State Traffic Records Coordinating Committee Noteworthy Practices

USDOT|TRCC

June 2015

FHWA Office of Safety

NHTSA Office of Traffic Records and Analysis

U.S. Department of Transportation
Federal Highway Administration

U.S. Department of Transportation
National Highway Traffic Safety Administration

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STATE TRAFFIC RECORDS COORDINATING COMMITTEE NOTEWORTHY PRACTICES

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TECHNICAL DOCUMENTATION PAGE

1. Report No. FHWA-SA-15-083	2. Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle State Traffic Records Coordinating Committee Noteworthy Practices		5. Report Date 6. Performing Organization Code
7. Author(s) Robert A. Scopatz, Nancy Lefler, and Kara Peach		8. Performing Organization Report No.
9. Performing Organization Name and Address Vanasse Hangen Brustlin, Inc (VHB) 8300 Boone Blvd., Ste. 700 Vienna, VA 22182-2626		10. Work Unit No. 11. Contract or Grant No. DTFH61-10-D-00022 – T5000 Task 3.2
12. Sponsoring Agency Name and Address U.S. Department of Transportation Federal Highway Administration 1200 New Jersey Avenue, SE Washington, DC 20590		13. Type of Report and Period Final Report 6/18/2015 – 7/1/2015 14. Sponsoring Agency Code: FHWA
15. Supplementary Notes. The FHWA contract manager for this project was Esther Strawder. Luke Johnson (NHTSA) served as co-project manager.		
16. Abstract This *State Traffic Records Coordinating Committee Noteworthy Practices Guide* was developed under the direction of the USDOT|TRCC as a way to help State TRCCs become more effective. It includes definitions of successful TRCCs and provides examples of noteworthy practices drawn from six case study States and others. The recommendations provide State TRCC Coordinators and Chairs, TRCC participants, and executive leaders with ideas they can adopt and adapt to their own situation. The recommendations point to TRCC roles and responsibilities well beyond those mandated by the MAP-21 legislation and grant program requirements. Examples from State TRCC noteworthy practices point to roles for the TRCC in traffic records assessments, self-assessments, strategic planning, and performance measurement. Formal foundational documents and a purposeful focus on relationship building are seen as keys to success.		
17. Key Words: Traffic Records Coordinating Committee	18. Distribution Statement No restrictions.	

19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages: 104	22. Price

SI* (MODERN METRIC) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
		LENGTH		
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
		AREA		
in^2	square inches	645.2	square millimeters	mm^2
ft^2	square feet	0.093	square meters	m^2
yd^2	square yard	0.836	square meters	m^2
ac	acres	0.405	hectares	ha
mi^2	square miles	2.59	square kilometers	km^2
		VOLUME		
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liters	L
ft^3	cubic feet	0.028	cubic meters	m^3
yd^3	cubic yards	0.765	cubic meters	m^3
		NOTE: volumes greater than 1000 L shall be shown in m^3		
		MASS		
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")
		TEMPERATURE (exact degrees)		
°F	Fahrenheit	5 (F-32)/9 or (F-32)/1.8	Celsius	°C
		ILLUMINATION		
fc	foot-candles	10.76	lux	lx
fl	foot-Lamberts	3.426	$candela/m^2$	cd/m^2
		FORCE and PRESSURE or STRESS		
lbf	poundforce	4.45	newtons	N
lbf/in^2	poundforce per square inch	6.89	kilopascals	kPa

APPROXIMATE CONVERSIONS FROM SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
		LENGTH		
mm	millimeters	0.039	inches	in
m	meters	3.28	feet	ft
m	meters	1.09	yards	yd
km	kilometers	0.621	miles	mi
		AREA		
mm^2	square millimeters	0.0016	square inches	in^2
m^2	square meters	10.764	square feet	ft^2
m^2	square meters	1.195	square yards	yd^2
ha	hectares	2.47	acres	ac
km^2	square kilometers	0.386	square miles	mi^2
		VOLUME		
mL	milliliters	0.034	fluid ounces	fl oz
L	liters	0.264	gallons	gal
m^3	cubic meters	35.314	cubic feet	ft^3
m^3	cubic meters	1.307	cubic yards	yd^3
		MASS		
g	grams	0.035	ounces	oz
kg	kilograms	2.202	pounds	lb
Mg (or "t")	megagrams (or "metric ton")	1.103	short tons (2000 lb)	T
		TEMPERATURE (exact degrees)		
°C	Celsius	1.8C+32	Fahrenheit	°F
		ILLUMINATION		
lx	lux	0.0929	foot-candles	fc
cd/m^2	$candela/m^2$	0.2919	foot-Lamberts	fl
		FORCE and PRESSURE or STRESS		
N	newtons	0.225	poundforce	lbf
kPa	kilopascals	0.145	poundforce per square inch	lbf/in^2

