



Supporting and connecting Vision Zero community initiatives to advance Safe System efforts

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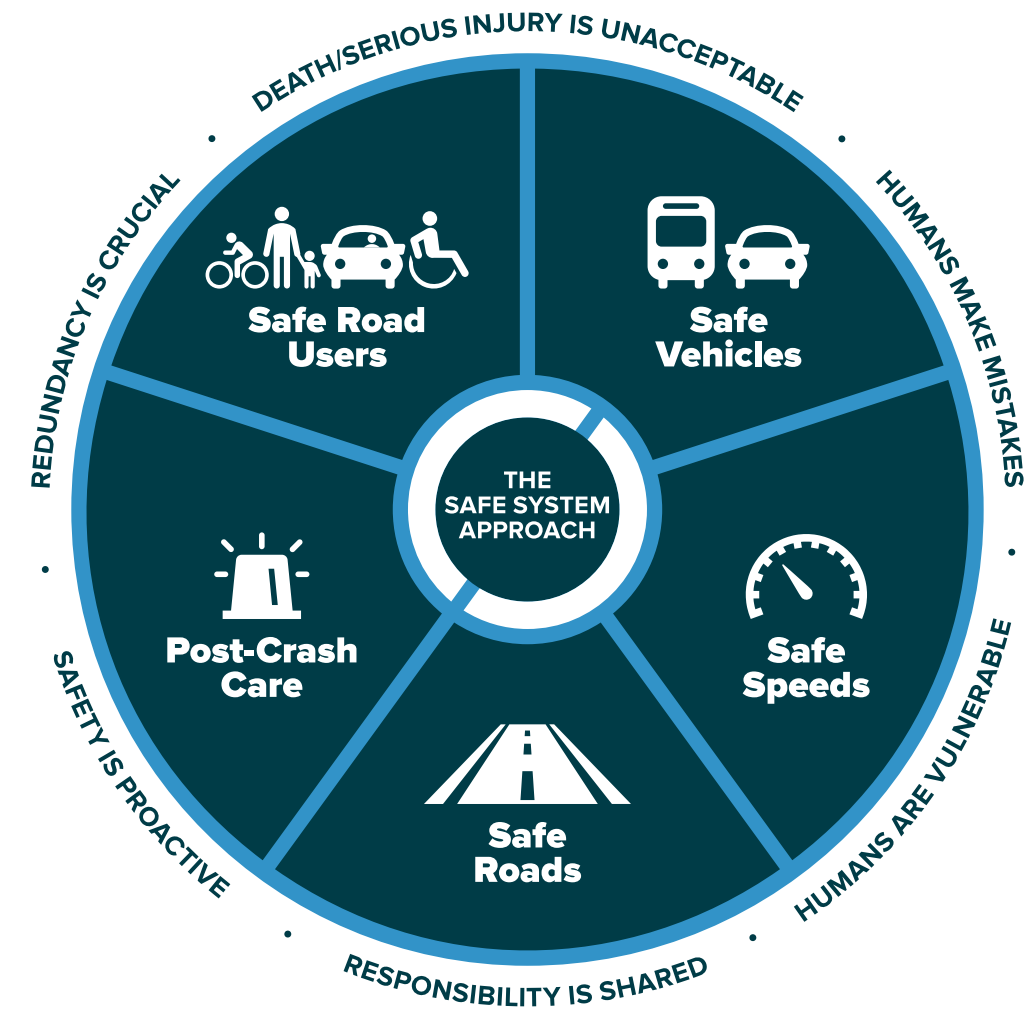


Agenda

- Safe System principles and core elements
- A Safe System approach & Vision Zero in North Carolina
- A model to accelerate progress
- Tools developed and utilized
- Early evaluation findings
- Resources



A Safe System Approach



A Safe System Approach



SAFE SYSTEM PRINCIPLES



Death/Serious Injury is Unacceptable

While no crashes are desirable, the Safe System approach prioritizes crashes that result in death and serious injuries, since no one should experience either when using the transportation system.



Humans Make Mistakes

People will inevitably make mistakes that can lead to crashes, but the transportation system can be designed and operated to accommodate human mistakes and injury tolerances and avoid death and serious injuries.



Humans Are Vulnerable

People have limits for tolerating crash forces before death and serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates human vulnerabilities.



Responsibility is Shared

All stakeholders (transportation system users and managers, vehicle manufacturers, etc.) must ensure that crashes don't lead to fatal or serious injuries.



Safety is Proactive

Proactive tools should be used to identify and mitigate latent risks in the transportation system, rather than waiting for crashes to occur and reacting afterwards.



Redundancy is Crucial

Reducing risks requires that all parts of the transportation system are strengthened, so that if one part fails, the other parts still protect people.

A Safe System Approach



SAFE SYSTEM ELEMENTS

Making a commitment to zero deaths means addressing every aspect of crash risks through the five elements of a Safe System, shown below. These layers of protection and shared responsibility promote a holistic approach to safety across the entire transportation system. The key focus of the Safe System approach is to reduce death and serious injuries through design that accommodates human mistakes and injury tolerances.



Safe Road Users

The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.



Safe Vehicles

Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.



Safe Speeds

Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.



Safe Roads

Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.

