO | 5 | Yes | Yes | Yes | All Crashes per mile with severity weighting | 11% of roadways, % of crashes not specified | Yes | Yes | No |
| Cobb County | 5 | Yes | No | Yes | F/SI crash concentration combined with equity data and other factors | Not specified | Yes | No | Yes |
| Forward Pinellas | 5 | Yes | No | Yes | F/SI Crashes per mile | 2.7% of roadways, 40% of KSI crashes | Yes | No | Yes |
| Metro Nashville | 6 | Yes | No | No | F/SI Crashes per mile, combined with ped/bike crashes per mile, and equity data | 6% of roadways, 59% of KSI crashes | Yes | Yes | Yes |
| Orlando | 6 | Yes | No | No | All crashes split out by mode, weighting for F/SI crashes | Not specified | Yes | Yes | Yes |
| Richmond | 7 | Yes | Yes | Yes | F/SI Crashes per mile | 7% of roadways, 62% of KSI crashes | Yes | No | No |
| Savannah | 6 | Yes | Yes | Yes | F/SI Crashes per mile | Not specified | Yes | Yes | No |
| Tampa | 5 | Yes | Yes | Yes | F/SI Crashes per mile | 24% of roadways, 73% of fatalities | Yes | No | No |

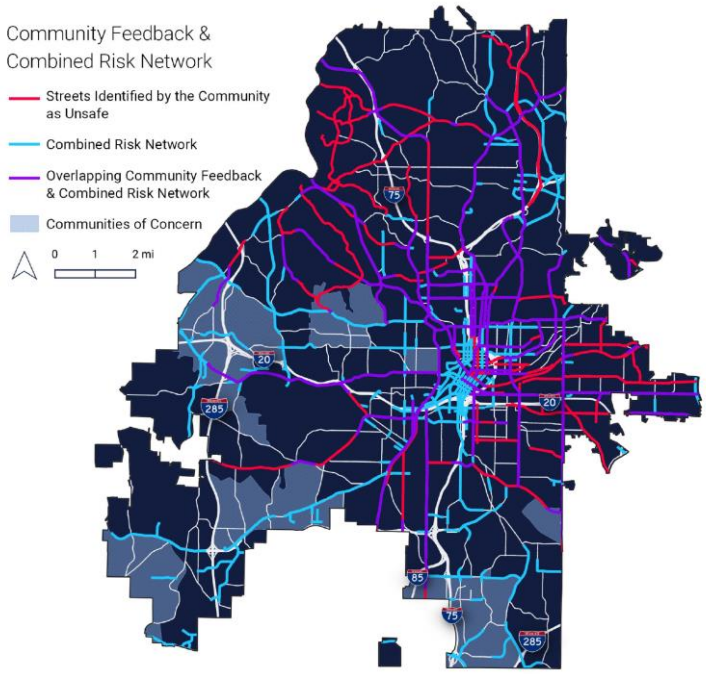
**Notable Practice: Incorporating non-crash related factors into HIN Development**

As stated above, all the action plans reviewed included historical crash data as the foundation for their HINs. However, some agencies chose to supplement crash data with other factors including equity, roadway characteristics, and community feedback.

Metro Nashville added additional weight to corridors that are located within identified equity areas. Cobb County took a similar approach to incorporating equity while also incorporating other factors identified by their task force including jurisdictional overlap and road ownership.

The City of Atlanta built upon their citywide crash analysis to determine factors that may contribute to increased F/SI crash risk. The analysis found that fatal and severe crashes were over-represented on multi-lane arterial roadways, suggesting that roadways with these characteristics carry an increased crash risk. The analysis also found that other factors along these roadways including higher speeds, proximity to transit, and socioeconomic characteristics were also over-represented. Atlanta used these findings to designate a “Combined Risk Network” that combines their HIN with roadways that demonstrate the largest systemic risks for future fatal and serious injuries crashes.

Atlanta’s plan then takes it one step further by overlapping the Combined Risk Network with streets that were identified by the community as unsafe during public outreach to address public perspectives of safety. Incorporating systemic risk factors and input from lived experience can help to proactively address safety needs before they are reflected in crash data.