*SI is the symbol for the International System of Units. Appropriate rounding should be made to comply with Section 4 of ASTM E380.
(Revised March 2003)

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ACRONYMS

CDC	Centers for Disease Control and Prevention
CDIP	Crash Data Improvement Program
CDL	Commercial Driver's License
CDUG	Crash Data Users Group
CFR	Code of Federal Regulations
CIO	Chief Information Officer
CMV	Commercial Motor Vehicle
CODES	Crash Outcome Data Evaluation System
ConnDOT	Connecticut Department of Transportation
CRCOG	Connecticut's Capital Area Regional Council of Governments
CVISN	Commercial Vehicle Information Systems
CVSP	Commercial Vehicle Safety Plan
DHHS	Department of Health and Human Services
DOJ	Department of Justice
DOT	Department of Transportation
DOTD	Louisiana's Department of Transportation & Development
DMV	Department of Motor Vehicles
DPH	Department of Public Health
DPS	Department of Public Safety
DVS	Minnesota's Division of Vehicle Services in DPS
DTMB	Michigan's Department of Technology, Management, and Budget
eCitation	Electronic Citation Reporting
eCrash	Electronic Crash Reporting
EMS	Emergency Medical Services
eTRIP	Washington State's Electronic Traffic Information Processing
FARS	Fatality Analysis Reporting System

FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
GIS	Geographic Information System
GTSAC	Michigan's Governor's Traffic Safety Advisory Commission
HSIP	Highway Safety Improvement Program
HSRG	Highway Safety Research Group (at LSU)
IT	Information Technology
LERN	Louisiana Emergency Response Network
LHSC	Louisiana Highway Safety Commission
LRS	Linear Reference System
LSU	Louisiana State University
MAP-21	Moving Ahead for Progress in the 21st Century
MMUCC	Model Minimum Uniform Crash Criteria
MnDOT	Minnesota Department of Transportation
MnGeo	Minnesota Geospatial Information Office
MNIT	Minnesota Information Technology Department
MNLARS	Minnesota License and Registration System
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
NHTSA	National Highway Traffic Safety Administration
OHSP	Michigan's Office of Highway Safety Planning
OTS	Minnesota's Office of Traffic Safety
PRISM	Performance and Registration Information Systems Management
RDETAP	Roadway Data Extraction Technical Assistance Program
RDIP	Roadway Data Improvement Program
SaDIP	Safety Data Improvement Program
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act-a Legacy for Users

SAMHSA	Substance Abuse and Mental Health Administration
SECTOR	Washington's Statewide Electronic Collision & Ticket Online Records
SHSO	State Highway Safety Office
SHSP	Strategic Highway Safety Plan
SP&R	State Planning and Research (funds)
STIP	State Transportation Improvement Plan
TRCC	Traffic Records Coordinating Committee
USDOT|TRCC	US Department of Transportation | Traffic Records Coordinating Committee
VHSA	Vermont Highway Safety Alliance
VTRANS	Vermont Agency of Transportation
WTSC	Washington Traffic Safety Commission

ACKNOWLEDGEMENTS

The project team would like to thank the FHWA project manager Esther Strawder, the NHTSA co-project manager Luke Johnson, and the following individuals who graciously served as Advisory Group members providing invaluable input for this project.

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EXECUTIVE SUMMARY

The U.S. Department of Transportation's Traffic Records Coordinating Committee (USDOT|TRCC) developed this project based on reviews of State's Traffic Records Assessment results, discussions at the annual Traffic Records Forum, and §405(c) grant application reviews. The purpose of this report is to provide State TRCCs with a guide to noteworthy practices for TRCC effectiveness.