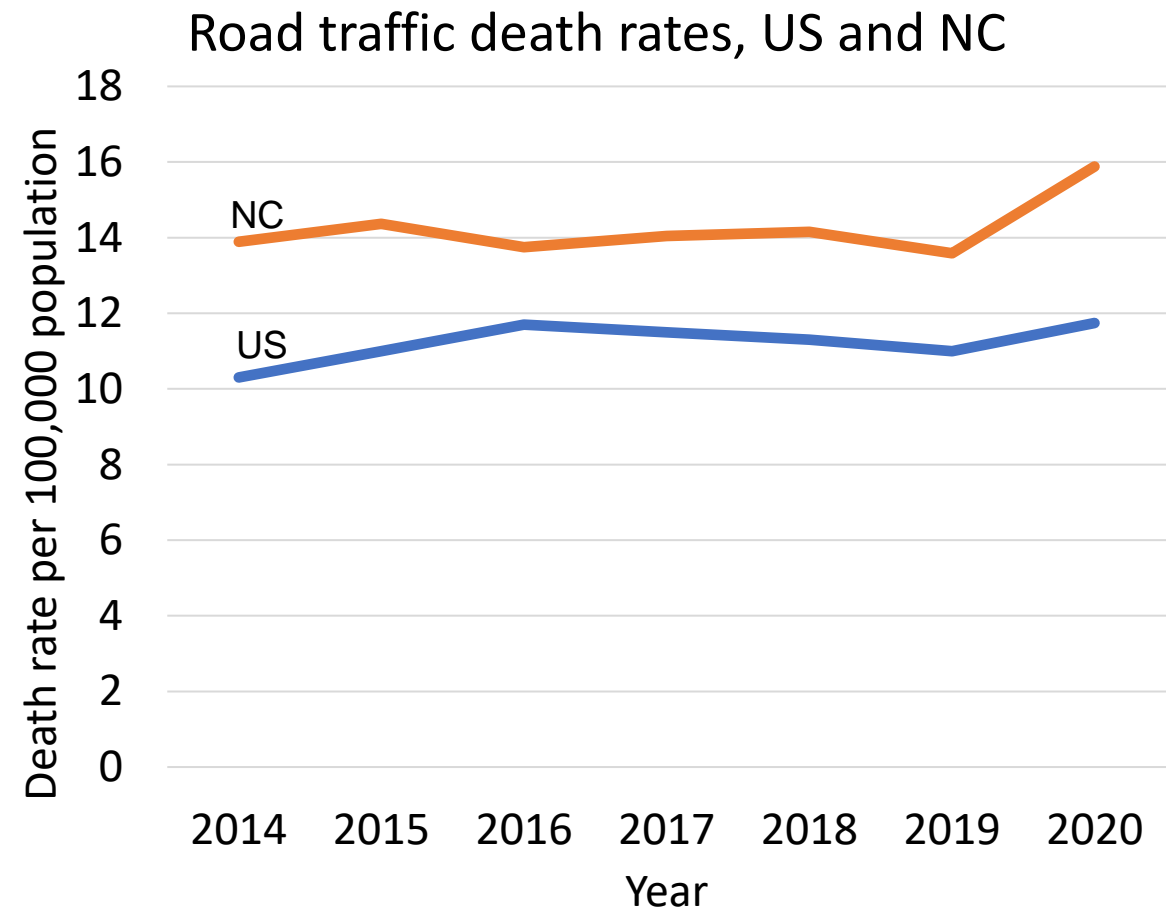


Post-Crash Care

When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.

Background on Vision Zero and a Safe System Approach in North Carolina

- Following declaration of NC as a Vision Zero state by the NCDOT in 2016, several municipalities garnered support to move forward with initiatives to achieve zero deaths in their communities
- Among the first, Charlotte, Durham, and Greensboro passed resolutions with defined goals in 2017
- Since then, 7 more NC communities across the state have joined them to pursue Vision Zero initiatives



North Carolina Vision Zero Communities



A Safe System Approach



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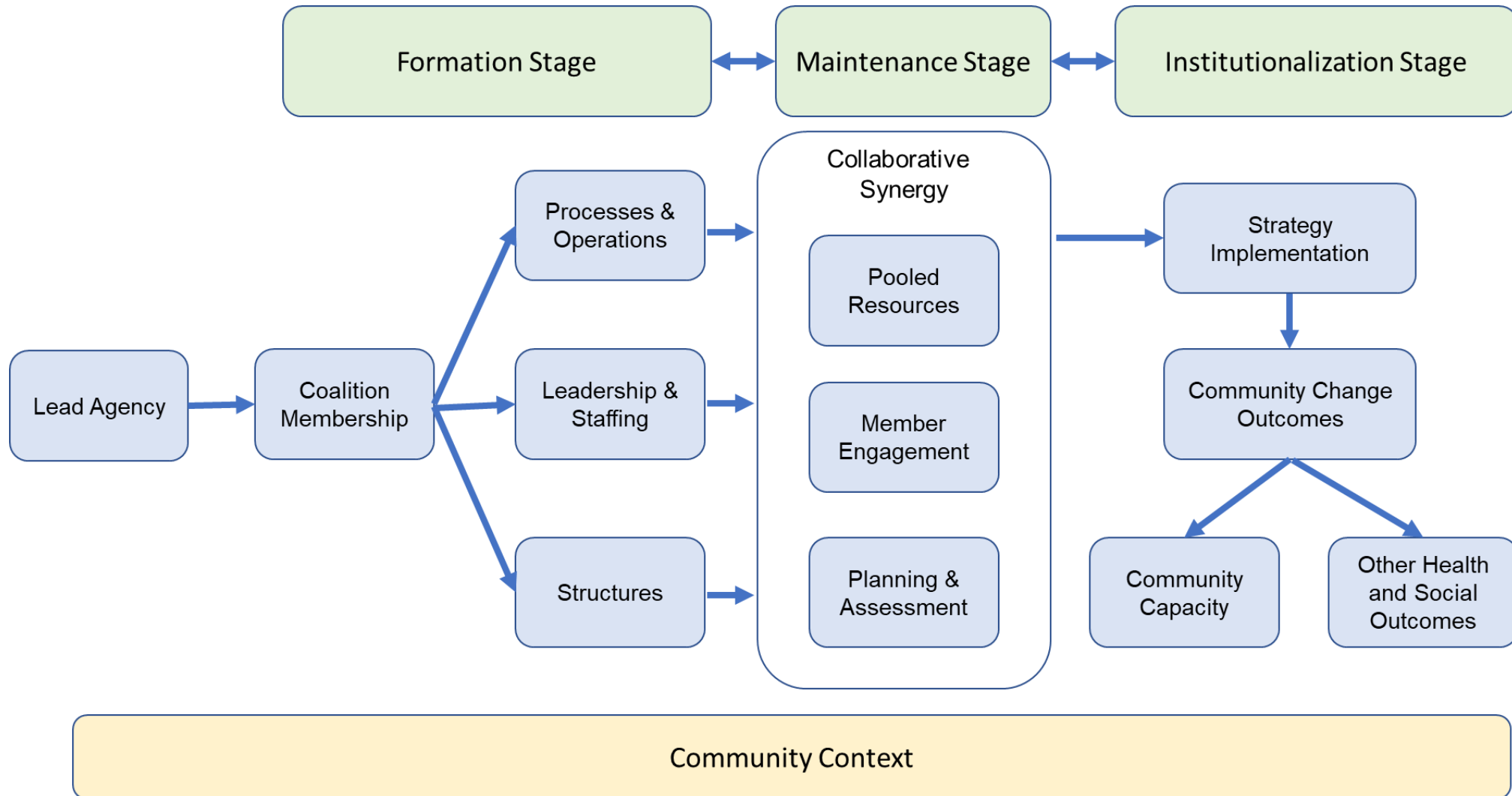
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Community Coalition Action Theory used to inform Safe Systems and Vision Zero Training and Resource Development