*The City of Atlanta overlaid safety data, risk data, and public feedback to identify their priority road network (Source: City of Atlanta)*

**Notable Practice: Right sizing your HIN**

Of the action plans reviewed, the HIN typically made up between 6%-11% of the jurisdiction's total roadway network with an average of 9.6%. The size of an agency's HIN is typically dependent on the context and goals of each community and is a balancing act between highlighting the highest concentrations of safety issues and ensuring that the network is broad enough to provide all participating agencies have clear actionable priorities. The range in HIN concentration in the action plans reviewed provides insight into how an agency may size their HIN.

Of the plans reviewed the City of Tampa had the least concentrated HIN with 24% of roadways representing 73% of fatal crashes. In a Vision Zero Network webinar, Tampa staff explain that within the city just 30% of fatal crashes occur on roadways that are maintained by the City of Tampa. The decision to broaden the scope of their HIN was made to pull in enough City maintained roadways for them to establish clear priorities[6].

Forward Pinellas' action plan had the smallest concentration with 2.4% of crashes representing 73% of F/SI crashes. As an MPO who represents a countywide geography and is not an implementing agency, their goal was to highlight the smallest concentration of roadways possible without regard to roadway jurisdiction, so that limited funding controlled by the MPO could be focused on these areas.

In both examples, the agencies sized their HINs based on their agency's goals and how they intended to use their action plan.

## Engagement and Collaboration

Achieving zero fatalities and serious injuries requires extensive coordination and buy-in across multiple disciplines, many agencies, and the public. Ensuring that a safety action plan's engagement process is comprehensive and inclusive is crucial to fully capturing the nature of the traffic safety issues within a community, and building the consensus and support needed to implement the plan. USDOT guidance states that

6 Vision Zero Network: Developing a Robust Vision Zero Prioritization Process

engagement and collaboration should include engagement with the public and relevant stakeholders including overlapping jurisdictions, the private sector, and community groups. Input received throughout the process should be analyzed and incorporated into the Action Plan[7].

This section summarizes the engagement and collaboration approaches of each of the action plans reviewed and highlights notable practices.

**Engagement Strategies**

Of the action plans reviewed, 60% included one or more in-person meetings, 30% included one or more virtual meetings, and 20% included both in-person and virtual meetings. Note that some of the plans reviewed were developed during various stages of the COVID-19 pandemic, which may have limited in-person engagement opportunities.

40% of the action plans review supplemented their outreach with pop-up events. These events commonly consisted of setting up a project table somewhere in the community, either at an event or at a busy community destination. These pop-up events offer an opportunity for the project team to "meet people where they are" and reach people who may not normally participate in the planning process. In many cases, pop-up events were intentionally focused in priority equity communities.

Many of the plans reviewed also incorporated interactive online tools into their outreach. 60% of plans reviewed published an online survey and 40% included an interactive online map. These maps were commonly used to collect location-specific feedback on safety needs and issues that members of the public have experienced.

A full summary of common engagement strategies used in each plan is included in Table 4.

**Incorporating Community Feedback**

Throughout the action plans reviewed, outreach was primarily focused on determining the public's general attitudes and priorities towards traffic safety, their support for specific strategies, and pin-pointing spot specific safety issues and concerns.

Outreach typically occurred towards the beginning of the action planning process and was used to inform each plan's goals and recommendations. Some plans included additional public touchpoints throughout the planning process to receive feedback on recommendations or the final planning document.

**Stakeholder Outreach**

In addition to the strategies discussed in the Planning Structure section, many of the plans reviewed included additional strategies to involve and collaborate with a diverse set of stakeholders.

Several of the plans reviewed included interviews and focus groups with partner agency staff, allowing them to interact with different offices, better understand agency policies and practices, and explore partnership opportunities. Although representatives from these agencies often served on the plan's task force, having more focused conversation with a broader group of staff can help to inform plan recommendations, strengthen relationships, and build multi-agency momentum for plan implementation. These meetings also provide an opportunity to engage with agencies or groups that may not have had the time or resources to participate on the task force, but who may have important input or insight.

