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

Source: https://safety.fhwa.dot.gov/zerodeaths/zero_deaths_vision.cfm
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.

Source: https://safety.fhwa.dot.gov/zerodeaths/zero_deaths_vision.cfm
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.

Source: https://safety.fhwa.dot.gov/zerodeaths/zero_deaths_vision.cfm
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.

Road traffic death rates, US and NC

Death rate per 100,000 population

Year

USA

NC

North Carolina Vision Zero Communities
A Safe System Approach

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Source: https://safety.fhwa.dot.gov/zerodeaths/zero_deaths_vision.cfm
Community Coalition Action Theory used to inform Safe Systems and Vision Zero Training and Resource Development

Source: Recreated from Butterfoss, 2007
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

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Collaborative Sciences Center for Road Safety

Table B.2: Examples of how Vision Zero Plans framed their goals

<table>
<thead>
<tr>
<th>Examples of Goal Themes</th>
<th>Example Plans (page number, reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability, leadership</td>
<td>Cambridge (page 21-24) (10)</td>
</tr>
<tr>
<td></td>
<td>Richmond (page 14-18) (11)</td>
</tr>
<tr>
<td>Advocacy</td>
<td>Montgomery County (page 19-23) (12)</td>
</tr>
<tr>
<td>Culture of safety</td>
<td>Alexandria (page 24-27) (13)</td>
</tr>
<tr>
<td></td>
<td>Hillsborough County (page 28-31) (14)</td>
</tr>
<tr>
<td>Dangerous behaviors</td>
<td>Eugene (page 32-35) (15)</td>
</tr>
<tr>
<td></td>
<td>Washington D.C. (page 36-39) (16)</td>
</tr>
<tr>
<td>Data</td>
<td>Los Angeles (page 37-40) (17)</td>
</tr>
<tr>
<td></td>
<td>Philadelphia (page 41-43) (18)</td>
</tr>
<tr>
<td>Emergency response and services</td>
<td>Greensboro (page 44-47) (19)</td>
</tr>
<tr>
<td></td>
<td>Montgomery County (page 48-51) (20)</td>
</tr>
<tr>
<td>Encouragement</td>
<td>Fort Lauderdale (page 52-55) (21)</td>
</tr>
<tr>
<td></td>
<td>Miami-Dade County (page 56-59) (22)</td>
</tr>
<tr>
<td>Engagement with the public</td>
<td>Hillsborough County (page 60-63) (23)</td>
</tr>
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<td></td>
<td>2021 New York City (page 64-67) (24)</td>
</tr>
<tr>
<td></td>
<td>San Juan (2008) (24-26) (28)</td>
</tr>
<tr>
<td></td>
<td>2006 New York City (36-39) (33)</td>
</tr>
<tr>
<td>Partnerships, external</td>
<td>Cambridge (2005) (40-42) (34)</td>
</tr>
<tr>
<td></td>
<td>San Juan (2008) (43-45) (35)</td>
</tr>
<tr>
<td></td>
<td>Denver (2005) (49-51) (37)</td>
</tr>
<tr>
<td>Policy, law</td>
<td>Cambridge (2005) (52-54) (38)</td>
</tr>
<tr>
<td></td>
<td>Charlotte (2005) (55-57) (39)</td>
</tr>
<tr>
<td>Practices</td>
<td>Jersey City (2005) (58-60) (40)</td>
</tr>
<tr>
<td></td>
<td>2006 New York City (61-63) (41)</td>
</tr>
</tbody>
</table>

Examples of Goal Themes

- Promotion of Vision Zero
  - Hillsborough County (page 46) (21)
  - Sacramento (page 46-47) (22)

- Safe streets
  - Cambridge (page 46) (23)
  - San Francisco (page 47) (24)

- Safer drivers and people
  - Chicago (page 48) (25)
  - Tempe (page 49) (26)

- Safer vehicle technology
  - Hillsborough County (page 50) (27)
  - San Jose (page 51) (28)

- Speed
  - Denver (page 52) (29)
  - Portland (page 53) (30)

Street design
- Santa Monica (page 54) (31)

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, multivoting, a prioritization matrix, or other decision-making techniques (see pages 73-75 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 other concerns 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 serious and fatal traffic injuries, we now define and provide examples of how to do this.