NC Vision Zero Support Team & Resource Center



UNC

INJURY PREVENTION
RESEARCH CENTER



THE UNIVERSITY OF NORTH CAROLINA
**HIGHWAY SAFETY
RESEARCH CENTER**

VISION ZERO NETWORK



National **MCH** Workforce
Development Center
Advancing Health Transformation



UNC

GILLINGS SCHOOL OF
GLOBAL PUBLIC HEALTH

THE NORTH CAROLINA
Institute *for* Public Health

Ways we work together



ALL VZ COMMUNITY
QUARTERLY
MEETINGS



REGULAR
COACHING



LEADERSHIP
INSTITUTE



STATEWIDE TASK
FORCE

What we provide

Provide regular technical assistance through statewide meetings

- Monthly meetings with community pairs
- Quarterly all hands meetings
- Annual Vision Zero Leadership Institute

Develop resource materials for Safe System and Vision Zero communities

- Milestones checklist for tracking implementation
- Vision Zero Plan Guide
- Community readiness assessment
- Coalition sustainability guide
- Goal and action planning guides

Evaluate planning and implementation progress

- Track implementation milestones, collaboration assessments, evaluation of Leadership Institute
- Document process and approach for dissemination to wider audience

Guide to Developing a Vision Zero Plan

August, 2020

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Table 3.1. Examples of how Vision Zero Plans framed their goals

Examples of Goal Themes	Example Plans (page number, reference)
Accountability, leadership	Cambridge (page 41-42) (15) Richmond (page 19) (18)
Advocacy	Montgomery County (page 28-31) (19)
Culture of safety	Alexandria (page 54-57) (20) Hillsborough County (page 64) (21)
Dangerous behaviors	Eugene (page 35-36) (22) Washington D.C. (page 47-56) (23)
Data	Los Angeles (page 38) (7) Philadelphia (page 20-23) (24)
Emergency response and services	Greensboro (page 47-48) (25) Montgomery County (page 26-27) (19)
Encouragement	Fort Lauderdale (page 37-38) (26) Miami-Dade County (page 41) (27)
Engagement with the public	Hillsborough County (page 52) (21) New York City (page 33-37) (28)
Equity	Cambridge (page 36-40) (15) Chicago (page 23) (29)
Evaluation	Austin (page 29-32) (17) San Jose (page 18, 26) (30)
Fleet management	Philadelphia (page 36-39) (24)
Impairment	Portland (page 23) (31) Tempe (page 21-23) (32)
Improve large and for-hire vehicle safety	Cambridge (page 32-35) (15)
Partnerships, external	Cambridge (page 47-48) (15) San Jose (page 25, 27) (30)
Partnerships, internal	Alexandria (page 46-48) (20) Denver (page 14-15) (33)
Policy, law	Cambridge (page 41-42) (15) Charlotte (page 36) (13)
Practices	Jersey City (page 45-47) (8) New York City (page 32) (28)

Examples of Goal Themes	Example Plans (page number, reference)
Promotion of Vision Zero	Hillsborough County (page 46) (21) Sacramento (page 46-47) (34)
Safe streets	Fremont (page 18) (35) San Francisco (page 11) (36)
Safer drivers and people	Chicago (page 23) (29) Tempe (page 21-23) (32)
Safer vehicle technology	Chicago (page 23) (29) San Jose (page 23, 27) (30)
Speed	Denver (page 18-19) (33) Portland (page 24) (31)
Street design	Boston (page 16-17) (37) Monterey (page 17-18) (38)

Prioritizing Goals

Using an organized and collaborative process, the Vision Zero task force should prioritize community concerns toward creating a community-driven Vision Zero Plan. Both quantitative and qualitative information should be discussed. Through group discussion, multi-voting, a prioritization matrix, or other decision-making techniques (see [this link](#) for more information), the task force can build consensus around transportation-related concerns and develop justified reasons for each selection. The prioritized community concerns will be the central focus of the Vision Zero Plan.