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**Table 5: Engagement Technique Summary**

| Action Plan | In-Person Meeting | Virtual Meeting | Pop-Ups | Survey | Interactive Map |
|---|---|---|---|---|---|
| Arlington County | Yes | Yes | Yes | Yes | Yes |
| Atlanta | Yes | Yes | Yes | Yes | Yes |
| Burlington-Graham MPO | Yes | No | No | No | No |
| Cobb County | No | No | Yes | No | No |
| Forward Pinellas | No | No | No | Yes | Yes |
| Metro Nashville | No | No | Yes | Yes | Yes |
| Orlando | Yes | No | No | No | No |
| Richmond | Yes | No | No | Yes | No |
| Savannah | Yes | No | No | No | No |
| Tampa | No | Yes | No | Yes | No |

**Notable Practice: Targeted Outreach to Disadvantaged Populations**

In their white paper "Elevating equity in Vision Zero communications" the Vision Zero Network highlights facilitating meaningful community engagement as one of the key components of incorporating equity into a safety action planning process. This includes including and elevating the voices of populations that are not as readily heard in traditional public processes. To do this, they encourage communities to explore new interactive and inclusive outreach techniques to better reach these populations[8].

Metro Nashville made this concept a priority when developing their outreach strategy and went to great lengths to include and involve perspectives from traditionally underrepresented populations. This included holding three separate focus groups seeking feedback from the African American, Hispanic, and Kurdish communities, and conducting intercept surveys along high-crash corridors with people experiencing homelessness.

## Equity Considerations

A critical aspect of addressing a community's traffic safety issue is understanding where concentrations of severe crashes are occurring, and which communities are the most impacted. Throughout the United States, people living in historically underserved communities are disproportionately more likely to be killed in a traffic crash. These communities are more likely to be located near high-speed, multi-lane roadways that are often over-represented in crash data and often lack safe transportation infrastructure[9]. An effective action plan should identify where these disparities are occurring, involve those community members in the planning process, and develop strategies to address identified inequities.

This approach is echoed by USDOT guidance which states that the action plan should be developed using an inclusive and representative process, and that underserved communities should be identified through data analysis. Equity analysis should gauge both population characteristics and determine any impacts of proposed projects or strategies[10].

This section summarizes the approach that each of the reviewed action plans took to incorporating equity into their planning process. A detailed summary of each agency's approach is included in Table 5. Consideration of equity is a cross cutting issue that touches all the other safety action planning components. Notable practices

8 Vision Zero Network: Elevating Equity in Vision Zero Communications
9 Vision Zero Network: Vision Zero Equity Strategies for Practitioners
10 USDOT: SS4A Action Plan Components

featuring examples of how to incorporate equity are included in the Safety Analysis, Engagement and Collaboration, and Strategy and Project Selection sections.

**Equity in Safety Analysis**

All the action plans reviewed included an analysis to demonstrate how each jurisdiction's traffic safety issues overlap with priority equity communities. This exercise helps to underscore overrepresentations of F/SI crashes in disadvantaged communities and emphasize the need for inclusive community involvement throughout the action planning process. The plans reviewed most commonly overlaid F/SI crash locations or their HIN with identified equity priority areas.

The action plans reviewed used several different data sources to identify equity priority areas. The City of Orlando plan developed its own methodology to identify these areas, but most plans made use of existing local, state, or federal data sources. Federal resources promoted by USDOT for use in the action planning process include:

- The USDOT Equitable Transportation Community Explorer (ETCE)[11]
- The Climate and Economic Justice Screening Tool (CEJST)[12]

The Cobb County, Metro Nashville, and Savannah action plans also incorporated equity data as a factor in identifying their HINs and priority projects.

**Equity Focused Outreach**

Community members in priority equity areas are often difficult to reach using traditional outreach and engagement strategies as long working hours, lack of access to transportation, eroded trust in public institutions and other factors can inhibit meaningful participation. As such, a growing best practice is to tailor outreach strategies towards these communities to ensure that their input is included in the planning process.

Of the action plans reviewed, half detailed specific outreach strategies focused in priority equity areas. An example of these strategies can be found in the "Notable Practice: Prioritizing Equity in Outreach" in the Engagement and Collaboration section.

