



An Action Framework for Transforming Traffic Safety Culture

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Executive Summary

This action framework was created by the Center for Health and Safety Culture at the Western Transportation Institute of Montana State University. At the Center, we believe improving health and safety is achieved by growing positive community norms through cultural transformation. The Center serves in the role leading national change efforts and can act as a facilitator for the process outlined in this document.

While significant progress has been made in reducing fatalities and injuries associated with motor vehicles, over 33,000 people still died as a result of motor vehicle incidents in 2009. Single solutions like infrastructure improvements and vehicle design have had positive results, however, such strategies are insufficient towards achieving comprehensive transportation safety. Future efforts to improve traffic safety will involve transforming traffic safety culture to foster a broader engagement in safety. Transforming traffic safety culture is a long-term endeavor that will involve working across the traffic safety system (from the national level to the individual).

This document provides an action framework to foster this transformation using a seven step process. At the Center, we believe the work of transforming culture must focus on a science-based process and not attempt to prescribe specific strategies at the outset. Gaining an accurate understanding of the existing culture is critical BEFORE recommending strategies. We use the following process to guide our efforts:

1. PLAN AND ADVOCATE
2. ASSESS CULTURES
3. ESTABLISH A COMMON FRAME AND PRIORITIZE OPPORTUNITIES
4. DEVELOP PORTFOLIO OF STRATEGIES
5. PILOT TEST AND REFINE
6. IMPLEMENT PORTFOLIO STRATEGIES
7. EVALUATE EFFECTIVENESS AND NEEDS

This document details an action framework for the process of cultural transformation. The specific details of the content unfold as the key stakeholders engage in the process.

Introduction

While significant progress has been made in reducing fatalities and injuries associated with motor vehicles, over 33,000 people died as a result of motor vehicle incidents in 2009. Single solutions like infrastructure improvements and vehicle design have had positive results, however, such strategies are insufficient towards achieving comprehensive transportation safety. We need multiple disciplines working together to transform the culture around driving – especially with challenges regarding seat belt usage, impaired and distracted driving, and single vehicle crashes.

The overwhelming majority of drivers do not engage in risky behaviors. In fact, it is the behaviors of a minority of individuals which are causing significant harm. This small group seems unaffected by recent efforts to improve traffic safety:

- 2.2% of drivers had a blood alcohol concentration over 0.08g/dL in 2007 (Source: NHTSA 2007 National Roadside Survey of Alcohol and Drug Use by Drivers).
- 15% of vehicle occupants reported NOT wearing a seatbelt in 2010 (Source: NHTSA Seat Belt Use in 2010 – Overall Results).

Future efforts to improve safety will require new strategies to address the behaviors of this minority of drivers – strategies including engaging others (including the majority who avoid risky behaviors) to improve traffic safety. Efforts must not only focus on drivers, but focus on all levels of the traffic safety system including individuals, families, organizations, governmental bodies and national leaders. This approach requires a transformation of traffic safety culture to foster a much broader sense of collective responsibility.

At the Center for Health and Safety Culture, we define culture as the shared values, beliefs, behaviors (and artifacts of behaviors) of a group of people. From this definition, it is critical to realize that a traffic safety culture already exists. Of course, there are ways that this culture can be improved; however, any improvements will be made to an *existing* culture – not by creating a new one. Also, it is clear that there is not one culture, but many cultures; communities of place have cultures; workplaces have cultures; age groups (i.e., young adults) have cultures; national organizations have cultures; traffic safety leaders have cultures.

Before addressing cultural transformation, it is important to reflect on transformation. Transformation is fundamentally different than just simple change. Transformation requires an examination of core assumptions and results in seeing the world fundamentally differently. Transformation is very lasting, involves new elements, and often takes considerable time. Change occurs much more frequently, involves incremental differences, and can be temporary.

Efforts to improve traffic safety will involve both change and transformation of traffic safety culture. Change will be necessary, but change alone will be insufficient. Transformation will be required to make improvements in traffic safety lasting and sustainable.

The work to foster cultural transformation is not a program. It is not a media campaign or a new single strategy. Cultural transformation is a process – a process which is cyclical and repeated. The process of cultural transformation is never completed as there are always ways to improve health and safety.