- Prioritization criteria may include:
- magnitude of the problem
 - severity of the problem
 - need among vulnerable populations
 - availability of community resources
 - importance of each concern to the community

Writing and Connecting Goals, Objectives, Agency Actions, and Performance Measures

The goals, objectives, agency actions, and performance measures are informed by Safe Systems principles and a community's vision for the transportation system as one designed for and protective of all road users. To ensure that the community develops a set of goals that provides

a pathway to realize zero serious and fatal traffic injuries, we now define and provide examples of these terms.

Goals offer the desired end states or outcomes of the community's transportation system. That is, goals describe what a city's transportation future will look and feel like once the city has fully implemented its Vision Zero initiative.

Example goal:
 Motor vehicles travel at safe speeds along all roadways in our city's network.

Objectives provide the standards to determine the extent to which each of the Vision Zero goals is achieved. Objectives should be **SMART**:

- **Specific** – Details on the approach that will be used to achieve the objective;
- **Measurable** – Can evaluate and track progress toward achieving the objective using quantitative data;
- **Agreed-Upon** – Consensus among planners, operators, and other key stakeholders;
- **Realistic** – Address what can be reasonably accomplished, given resource constraints and other cultural and political factors; and
- **Time-bound** – Establish a specific timeframe for achieving the objective.

IMPLEMENTATION MILESTONE CHECKLIST

This Vision Zero Implementation Milestones Checklist, rooted in the science of program implementation, offers a series of phases and milestones toward fully implementing Vision Zero in your community. As you can see, fully implementing Vision Zero will require between 2 and 4 years of committed work. Consider using this checklist to determine the implementation phase your community is in and to gather ideas on what you could be working on next toward realizing a Vision Zero future.

Total Time to Full Implementation: 2 – 4 years



Exploration

- Convening diverse professional and community stakeholder groups to establish a Vision Zero coalition**
 - Number of sectors (outside your own) taking part in the coalition: _____
- Identifying one or more local Vision Zero champions**
Professional staff or community members who are well-connected with safety stakeholders and enthusiastically support Vision Zero, throwing their weight behind getting the program fully implemented
- Conducting a systems-oriented needs and assets assessment**
A process used to identify the community's strengths in terms of skillsets, resources and infrastructure, as well as its needs related to staffing, funding, policies, and procedures. The assessment then addresses how to close the gap between where the community is and where it needs to be to eliminate serious and fatal traffic injury
- Securing local public official commitment to Vision Zero (e.g., Vision Zero resolution, policy)**
 - Date of Vision Zero resolution, policy, or ordinance: _____

Installation

- Developing and adopting a Vision Zero Plan**
 - Date of Vision Zero Plan adoption: _____
- Hiring staff focused on designing and implementing Vision Zero strategies OR**
- Dedicating staff time across multiple sectors to Vision Zero work**
 - Number of staff with at least 50% time devoted to Vision Zero: _____
- Dedicating funds to implementing Vision Zero strategies**
- Establishing a Vision Zero performance management system**
Whereas "performance measurement" involves tracking a program's progress toward zero serious and fatal traffic injuries, "performance management" includes measurement AND requires planning ahead in order to respond to anticipated and unforeseen changes, such as decreased funding for Vision Zero, major adverse weather events, pandemics, changes in staffing, etc.

Initial Implementation

- Implementing a Vision Zero performance management system**
Tracking progress toward zero through performance measurement, while putting into place, "if-then" action plans, e.g., "if funding for Vision Zero decreases, then we will shift toward implementing a greater number lower-cost safety procedures"
- Experimenting with implementing evidenced-based safety procedures**
A cluster of procedures and approaches with documented traffic safety benefits and relatively high political and social support
- Sharing data and resources across Vision Zero coalition sectors**
 - Number of times per year data and resources are shared across sectors: _____
- Establishing on-boarding procedures for new staff and cross-sectoral coalition members**
A system to quickly bring new coalition members up to speed on the safety procedures in the Vision Zero Plan, means of collaborating with cross-sector partners, and ways to manage system performance.

Full Implementation

- Operating on-boarding procedures for new staff and cross-sectoral coalition members**
- Implementing more than 50% of the safety procedures outlined in the Vision Zero Plan**
- Maintaining a Vision Zero performance management system**
Yearly adjustments to how and when safety procedures are implemented based upon documented progress toward zero fatal and serious traffic injury

NC VISION ZERO

Sustainability Toolkit for North Carolina Vision Zero Coalitions

Key Elements and Steps for Sustaining an Effective Vision Zero Coalition

(* represent key items reflected in NC Vision Zero Milestones Checklist)

Sustainability Planning Tool: Seven Elements and Key Considerations/Action Steps

ELEMENT 5: Effective operations and solid infrastructure (Annex 5: Additional Guidance)

Key Considerations and Action Steps	Related Academy Session/ Activity	Person(s) Responsible	Due Date
5a. Is there a coalition lead/chair and vice-chair (or co-chairs) and do we	Coalition structure and procedures (LI Session 3)		
	Coalition structure and procedures (LI Session 3)		
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	Coalition structure and procedures (LI Session 3)		
	Coalition structure and procedures (LI Session 3); 30/30 Tool (LI Session 4)		
	Coalition structure and procedures (LI Session 3)		
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	Equity considerations (LI Session 2)		

Key Elements and Steps for Sustaining an Effective Vision Zero Coalition

(* represent key items reflected in NC Vision Zero Milestones Checklist)

Sustainability Planning Tool: Seven Elements and Key Considerations/Action Steps

ELEMENT 4: Strong connections and partnerships with organizations and individuals representing key sectors of your community outside of your coalition membership (Annex 4: Additional Guidance)