**Table 6: Equity Summary**

| Action Plan | Equity Analysis | Equity Data Source | Included in HIN Methodology | Equity Focused Outreach |
|---|---|---|---|---|
| Arlington County | Overlay with HIN | Local | No | No |
| Atlanta | Overlay with HIN | Local | No | Yes |
| Burlington-Graham MPO | Overlay with HIN | State/Federal | No | Yes |
| Cobb County | Overlay with F/SI Crashes | Federal | Yes | Yes |
| Forward Pinellas | Overlay with HIN | MPO | No | No |
| Metro Nashville | Overlay with all crashes | MPO | Yes | Yes |
| Orlando | Overlay with F/SI Crashes | Created for plan | No | No |
| Richmond | Overlay with F/SI Crashes | State | No | No |
| Savannah | Individual project selection | Federal | Yes | Yes |
| Tampa | Overlay with F/SI Crashes | MPO | No | No |

11 USDOT: Equitable Transportation Community Explorer
12 Council on Environmental Quality: Climate and Economic Justice Screening Tool

## Policy and Process Changes

Identifying specific areas of policy and process change to reinforce a safe systems approach and to aid implementation is a key component of the safety action planning process. Many of the plans reviewed included a detailed review of relevant local planning documents and engineering guidelines to identify opportunities for improvement. Discussions with plan stakeholders also focused on understanding existing policies, processes, and identifying needed changes. Specific policy and process changes varied from plan to plan, but the following recommendations were identified by several of the plans reviewed:

- Incorporating safe systems principles into master planning documents
- Incorporating safe system principles into project selection and prioritization
- Incorporating safe system principles into the development review process
- Establishing a quick-build or pilot project program
- Identifying dedicated funding for safety infrastructure projects
- Focus funding and resources on HIN
- Identifying full time staff to focus on action plan implementation
- Lower speed limits and/or revisit speed limit setting process
- Create a toolbox of effective safety countermeasures
- Update or create specific design guidelines to support implementation of safety countermeasures
- Update Maintenance of Traffic (MOT) guidance to ensure safety in work zones
- Implement automated enforcement
- Spread awareness of action plan among internal agency staff

**Notable Practice: Quick Build Policy and Early Policy Adoption**

Half of the action plans reviewed recommended the establishment of a Quick Build Policy. Quick Build projects use inexpensive, easy to install, and sometimes temporary materials to rapidly implement roadway improvements. Quick Build projects can be used to rapidly introduce crash countermeasures on priority corridors and used as pilot or "proof of concept" projects to try out new designs without the permanency, cost, and implementation time of a capital project.

Metro Nashville included language formalizing leadership commitment to a quick-build program in their city/county resolution that also adopted their action plan as official policy. This is an example of how agencies can codify leadership support for key policy recommendations at the beginning of the implementation process when political will is often the highest.

## Strategy and Project Selections

All of the analysis conducted and input collected throughout a safety action plan process culminates in the development of actionable strategies and priority projects designed to address a community's traffic safety needs.

USDOT guidance states that these actions and strategies should be shaped by data, input, and equity considerations that will address the issues highlighted in the Action Plan. Projects and strategies should be prioritized in a list with estimated time ranges of when an action will be completed. The list should contain interventions focused on infrastructure, behavioral, and/or operational safety[13]. The Vision Zero Network builds

13 USDOT: SS4A Action Plan Components

upon this guidance stressing the priority of strategies and projects that address roadway design and promote lower speeds[14].

This section summarizes the approach that each of the reviewed action plans took to developing strategies and priority projects and highlights notable practices. A detailed summary of each plan's approach is provided in Table 6.

**Strategy Organization**

Of the plans reviewed, strategies and recommendations were most commonly sorted into categories developed and informed by task force and public input. Common categories and themes included:

- Roadway design strategies
- Data and Evaluation
- Equity
- Engagement and Culture Change
- Collaboration and Partnership

A handful of plans organized their strategies based on the components of the Safe Systems approach (safe streets, safe speeds, etc.) or the "Es of Safety" (engineering, education, enforcement, etc.)

**Prioritization and Timeline**

None of the plans reviewed ranked or prioritized the importance of each strategy. All the plans established a high-level timeline for the completion of each strategy. Strategies were typically either sorted into a "short-term, mid-term, or long-term" category, or an approximate timeline was provided in years or months.

**Countermeasures and Projects**

Of the plans reviewed, 70% identified and highlighted specific engineering safety countermeasures to be promoted in future infrastructure projects. These countermeasures typically related to over-represented crash types highlighted in each plan's safety analysis while also reflecting national best practices.

30% of the plans reviewed identified and prioritized specific infrastructure projects along corridors identified as part of their HIN.