A critical aspect of this process is to gain an accurate understanding of the existing traffic safety culture *before* prescribing solutions. Attempts at offering solutions without an accurate understanding of the current values, beliefs and behaviors of the existing traffic safety system may result in wasteful deployment of limited resources.

Traffic safety in the United States involves many different entities including those at the national level all the way to individual drivers, passengers and pedestrians (see Figure 1). Viewing traffic safety as a system provides a powerful way to operationalize the work of transforming culture. *Our traffic safety culture includes the values, beliefs and behaviors of all these many systems.* Each component of the system has a unique sub-culture with unique opportunities and common values and beliefs with other sub-cultures across the system. Culture is a simple label for a very complex set of interactions.

The work of transforming traffic safety culture involves understanding the sub-cultures across the traffic safety system and seeking change and transformation *at each level*. The strategies employed at each level will be very different. The goal is not to achieve the same “culture” at each level. The goal is to recognize the many different levels and seek to address the opportunities appropriate for each level. By working across the system, traffic safety can be impacted in a sustainable way by truly transforming the many cultures in which we live and drive.

The context and strategies proposed at each level of the traffic safety system will look very different. For example, among individual drivers, the assessment phase may reveal that a lack of seat belt usage is resulting in fatalities among rural, native populations. Further analysis may reveal key misperceptions regarding seat belt usage, and an appropriate strategy may include education combined with increased enforcement to correct the misperception risk factor.

At another level of the traffic safety system, the assessment phase of national stakeholders may reveal a bias towards viewing improving traffic safety as a national effort to prescribe policy

changes and increased enforcement. This limited view of improving traffic safety may lead national efforts to “miss” opportunities to promote traffic safety as a public health issue within a community-based focus. The appropriate strategy to address this opportunity would be completely different than the strategy described above to increase occupant protection among rural native populations. However, both are important in the work of transforming traffic safety culture. **The critical realization is that different levels of the traffic safety system will require very different strategies and that these strategies cannot be determined until after careful assessment.**

This document provides an action framework to transform traffic safety culture. The process is intentionally presented as a “cycle” as opposed to a linear path. The work of transforming culture is not completed in a single plan, or from only one point in the system, but rather involves an iterative approach applying common steps to different components of the traffic safety system.

Clearly, this long term process will require the engagement of many key stakeholders from many different agencies. The Center for Health and Safety Culture can support this initiative by acting as a convener and facilitator (funding and resources to be determined). Critical to the success of such an initiative is found in Step 1 of the Action Framework described below. During this step, key stakeholders will be identified and recruited, a unified purpose and common frame will be established, and the stakeholders will be trained on the process. As the effort unfolds, the work together will result in shared processes, perceptual framing, purpose and a set of shared tools which can utilized across the traffic safety system (see Figure 2).