Key Considerations and Action Steps	Related Academy Session/ Activity	Person(s) Responsible	Due Date
4a. Do we have a plan for participatory community engagement at all levels of the coalition's decision-making?	*Will be a focus of 2022 Leadership Institute*		
4b. Do our community engagement efforts reach members of the community most affected by traffic violence (children, elderly, disabled people, racial minorities)?	Equity Considerations (LI Session 2)		
4c. Do we regularly scan the community for new partners?	Partnership Assessment and Prioritization Tool (Deeper Dive materials); 5 Rs (LI Session 3)		
4d. Do we have mechanisms in place to incorporate community input into planning and evaluation efforts?	Community Readiness Assessment (Deeper Dive materials)		
* 4e. Do we have systems in place for regular communication with community members in a manner that is equitable?	Equity Considerations (LI Session 2)		
4f. Do we create opportunities to recognize and reward coalition and community accomplishments?			

Building and Making the Pitch

Overview:

The purpose of this handout is to serve as a guide for formulating an effective pitch or “elevator speech” to recruit or engage a potential Vision Zero partner (e.g., new coalition members, potential funders and/or collaborators, implementation sites, gatekeepers such as city council members).

Activity Instructions:

Work with your team to develop and practice making a pitch to a selected audience.

1. Reflect on previous presentations/activities, including the Core Conversations, discussion and work around refining your Vision Zero goal(s), the 5 Rs, and consideration of the Sustainability checklist.
2. From these discussions, you could likely choose many audiences/persons you might want to “pitch.” Choose one to work through today (e.g., council member, potential funder, potential community group to collaborate with).
3. Complete the sections of the worksheet (next page) to build a concise pitch to your selected audience.
 - a. Modify your tone and language to be suitable for your selected audience.
 - b. Each element should be short and concise - no longer than 1-2 sentences.
3. Role play and practice making your pitch with your team. Pretend that you have 3-4 minutes to convince someone to become a partner.

Building and Making the Pitch

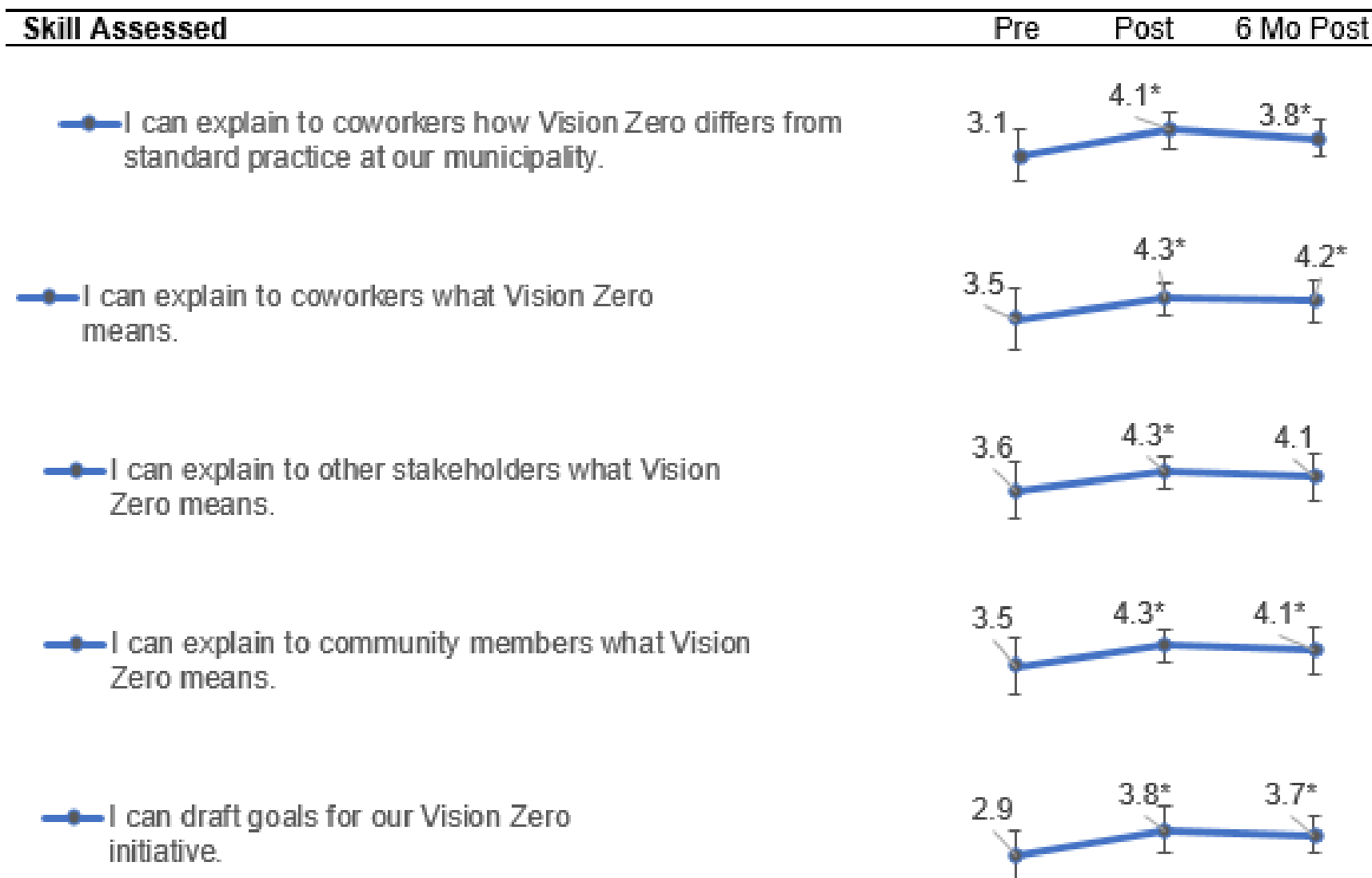
Choose an audience (e.g., potential funder and/or collaborator, new coalition member, etc.): _____

