

To make progress toward a zero-based goal, we as an American culture need to change our attitudes about highway safety. In terms of highway safety, we refer to a community's collective values, attitudes and behaviors as traffic safety culture.

Safety culture is more than a public information campaign. Safety must be a factor in every transportation decision. The Toward Zero Deaths National Strategy applies safety culture to decision-making at all levels. It involves safety as a valued factor in every transportation decision, whether personal or organizational.

A safety culture program, project or process aligns efforts across the social environment, leveraging the work of stakeholders at all levels to support traffic safety. This document outlines the process and lists materials to help traffic safety professionals with each step.

SAFETY CULTURE DEVELOPMENT PROCESS

- 1. Learn
- 2. Plan
- 3. Engage
- 4. Implement
- 5. Evaluate



The following process for developing safety culture summarizes a Safety Culture Workshop held jointly by the NCHRP 17-69 panel and AASHTO in October 2018.

STEP 1: LEARN

LEARN ABOUT TRAFFIC SAFETY CULTURE AND HOW IT MIGHT BE DEVELOPED IN YOUR COMMUNITY

Objectives of this phase:

- 1. Develop a general understanding of safety culture.
- 2. Situation analysis: Conduct assessments, gather data and inventory existing resources.

At the first stage of implementation, traffic safety practitioners develop a working knowledge of safety culture and its influence on road user behavior.

Next, they evaluate their community's readiness for a safety culture effort. Assessments and analysis create a base of knowledge upon which to plan the effort. The learning process may uncover potential partnerships and opportunities to align resources. It will help practitioners identify which aspect of traffic safety to focus on. This stage may also show when a community is not ready, or whether barriers exist that would prevent or delay the success of a safety culture effort.

In summary, during Step 1 of safety culture development, practitioners:

- · Develop an understanding of safety culture.
- Conduct assessments to determine the community's readiness for a safety culture effort and to determine what the effort should address.
- · Identify existing resources, countermeasures, stakeholders, etc., already at work in the community.

Tools & resources:

Safety culture process overview	Safety culture basics	Assessment tools	Traffic safety inventory
Toward Zero Deaths: A National Strategy on Highway Safety, "Safety Culture," pages 61-70.1 NCHRP 17-69: A Strategic Approach to Transforming Traffic Safety Culture to Reduce Deaths and Injuries, "Guidance for Strategic Approach," pages 52-90.2	NCHRP 17-69, "Chapter 1: An Introduction to Terminology and Theory," pages 5-10, "Traffic Safety Culture-Based Strategies," pages 32-38, and "Chapter 2: Guidance on a Process to Develop a Strategic Approach," pages 48-90. Western Transportation Institute: Positive Culture Framework Overview.3 (18-minute YouTube video; other webinars available) Western Transportation Institute: "How are Vision Zero, Safe System, and Traffic Safety Culture related?" 4	NCHRP 17-69, "1.6 Measuring Traffic Safety Culture" and "1.7 Analyzing Traffic Safety Culture Data," pages 14-32; and "Step 2.1 Gather prevalence and consequence data" and "Step 2.2 Assess traffic safety culture," pages 62-65.	NCHRP 17-69, "Step 2.3 Assess existing strategies/system interactions," pages 66-68.

Toward Zero Deaths Steering Committee (2014, June). Toward Zero Deaths: A National Strategy on Highway Safety. American Association of Motor Vehicle Administrators, American Association of State Highway and Transportation Officials (AASHTO), Governors Highway Safety Association, International Association of Chiefs of Police, National Association of County Engineers, National Association of State EMS Officials, National LTAP/TTAP Association; 61-70.

Center for Health & Safety Culture, "How are Vision Zero, Safe System, and Traffic Safety Culture related?" (https://chsculture.org/all-publications/how-are-vision-zero-safe-system-and-traffic-safety-culture-related/ accessed 18 March 2019). Montana State University/Western Transportation Institute.



² Center for Health and Safety Culture, Western Transportation Institute, Montana State University; with Cambridge Systematics (2016, January). A Strategic Approach to Transforming Traffic Safety Culture to Reduce Deaths and Injuries. NCHRP 17-69, NAS-NRC Transportation Research Board (TRB) of The National Academies. 52-90.

³ Center for Health & Safety Culture, Positive Culture Framework Overview (2018, February). Montana State University/Western Transportation Institute.

STEP 2: PLAN

DEVELOP A PLAN FOR YOUR TRAFFIC SAFETY CULTURE EFFORT

Objectives of this phase:

- 1. Create a strategic plan to improve safety culture deficiencies in your community.
- 2. Incorporate traffic safety culture into existing safety plans.

With the knowledge and background acquired in Step 1, practitioners will develop a plan for their traffic safety culture effort. The plan articulates what will be accomplished, what the approach will be, who should be involved and resources required, including projected funding and timelines. With a plan in hand, practitioners will be prepared to gather the internal and external support needed to begin implementing the traffic safety culture effort. It's worth noting that the plan may be a living document, as it may evolve from the influence and participation of stakeholders.

This stage also provides the opportunity to examine relevant safety plans to determine if they are in alignment with traffic safety culture goals. Formally incorporating safety culture into existing safety plans is a key tactic for gaining the support of stakeholders for the safety culture effort.

Tools & resources:

Planning

NCHRP 17-69, "Chapter 2: Guidance on a Process to Develop a Strategic Approach," pages 48-90.

Incorporating traffic safety culture into safety plans

NCHRP 17-69, "Chapter 3: Integrating the Strategic Approach into Agency Planning Processes," pages 91-96.