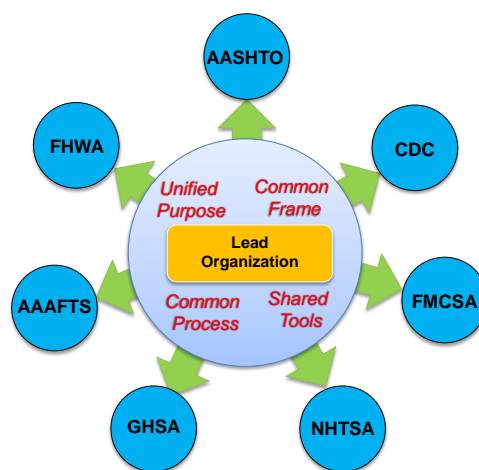
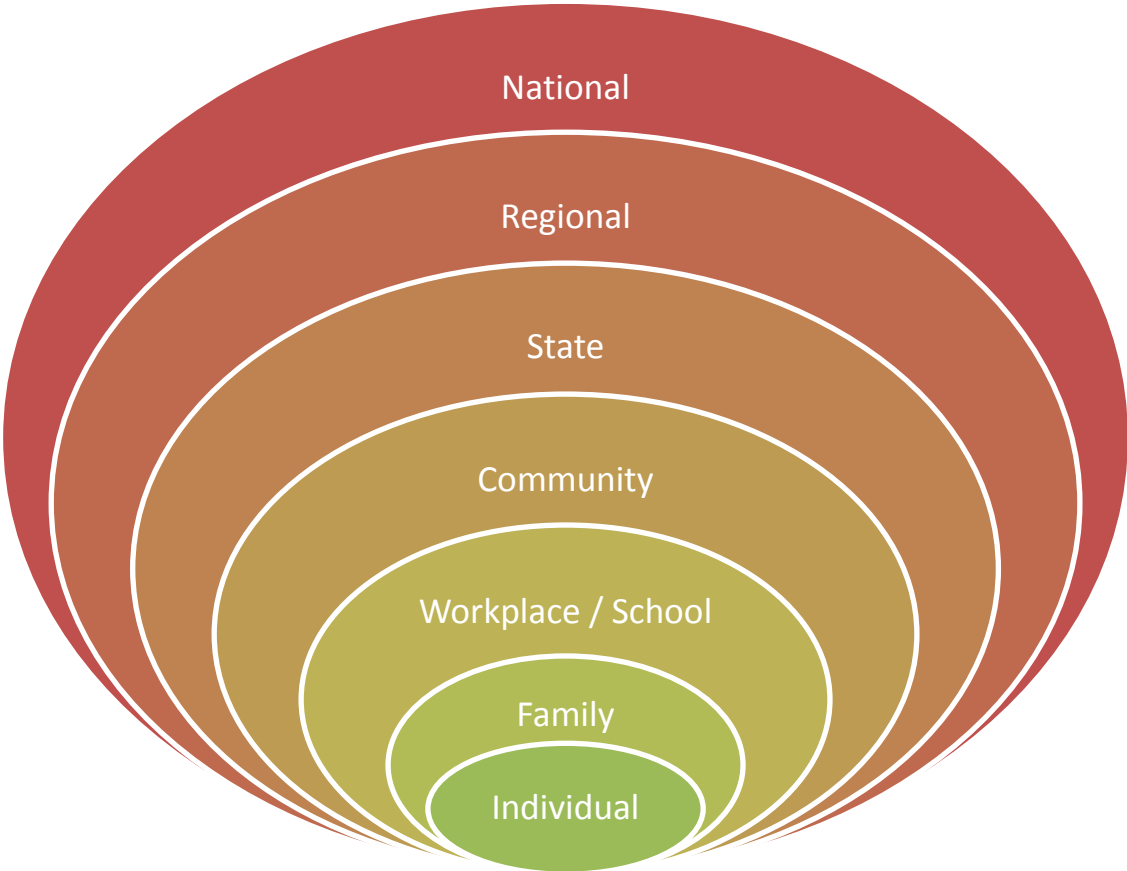