Pitch Component	Notes
Introduce yourself and describe your coalition. (What is the goal of your coalition?)	
What motivated your coalition to address road traffic deaths and serious injuries in your community? (Use a few data points or brief anecdote to describe the problem.)	
Target population(s) that will benefit from your initiative (including demonstrating explicit alignment to audience member's target populations, if/as appropriate)	
What is Vision Zero and why is this an effective approach to prevent road traffic deaths and serious injuries?	
A brief description of your prevention strategies/ activities (or the types you plan to implement)	
How is this project potentially aligned with their objectives and goals?	
The value of this partner's involvement (why their role is important)	
Your ask (what do you need or want from this potential partner, specifically)	

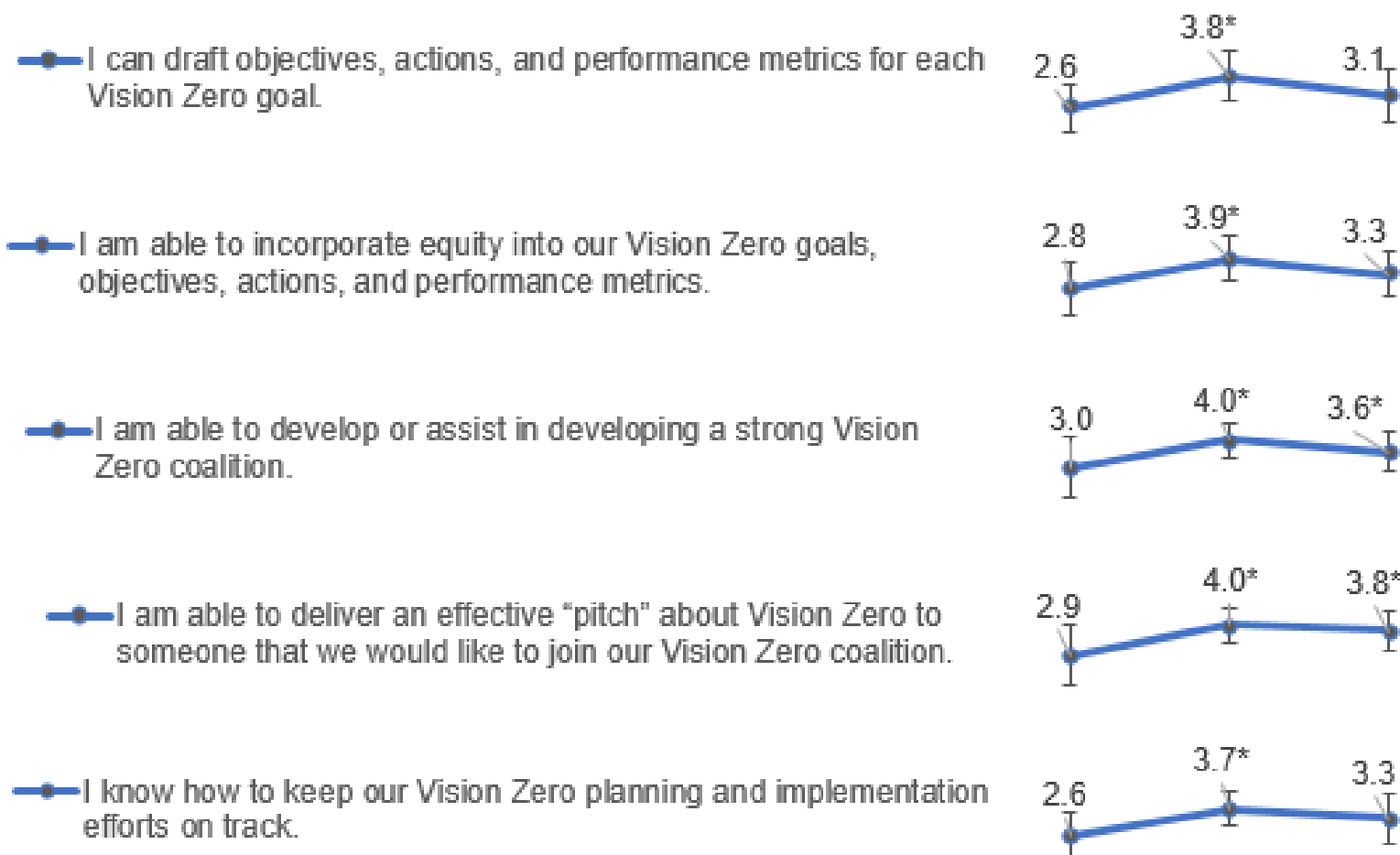
*Adapted from a tool developed by the NC Division of Public Health

Evaluating Skills Developed and Movement toward Vision Zero and Safe System Goals

Evaluation of Leadership Institute skills



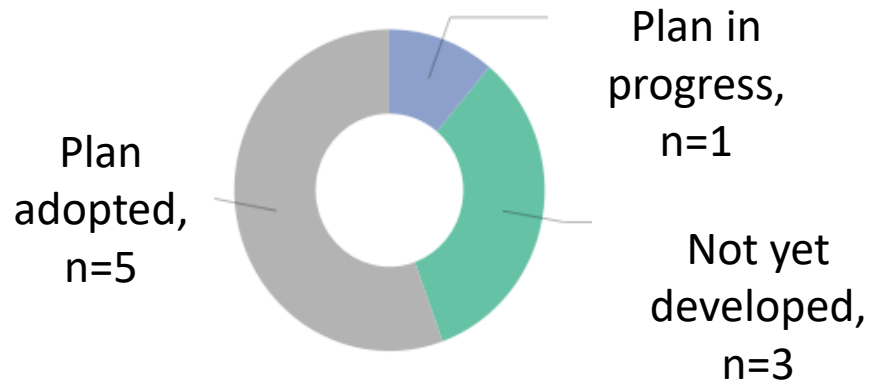
Evaluation of Leadership Institute skills