**Table 6: Strategy and Project Selection Summary**

| Action Plan | Categories | Strategy Prioritization | Strategy Timeline | Countermeasures | Projects |
|---|---|---|---|---|---|
| Arlington County | Task Force Informed | No | Yes | No | No |
| Atlanta | Task Force Informed | No | Yes | Yes | No |
| Burlington-Graham MPO | Safe Systems Categories | No | Yes | No | Yes |
| Cobb County | Es of Safety | No | No | Yes | Yes |
| Forward Pinellas | Task Force Informed | No | yes | Yes | No |
| Metro Nashville | Task Force Informed | No | Yes | Yes | No |
| Orlando | Task Force Informed | No | Yes | Yes | No |
| Richmond | Task Force Informed | No | Yes | No | No |
| Savannah | Task Force Informed | No | No | Yes | Yes |
| Tampa | Safe Systems Categories | No | Yes | Yes | No |

14 Vision Zero Network: Building a Strong Foundation for Safe Mobility

**Notable Practice: Priority Project Identification**

Some of the plans reviewed chose to leverage the safety analysis and stakeholder engagement undertook as part of the action planning process to develop a list of priority infrastructure projects. Outlining clear priorities and conducting high-level project development activities can build consensus around individual projects while also positioning projects for future supplemental planning, demonstrational activity, or infrastructure funding.

The Burlington-Graham MPO ranked each of the corridors on its HIN by crash severity and overlap with identified emphasis areas to create a priority list for future funding.

Cobb County combined the results of its safety analysis with feedback from county staff to identify a list of "early implementation priorities" consisting of projects along their HIN. The plan includes a high-level project scope and cost estimate for each identified project.

Cobb County Safety Action Plan

**Table 9-14: Early Implementation Priorities**

| Corridor ID | Location | Recommendation Description | Est. Cost |
|---|---|---|---|
| 1-1 | Cobb Parkway (US 41/SR3) *(McCollum Pkwy NW to Jiles Rd NW)* | Fill sidewalk gaps on the corridor (note: may require widening bridge over railroad or parallel pedestrian bridge). Install retroreflective backplates, intersection lighting, and pedestrian warning signs at signalized intersections. Evaluate intersection geometry at Watts Dr/Pine Mountain Ct and at Keene St/Dobbs Dr for further safety enhancements. Coordinate improvements with findings from Cobb Pkwy/McCollum Pkwy realignment study. | $5.0 - $5.1 million |
| 1-2 | Austell Road (SR 5) *(Arkose Dr SW to Pair St SE)* | Conduct a Road Safety Audit (RSA) to identify specific needs along the corridor and study for re-alignment of Austell Rd and Favor Rd to improve intersection geometry and sight distance issues. Upgrade traffic and pedestrian signals to include Leading Pedestrian Intervals (LPIs) and flashing yellow arrows (FYAs) as appropriate. Extend medians at Pat Mell Rd and Cunningham Rd to provide additional pedestrian protection. Evaluate and install Pedestrian Hybrid Beacons (PHBs) along with roadway lighting near 8 bus stops at which Austell Road is uncontrolled. | $3.5 - $3.6 million |
| 1-4 | Powder Springs Street (SR 360) *(Bellmeade Dr SW to Chestnut Hill Rd SW)* | Install segments of raised medians throughout the corridor. Upgrade traffic and pedestrian signals to include FYAs and LPIs at Bellemeade Dr and Chestnut Hill Rd. Review and adjust yellow change intervals. Install Traffic Signal Ahead signs at both signalized intersections and advance pedestrian warning signs at Chestnut Hill Rd. As part of Laurel Springs Ln intersection improvement, consider opportunities for raised median, signalized pedestrian crossing (consider a PHB if intersection does not meet signal warrants), and intersection lighting. Evaluate recent improvements at Chestnut Hill Rd to see if these result in reductions in serious injury and fatal crashes. | $2.4 - $2.5 million |
| 2-2 | South Cobb Drive (SR 280) *(East-West Conn SE to I-285)* | Conduct an RSA and implement priority recommendations. Study the impacts of installing a raised median south of the Shops at South Cobb and implement if feasible. Analyze intersections of Oak Dr/Tibarron Pkwy, Shops at South Cobb, Valley Pkwy/Lois St to evaluate possible signalization. Fill sidewalk gaps. Upgrade signals at I-285, Highlands Pkwy, Wright Dr/S Cobb Industrial Blvd, Oakdale Rd/Church Rd/Kenwood Rd, and East-West Conn/Cumberland Pkwy with mast arms and retroreflective backplates. Consider access management improvements such as consolidating driveways or convert to right-in/right-out, especially south of Oakdale Rd. | $7.7 - $7.8 million |