Figure 2. Organizing structure for engaging key stakeholders

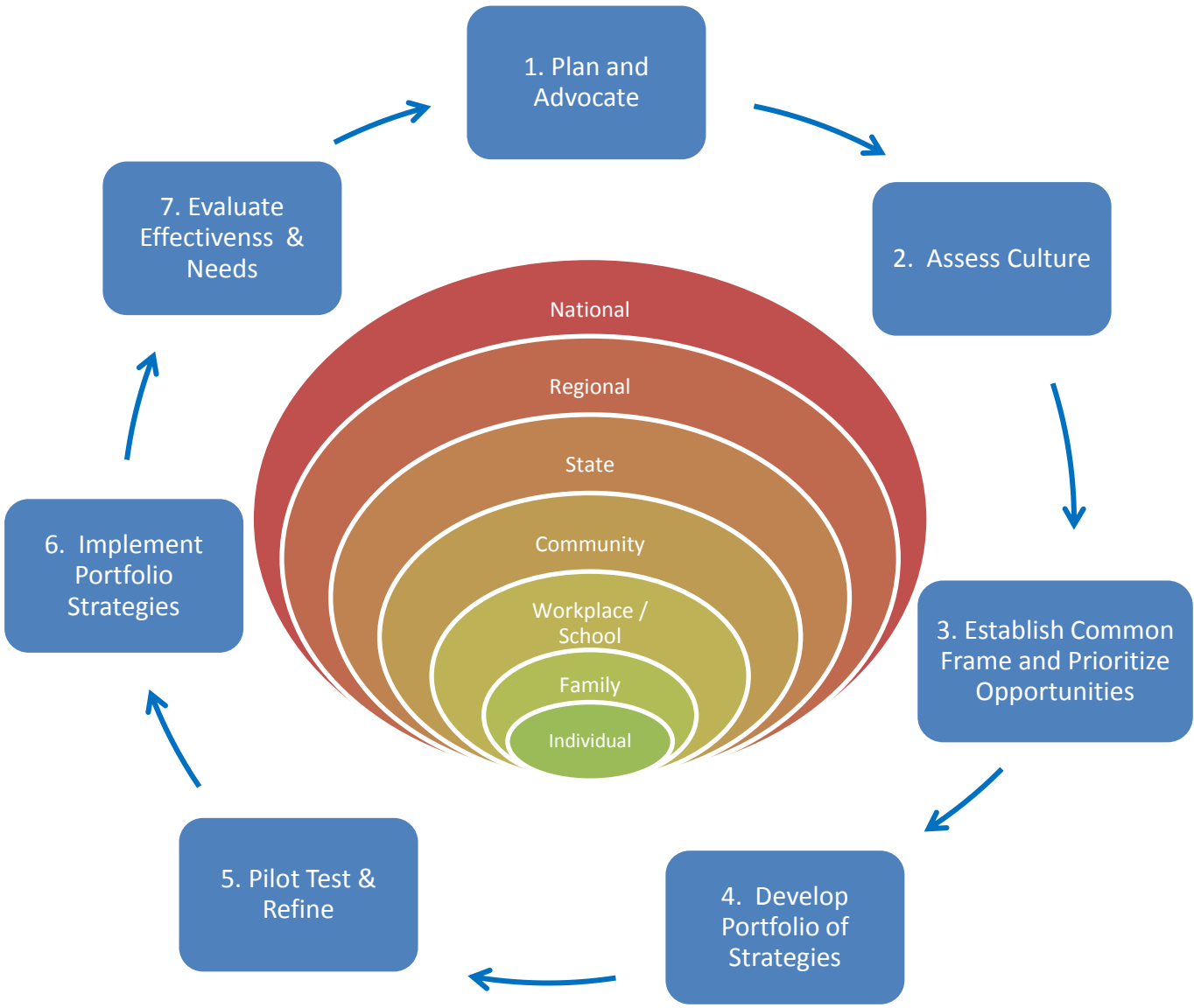
Figure 1. Various Levels of the Traffic Safety System



National	Regional	State
FHWA TRB AASHTO AAA Foundation GHSA CDC [more]	NHTSA [more]	DOTs Licensing Departments TS Commissions State Law Enforcement Transportation Committees Public Health / Injury Prevention [more]

Community	Workplace / School	Family	Individual
TS Departments Local Law Enforcement EMS Services Local Hospitals [more]	Commercial Operators Employers Driver Education [more]	Family Guidelines [more]	Drivers Passengers Pedestrians [more]

A Seven-Step Action Framework to Enhance Positive Traffic Safety Culture



AIM of the ACTION FRAMEWORK

The purpose of this plan is to improve traffic safety by fostering cultural transformation across the many systems engaged in traffic safety from national entities (including the Federal government and private entities with a national focus) to state agencies (such as DOTs) to individuals in their communities. The process outlined here will NOT be implemented once, but rather repeated multiple times with different levels of the traffic safety system.