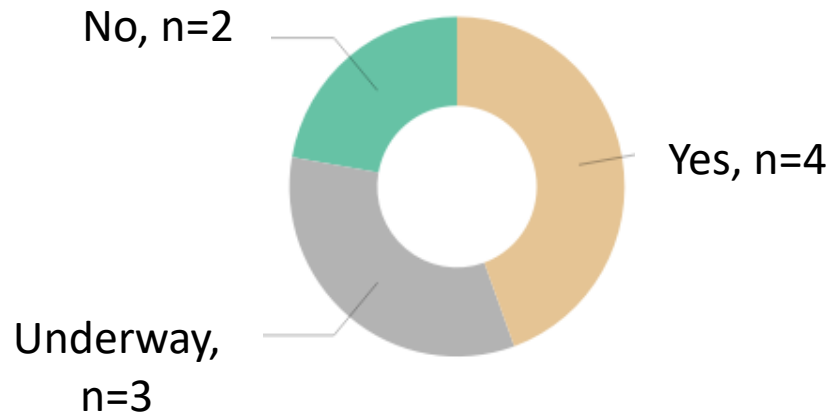
^ Measured on a 5-point Likert scale (1=Not confident, 2=A little confident, 3=Somewhat confident, 4=Confident, 5=Very confident)

* Statistically significant when compared to the pre-assessment, using a Wilcoxon signed-rank test (and alpha=0.05 cut point)