*Cobb County included preliminary project scopes and cost estimates for priority projects in their Action Plan (Source: Cobb County)*

The City of Savannah similarly identified seven priority corridor projects by overlaying the results of their safety analysis with equity data. The city conducted an equity analysis for each candidate project, developed a high-level scope, and identified relevant stakeholders to engage once each project moves forward.

## Progress and Transparency

To maintain support and momentum for an action planning effort, it is important to maintain clear and transparent communication with stakeholders and the public regarding the plan's progress. Effective safety action plans include recommendations that establish formal processes for regularly sharing this information. USDOT guidance states that this must include, at a minimum, annual public and accessible reporting towards a plan's progress, and posting the Action Plan online[15].

Of the reviewed action plans, 90% committed to publishing an annual report to update the public on crash trends and progress towards plan implementation. All these plans also included performance measures in their

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action items so that progress could be quantified and tracked. 40% of plans also committed to launching a publicly facing online dashboard to communicate trends and progress. 80% of the plans explicitly state that the task forces used to create the plans would remain active and be held responsible for action plan implementation.

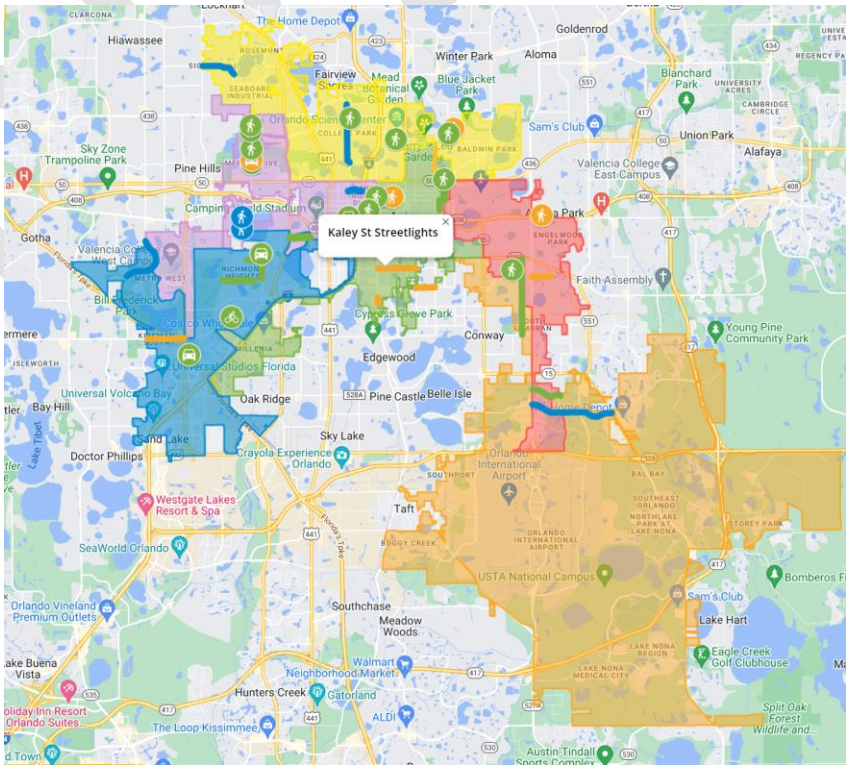
**Table 7: Progress and Transparency Summary**

| Jurisdiction | Annual Progress Report | Online Dashboard | Establishes Performance Measures | Ongoing Oversite Committee |
|---|---|---|---|---|
| Arlington County | Yes | Yes | Yes | Yes |
| Atlanta | No | No | Yes | Yes |
| Burlington-Graham MPO | No | No | No | Yes |
| Cobb County | Yes | No | Yes | No |
| Forward Pinellas | Yes | No | Yes | Yes |
| Nashville | Yes | Yes | Yes | Yes |
| Orlando | Yes | Yes | Yes | No |
| Richmond | Yes | Yes | Yes | Yes |
| Savannah | Yes | No | Yes | Yes |
| Tampa | Yes | Yes | Yes | Yes |