STEP 3: ENGAGE

ENGAGE STAKEHOLDERS INTERNALLY AND EXTERNALLY TO REFINE YOUR PLAN

Objectives of this phase:

- 1. Gather support internally for your plan, including leadership support.
- 2. Educate, engage and involve external stakeholders and partners in refining the plan.
- 3. Secure commitment from stakeholders to participate in implementation of the plan.

During this phase, practitioners educate internal stakeholders about traffic safety culture and present the draft implementation plan internally for feedback. The plan is refined and presented to leadership, which may include agency executives, elected officials and policy makers.

Next, reach out to key partners and stakeholders. Educate them on safety culture. Ask for their input on the plan and for their involvement in its implementation. Both internal and external stakeholders may be helpful in determining how to measure success.

The level of engagement required for this stage depends on the local needs of the community. Outreach to stakeholders may take the form of one-on-one communication, meetings and phone calls, or may scale up to larger workshops and coalition building. The main objectives of the outreach are: 1) Identify partners from various aspects of the community's social structure. 2) Involve partners and stakeholders in refining the implementation plan. 3) Engage stakeholders in implementing the plan.

Some partnerships and stakeholder relationships may have formed earlier in the process than Step 3, such as during assessment or planning activities. Some relationships may be formed later in the process. Allow the safety culture process to be fluid and adaptable to local needs, so that interested stakeholders are welcomed into traffic safety culture efforts, regardless of the current stage of implementation.



Tools & resources:

Internal stakeholders	Leadership	External partners and stakeholders
NCHRP 20-68A Scan 14-03 Report: Successful Approaches for the Development of an Organization-Wide Safety Culture in Transportation Agencies. ⁵	Safety culture educational resources listed in Step 1	NCHRP 17-69, "Step 1.1 Create concern," "Step 1.2 Identify, select and recruit stakeholders," and "Step 1.3 Form or join a coalition." pages 55-61.

⁵ AASHTO (2015, August). Scan Team Report: Scan 14-03, Successful Approaches for the Development of an Organization-Wide Safety Culture in Transportation Agencies. NCHRP 20-68A U.S. Domestic Scan Program, NAS-NRC TRB of The National Academies.

☆ STEP 4: IMPLEMENT

IMPLEMENT YOUR PLAN

Objectives of this phase:

- 1. Execute the traffic safety culture implementation plan.
- 2. Maintain a dialogue with stakeholders and report on progress of the plan at regular intervals.

With a coalition of support behind the effort, Step 4 is the time to implement the safety culture plan. At this stage, practitioners will use the plan developed in Step 2 and refined during Step 3 as a roadmap for influencing traffic safety culture in their communities. Partners and stakeholders should be involved in implementation.

Maintaining an open dialogue with stakeholders throughout implementation will help everyone keep the big picture in mind, measure progress and remember their roles and commitments. Leaders, policy makers and partners who have invested resources in the plan will want to see progress toward set benchmarks.

There are many ways to achieve an open dialogue: presentations, quarterly or semi-annual coalition meetings, enewsletters, online dashboards and more. Practitioners will work with partners and stakeholders to determine the best way to keep in touch throughout implementation.



Tools & resources:

Implementation

Toward Zero Deaths, Road Map for Implementing the TZD National Strategy on Highway Safety (see the Toward Zero Deaths website for additional implementation materials from NCHRP 17-69).6

NCHRP 17-69, "Step 4.3 Implement and evaluate pilot." "Step 4.4 Revise strategies based on evaluation," "Step 4.4 Revise strategies based on evaluation," "Step 5.1 Plan for implementation and monitoring," "Step 5.2 Implement strategies," and "Step 5.3 Monitor evaluations and revise strategies as needed," pages 87-90.

Western Transportation Institute: Communication: A Catalyst for Growing a Positive Culture (1-hour webinar)?

Western Transportation Institute: Moving Beyond Bystander Engagement: Growing Safety Citizenship to Improve Health and Safety (1-hour webinar).

⁶ Ott, Patricia and Fischer, Pam Schadel; Road Map for Implementing the TZD National Strategy on Highway Safety (2018). AASHTO, FHWA and NCHRP.

Center for Health & Safety Culture, Communication: A Catalyst for Growing a Positive Culture (2019, January 16). Montana State University/Western Transportation Institute.

⁸ Center for Health & Safety Culture, Moving Beyond Bystander Engagement: Growing Safety Citizenship to Improve Health and Safety (2019, Feburary 12). Montana State University/Western Transportation Institute.

⚠ STEP 5: EVALUATE

MEASURE THE EFFECTIVENESS OF SAFETY CULTURE IMPLEMENTATION; DETERMINE WHERE TO GO NEXT

Objectives of this phase:

- 1. Measure safety culture plan implementation, evaluate and report on progress.
- 2. Determine next steps for safety culture efforts in the community.

The safety culture plan developed during this process should include evaluation methods and metrics, as well as a timeframe for analyzing the success of the program. The evaluation process may include comparing program results with Step 1 assessments, gathering feedback from stakeholders and partners or linking stakeholder data sets for in-depth analysis.

Practitioners may have specific reporting requirements tied to funding or partnership agreements, or reporting may be voluntary. In either case, practitioners serve their own community and others by summarizing the safety culture effort, results and lessons learned, so that safety culture efforts may be optimized in the future.

With program results in hand, practitioners work with partners and stakeholders to refine plans, set new goals and focus areas or generate new ideas for safety culture efforts. The safety culture process may then become iterative in a community, with much of the data from Step 5 serving as a basis for the assessment in Step 1 of a new safety culture venture.

Tools & resources:

Evaluation

NCHRP 17-69 Implementation and Evaluation sections, pages 87-90.