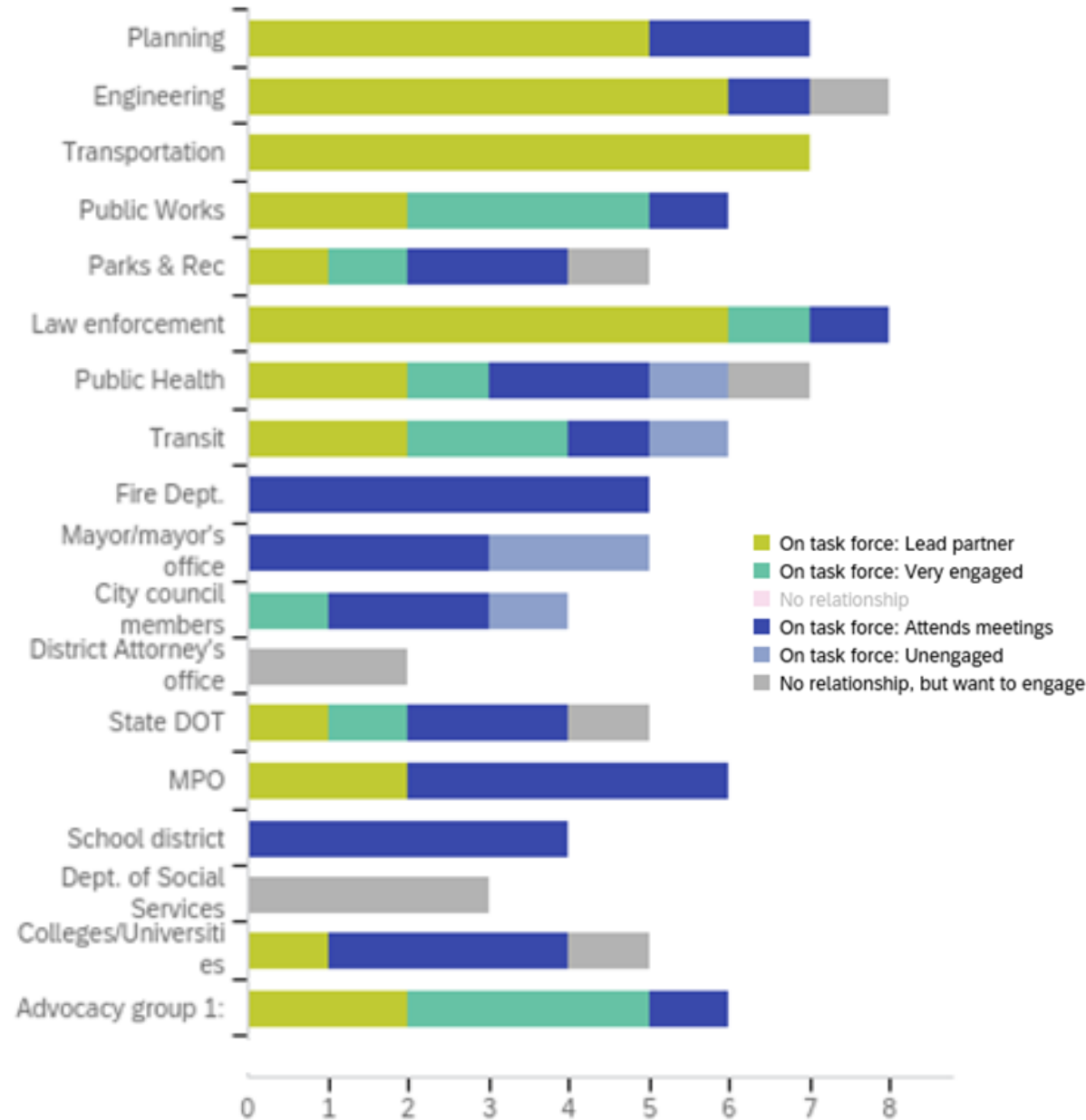
Communities with a Vision Zero Plan



Communities that have conducted a needs/assets assessment



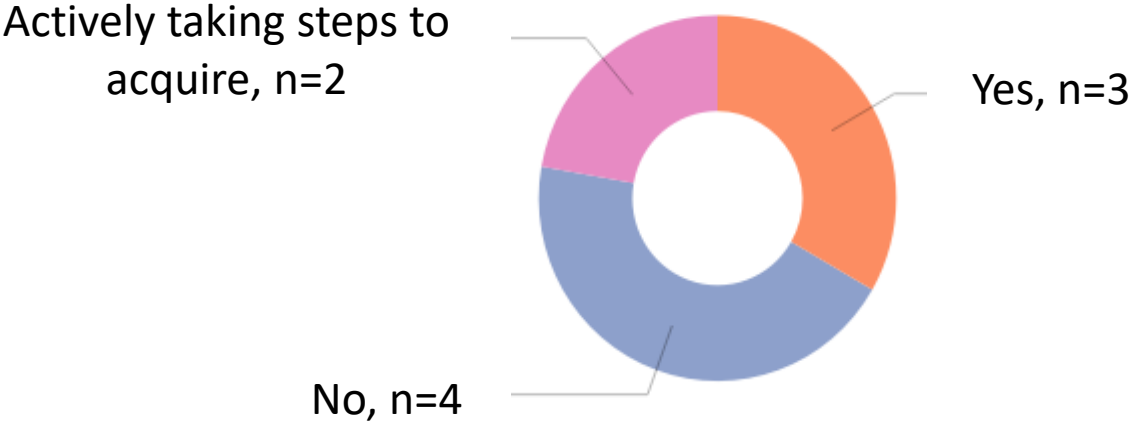
Sectors represented on coalition/task forces



Communities that have secured public, official commitment to Vision Zero locally (e.g., VZ resolution, policy)



Communities that have hired staff to focus on the design and implementation of Vision Zero strategies



In Sum

- Safe Systems and Vision Zero require a holistic and systems-based approach
- Requires coordination and collaboration across agencies and organizations
- Support networks within states can help share tools, best practices, solutions to common challenges between municipalities and communities to hopefully accelerate Safe Systems progress

Resources

<https://www.roadsafety.unc.edu/profdev/resource-hub/>

For more information:
RNAumann@unc.edu

Creating Safer Systems and Healthier Communities: Resource Hub

Community Readiness Assessment Guide for Vision Zero work

This manual, adapted from the Tri-Ethnic Center for Prevention Research, will provide a guide to the understanding and assessing the complex process of community change for Vision Zero. The manual and accompanying Interview Guide and Scoring Sheet provides all the information and instructions needed for measuring a community's readiness for implementing Vision Zero. The Community Readiness Model assesses "readiness" along several dimensions to help determine where to focus efforts and increase the likelihood for success. Guide will be available in 2022.

Voices of Vision Zero across the U.S.

The following 5-minute videos provide a brief introduction to the ways in which communities across the country have incorporated a Safe Systems approach to their Vision Zero initiatives. The interview clips feature Vision Zero leaders representing a variety of sectors—from elected officials to town planners to public health professionals and more.

- How does Vision Zero add value to your work?
- How have you integrated Vision Zero into your work?
- What is something that you're proud your community accomplished toward the goal of Vision Zero?
- What are some lessons you've learned in implementing a Vision Zero initiative?

For those looking ahead and planning

Vision Zero Implementation Milestones Checklist

Organized as a series of benchmarks, rooted in the science of program implementation, the



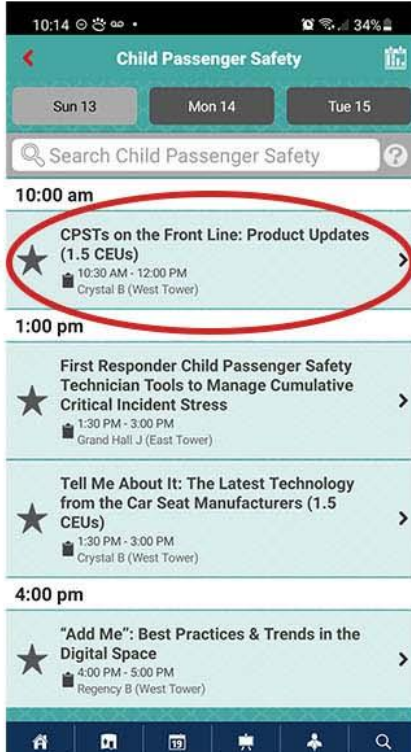
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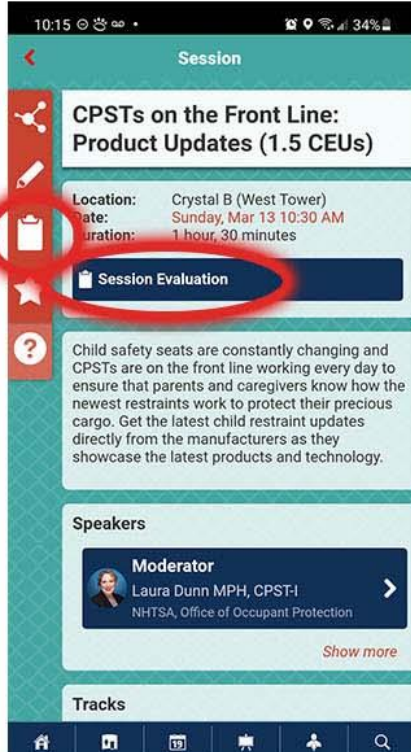
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SELECT APPLICABLE TRACK



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