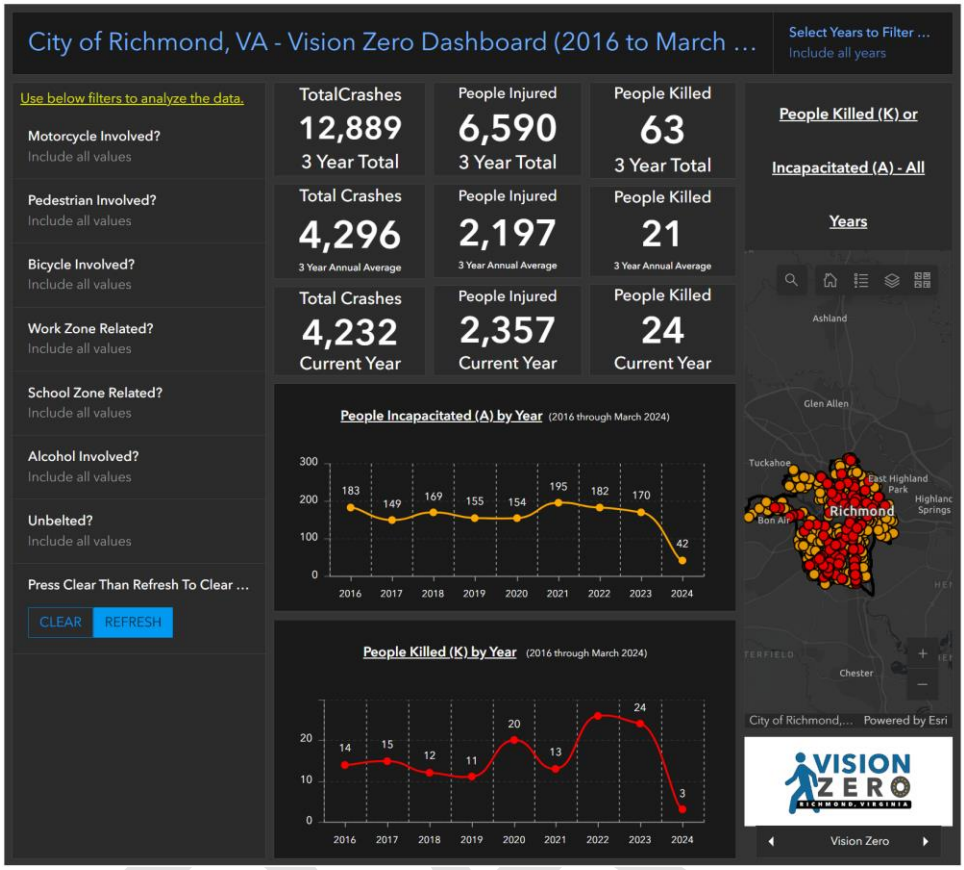
### Case Study: Online Mapping Tools

One of the most effective and public-friendly ways sharing progress and demonstrating transparency is with online mapping applications.

Several of the communities included in the peer review created interactive online maps and dashboards to show progress towards action plan implementation, and to update the public on recent safety trends. For example, the City of Orlando published an interactive map showing the completion of safety improvement projects throughout the city. The City of Richmond also released a Vision Zero Dashboard that allows the public to see crash locations and analyze trends of historic crashes.