Seven Key Action Steps

1. **PLAN AND ADVOCATE** – A Lead Organization (LO) to be designated will provide leadership in planning the process outlined in the remaining steps and advocacy to bring together the key stakeholders. Steps 2 – 7 require engagement by a broad array of stakeholders representing both public and private entities.
2. **ASSESS CULTURES** – Each of the many systems involved in traffic safety have both common and unique values, beliefs and action. An assessment of these entities will reveal baseline measures and opportunities to establish a common frame as well as gaps needing to be addressed.
3. **ESTABLISH A COMMON FRAME AND PRIORITIZE OPPORTUNITIES** – The assessment of the cultures among the many entities will reveal common themes which can help establish a common frame for fostering transformation. This common frame will foster engagement. Furthermore, the assessment will reveal critical gaps in beliefs and behaviors which will inform the selection of strategies.
4. **DEVELOP PORTFOLIO OF STRATEGIES** – Based on the prioritization of opportunities completed in Step 3, a portfolio of strategies can be developed appropriate for different levels of the traffic safety system. Each strategy should be based on the best available science regarding effectiveness and outcomes. Sample strategies are listed in Appendix A.
5. **PILOT TEST AND REFINE** – To make best use of limited resources and optimize outcomes, strategies should be pilot tested and refined before seeking system-wide implementation. This step involves research and demonstration projects with attention to cultural competency.
6. **IMPLEMENT PORTFOLIO STRATEGIES** – Once pilot tested and refined, strategies should be implemented broadly across the traffic safety system with ongoing monitoring and evaluation.

7. **EVALUATE EFFECTIVENESS AND NEEDS** – Ongoing evaluation will facilitate implementation effectiveness and inform future needs. The process of cultural transformation is never complete; with every cycle, new opportunities to improve traffic safety will be revealed and inform future efforts.

Step 1

PLAN AND ADVOCATE –The Lead Organization will provide leadership in planning the process outlined in the remaining steps and advocacy to bring together the key stakeholders. Steps 2 – 7 require engagement by a broad array of stakeholders representing both public and private entities.

- 1.1 The Lead Organization (LO) to further develop and disseminate action framework document.
- 1.2 LO to provide leadership process for identifying and engaging key stakeholders in common effort of increasing positive traffic safety norms through cultural transformation.
- 1.3 Solicit ‘champions’ from key agencies to engage leaders in support of addressing culture as an umbrella paradigm for traffic safety throughout the next decade.
- 1.4 Develop an active network of key stakeholders who meet online and at meetings to move this call to action process forward.
- 1.5 LO to develop and continually update the core purpose and frame of this initiative through engagement of network of invested stakeholders.
- 1.6 LO to develop a plan for Steps 2 – 7 with input from key stakeholders. The plan will recognize a multi-cycle approach (in other words, not attempt to transform the entire traffic safety system in the first pass).
- 1.7 LO to conduct research on cultural efforts employed in other countries to improve traffic safety. This research would inform this initiative.
- 1.8 LO to convene annual Summits on Traffic Safety Culture by building on successes of the past three National Summits on Rural Traffic Safety Culture.

Step 2

ASSESS CULTURES – Each of the many systems involved in traffic safety have both common and unique values, beliefs and action. An assessment of these entities will reveal baseline measures and opportunities to establish a common frame as well as gaps needing to be addressed.

- 2.1 LO to provide leadership role in process of developing and disseminating definitions, models, and language for the measurement (and transformation) of traffic safety culture.
- 2.2 Develop operational constructs about traffic safety culture related to values, attitudes, beliefs, actions and perceived norms as well as other variables.
- 2.3 Establish baseline measures of traffic safety cultures across the traffic safety system. These include assessing norms and perceived norms at levels of the individual, groups, worksites, sub-populations, and agencies.
- 2.4 Identify similarities (strong norms) and critical gaps in key cultural constructs. Strong norms identify unifying opportunities; critical gaps help prioritize strategies. Examples include gaps between stated values and behaviors, actual versus perceived norms, or perception of harm from engaging in certain risky behaviors (like cell phone usage while driving).

Step 3

ESTABLISH A COMMON FRAME AND PRIORITIZE OPPORTUNITIES – The assessment of the cultures among the many entities will reveal common themes which can help establish a common frame for fostering transformation. This common frame will foster engagement. Furthermore, the assessment will reveal critical gaps in beliefs and behaviors which will inform the selection of strategies.

- 3.1 LO to provide leadership on engaging key leaders in establishing a common frame for addressing traffic safety culture. This is a process of proactively defining a frame which is anchored to values revealed in Step 2.