Goals define 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 vehicle travel at safe speeds along all roadways in the 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
- Measurable
- Achievable
- Relevant
- Time-bound

Guidance on 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

<table>
<thead>
<tr>
<th>Phases</th>
<th>Exploration</th>
<th>Installation</th>
<th>Initial Implementation</th>
<th>Full Implementation</th>
</tr>
</thead>
</table>

**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 skills, 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
- Dedicated staff time across multiple sectors to Vision Zero work
  - Number of staff with at least 50% time devoted to Vision Zero:
- Dedicated funds to implementing Vision Zero strategies
- Establishing a Vision Zero performance management system
  - Whereas “performance measurement” involves tracking a program’s progress toward 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

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For more information, visit: [www.ncvisionzero.org](http://www.ncvisionzero.org)
### Key Elements and Steps for Sustaining an Effective Vision Zero Coalition

<table>
<thead>
<tr>
<th>Key Elements and Action Steps</th>
<th>Related Academy Session/Activity</th>
<th>Person(s) Responsible</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Do we have a plan for participatory community engagement at all levels of the coalition's decision-making?</td>
<td><em>Will be a focus of pre-visualization Institute</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b. Do our community engagement efforts reach members of the community most affected by traffic violence (children, elderly, disabled people, social isolation)?</td>
<td>Equity Considerations (4, Session 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1c. Do we regularly assess the community for new threats?</td>
<td>Partnership Assessment and Preventative Tool (Longer-term materials, 5 of 5, Session 5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1d. Do we have mechanisms in place to incorporate community input into planning and evaluation efforts?</td>
<td>Community Sustainability Assessment (Longer-term materials)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1e. Do we have structures in place to regularly communicate with coalition members in a manner that is equitable?</td>
<td>Equity Considerations (4, Session 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1f. Do we have opportunities to recognize and reward coalition and community accomplishments?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# 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.

4. Role play and practice making your pitch with your team. Pretend that you have 3-4 minutes to convince someone to become a partner.

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

*Adapted from a tool developed by the NC Division of Public Health*
Evaluating Skills Developed and Movement toward Vision Zero and Safe System Goals
<table>
<thead>
<tr>
<th>Skill Assessed</th>
<th>Pre</th>
<th>Post</th>
<th>6 Mo Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can explain to coworkers how Vision Zero differs from standard practice at our municipality.</td>
<td>3.1</td>
<td>4.1*</td>
<td>3.8*</td>
</tr>
<tr>
<td>I can explain to coworkers what Vision Zero means.</td>
<td>3.5</td>
<td>4.3*</td>
<td>4.2*</td>
</tr>
<tr>
<td>I can explain to other stakeholders what Vision Zero means.</td>
<td>3.6</td>
<td>4.3*</td>
<td>4.1*</td>
</tr>
<tr>
<td>I can explain to community members what Vision Zero means.</td>
<td>3.5</td>
<td>4.3*</td>
<td>4.1*</td>
</tr>
<tr>
<td>I can draft goals for our Vision Zero initiative.</td>
<td>2.9</td>
<td>3.8*</td>
<td>3.7*</td>
</tr>
</tbody>
</table>
Evaluation of Leadership Institute skills

- I can draft objectives, actions, and performance metrics for each Vision Zero goal.
  - 2.6
  - 3.8
  - 3.1

- I am able to incorporate equity into our Vision Zero goals, objectives, actions, and performance metrics.
  - 2.8
  - 3.9
  - 3.3

- I am able to develop or assist in developing a strong Vision Zero coalition.
  - 3.0
  - 4.0
  - 3.6

- I am able to deliver an effective “pitch” about Vision Zero to someone that we would like to join our Vision Zero coalition.
  - 2.9
  - 4.0
  - 3.8

- I know how to keep our Vision Zero planning and implementation efforts on track.
  - 2.6
  - 3.7
  - 3.3

^ 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
- Plan adopted, n=5
- Plan in progress, n=1
- Not yet developed, n=3

Communities that have conducted a needs/assets assessment
- No, n=2
- Yes, n=4
- Underway, n=3

Sectors represented on coalition/task forces
- Planning
- Engineering
- Transportation
- Public Works
- Parks & Rec
- Law enforcement
- Public Health
- Transit
- Fire Dept.
- Mayor/mayor’s office
- City council members
- District Attorney’s office
- State DOT
- MPO
- School district
- Dept. of Social Services
- Colleges/Universities
- Advocacy group 1:
Communities that have secured public, official commitment to Vision Zero locally (e.g., VZ resolution, policy)

- Yes, n=8
- No, n=1

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

- Yes, n=3
- Actively taking steps to acquire, n=2
- No, n=4
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
Please evaluate this presentation using the Lifesavers Conference Mobile App.