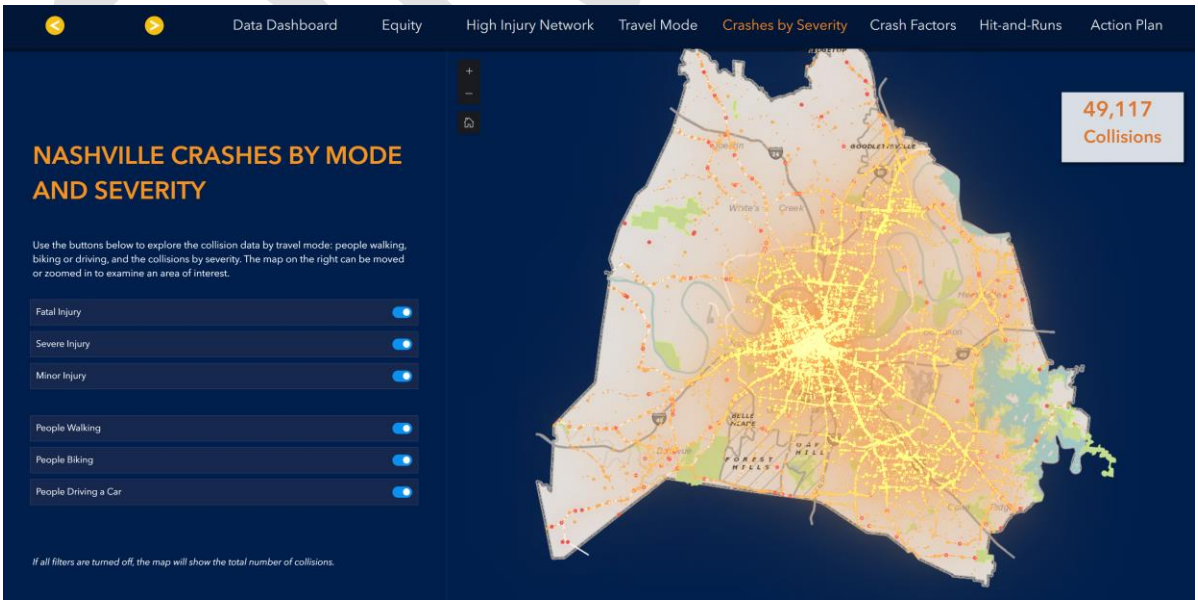


*The City of Orlando's Vision Zero Project Map (Source: City of Orlando)*




*The City of Richmond's Vision Zero Dashboard (Source: City of Richmond)*

Story-maps can also be an effective tool of communicating complex information to the public. Metro Nashville produced a story map summarizing the process and findings of their safety action plan in a way that is visually appealing and easy for the public to quickly digest.




*Metro Nashville used a story map to explain their action planning process and recommendations (Source: Metro Nashville)*

## Summary and Conclusion:

This section summarizes the key trends and notable practices gleaned from the action plan peer review.

**Leadership Commitment and Goal Setting**

- Obtain formal and explicit support for action plan implementation from agency leadership that includes a specific target date for plan implementation.
- For plans that require extensive multi-agency coordination, consider including leadership from major partner agencies in the formal commitment process.

**Planning Structure**

- Involve a diverse range of agencies and community groups in the action plan task force.
- Consider convening a separate task force or sub-committee with internal staff to focus on internal policy, process, and cultural changes, or focused on other key areas of interest.

**Safety Analysis**

- Include an analysis of crash locations and crash characteristics with an emphasis on fatal and severe injury crashes.
- Include an analysis of behavioral factors contributing to safety trends, and roadway characteristics that are over-represented in the crash data.
- Overlay crash history and safety priority areas with equity data to highlight disparities in certain communities.
- Identify concentrations of priority crash types and establish a high-injury-network. Consider incorporating other data into this process including equity data, risk factor information, and public feedback.
- Scale the size and concentration of the high-injury network based on the specific goals of the agency.

**Engagement and Collaboration**

- Employ a variety of in-person and online engagement strategies with the goal of reaching a diverse and representative audience.
- Engage with major community groups and other stakeholders who are not on the plan task force.
- Incorporate feedback from engagement into the plan's goals and strategies.
- Consider targeted outreach strategies to reach community members in disadvantaged communities.

**Equity Considerations**

- Utilize existing local, regional, state, or federal equity data sets when conducting analysis.
- Consider equity and impacts to disadvantaged communities throughout all parts of the action planning process including engagement, analysis, strategy development, and progress reporting.

**Policy and Process Changes**

- Policy and process change recommendations vary by agency but there are a handful of common themes reflected throughout the reviewed action plans.
- Some recommended policy changes may be able to be incorporated into the plan's adoption process to leverage political momentum.

**Strategy and Project Selections**

- Identify multi-disciplinary strategies that relate to the issues highlighted in the safety analysis, and the feedback received through public outreach.
- Include clear estimated timelines for when each strategy or project may be completed.

- Consider including a preliminary list of priority infrastructure projects that respond to the goals of the safety action plan.

**Progress and Transparency**

- Include recommendations in the safety action plan to establish formal processes to provide regular updates on plan progress.
- Consider using online mapping tools and other interactive elements to communicate plan progress to the public clearly and transparently.