- 3.2 LO, along with key stakeholders, prioritize gaps revealed in the cultural assessment. These gaps vary based on different levels of the system. For example, among individuals, gaps may include misperceptions regarding potential risk in engaging in certain behaviors or the prevalence of risky behaviors amongst others. For communities, the gaps could include misperceptions regarding support for enforcement. For state or federal agencies, the gaps could include strategic priorities and funding allocations.

Step 4

DEVELOP PORTFOLIO OF STRATEGIES – Based on the prioritization of opportunities completed in Step 3, a portfolio of strategies can be developed appropriate for different levels of the traffic safety system. Each strategy should be based on the best available science regarding effectiveness and outcomes. Sample strategies are listed in Appendix A.

- 4.1 Develop a portfolio of traffic safety strategies currently being implemented related to the opportunities identified in Step 3. Included in this map is the evidence base for the strategies identified and potential concerns regarding implementation.
- 4.2 Identify opportunities to enhance or improve existing strategies to address the gaps identified in Step 3 at different levels of the traffic safety system.
- 4.3 As needed, identify new innovative, promising and evidence-based strategies to address the gaps identified in Step 3. Prioritize potential new strategies based on readiness and resources required for implementation.
- 4.4 Develop a comprehensive plan for enhancement and implementation.

Step 5

PILOT TEST AND REFINE – To make best use of limited resources and optimize outcomes, strategies should be pilot tested and refined before seeking system-wide implementation. This step involves research and demonstration projects with attention to cultural competency.

- 5.1 Implement or enhance existing strategies with a limited number of diverse sites with extensive evaluation and attention to cultural competency.
- 5.2 Revise strategies as necessary based on outcomes of pilot tests.
- 5.3 Conduct research to better understand audiences and implementation issues.
- 5.4 LO to provide opportunity at National Summit on Traffic Safety to update stakeholders on latest research and needs for refining paradigms and portfolio.

Step 6

IMPLEMENT PORTFOLIO STRATEGIES – Once pilot tested and refined, strategies should be implemented broadly across the traffic safety system with ongoing monitoring and evaluation.

- 6.1 Foster implementation of the portfolio of strategies identified in Step 4 by working with key Traffic Safety stakeholders and agencies. Utilize outcomes from Step 5 to bolster advocacy.
- 6.2 LO and key stakeholders “hear and steer” the conversation around traffic safety to correct misperceptions and foster engagement.
- 6.3 Portfolio and strategies are updated based upon goals, time horizon, resources and evaluation of effectiveness.

Step 7

EVALUATE EFFECTIVENESS AND NEEDS – Ongoing evaluation will facilitate implementation effectiveness and inform future needs. The process of cultural transformation is never complete; with every cycle, new opportunities to improve traffic safety will be revealed and inform future efforts.

- 7.1 Researchers and evaluators conduct evaluation of process, outcomes and needs. These measures will link back to measures previously defined.
- 7.2 New evaluation models and methods are developed to assess changes and transformation of traffic safety culture.
- 7.3 Expand evaluation paradigms to include quantitative, qualitative and mixed methodologies.

APPENDIX A – Sample Strategies to Address Specific Traffic Safety Issues

Important: These strategies are provided as samples only. Attempts at offering solutions without an accurate understanding of the current values, beliefs and behaviors of the existing traffic safety system may result in wasteful deployment of limited resources.

1. Challenge beliefs through educational and communication efforts. Beliefs such as “seatbelts don’t work” or “I can talk on my cell phone without impacting my driving” can lead to poor decision making by individuals.
2. Clarify norms through educational and communication efforts. Mispercieved norms such as “most adults in my community drive after drinking” or “most adults speed” may lead individuals to make unsafe decisions. Misperceived norms may also include beliefs or attitudes (injunctive norms) such as “most people think it is OK to speed” or “most people in this community do not support strong enforcement.”
3. Codify norms of safe behaviors in policy. Policy has been shown to be effective in promoting safe behaviors and reducing risky behaviors. Effective policy will also require visible enforcement.
4. Using incentives versus penalties uses such novel approaches as rewarding drivers who routinely do not speed (by randomly selecting drivers who do not speed and providing them cash awards collected from fines from those who do speed).
5. Automated enforcement has been found to be an effective strategy to address both speeding and traffic violations such as running red lights.