The project included input from an Advisory Group including members from State TRCCs, FHWA, NHTSA, and FMCSA. The Advisory Group listed barriers to TRCC effectiveness and practices they each had used to overcome those barriers. At the 2014 Traffic Records Forum, the project team used the TRCC Roundtable sessions to engage participants from TRCCs around the U.S. in a discussion of their own experiences overcoming barriers including:

- **Economic Issues:** those related to funding the TRCC's efforts and managing traffic records and safety-related funding for data quality improvement projects.
- **Political Issues:** those related to interagency, legislative, and agency executive level commitments and awareness of traffic records needs.
- **Technological Issues:** those related to information technology staff's role in the TRCC, project selection, and coordination among multiple planning efforts.
- **Social Issues:** those related to participation by a broad range of stakeholders, communicating the need for traffic records improvement, and the importance of data-driven decision making.

This report includes six case studies drawn from the experiences of TRCCs in Connecticut, Louisiana, Michigan, Minnesota, Vermont, and Washington State. Florida, Massachusetts, and Utah also supplied examples of noteworthy practices highlighted in this report.

The document is intended for use by TRCC Chairs, Coordinators, executive staff, and general TRCC members. It describes the required functions of a TRCC (which may change with future legislation) and the functions that effective TRCCs fulfill beyond the current legislative and grant program funding requirements. The list of noteworthy practices includes:

- **Traffic Records Assessments:** Effective TRCCs help manage this process and are involved in answering questions and providing supporting materials for the sections related to traffic records data management, the TRCC itself, and strategic planning. More importantly, effective TRCCs incorporate the recommendations from the Assessment into the strategic plan in the form of specific strategies, goals, projects, and data quality performance targets.

- **Self-Assessment:** Effective TRCCs spend time reviewing their own effectiveness and identify ways that the TRCC can improve. Noteworthy practices include funding a full time TRCC Coordinator and developing subcommittees tasked with specific advisory roles on key issues.
- **Foundational Documents:** Effective TRCCs have a clear mission and vision. These are shared by all member agencies represented on the TRCC and established cooperatively at the highest levels of the participating agencies. Formal agreements among agencies help to set the charge for the TRCC and give the committee authority for specific actions such as developing a strategic plan, selecting projects for funding, and monitoring project completion.
- **Strategic Planning**: Effective TRCCs *own* their State's *Traffic Records Strategic Plan*. The TRCC sets the update cycle for the plan, deliberates on the plan's contents, and approves the final version of the plan. TRCC members promote the plan in their own agencies and help to make it a statewide resource endorsed by all of the participating agencies.
- **Relationship Building**: Effective TRCCs establish productive modes of communication, reducing conflict and fostering cooperation among the agencies. This reduces "silos" where agencies and the data systems they manage fail to share data. Effective TRCCs purposefully set a tone of respectful communication and build trust through successful interactions among peers.
- **Performance Measurement**: Effective TRCCs accept the role of data quality performance measurement advisors and managers. This role extends to the project level (where the TRCC judges the impact of specific programs on data quality) and the system level (where the TRCC advises on monitoring the timeliness, accuracy, completeness, uniformity, integration, and accessibility of each traffic records resource).

This document ends with a series of recommended practices for TRCCs to follow for improving their assessment, planning, management, and measurement of TRCC and traffic records performance. Appendices provide information about funding and resources, and an example memorandum of understanding.

I. INTRODUCTION

A. PROJECT BACKGROUND

In many States, the Traffic Records Coordinating Committee (TRCC) can benefit from learning about their peer's noteworthy TRCC management successes. These examples can be leveraged to help States update their processes and overcome barriers that adversely impact TRCC effectiveness, such as:

- Poor understanding of the TRCC's mission and the individual representatives' roles in traffic records improvement.
- Insufficient support or attention from upper level managers in State government agencies responsible for the components of the traffic records system.
- Insufficient funding and staff support for the TRCC and its activities.
- Inefficient meetings or meetings that deal with only a subset of the TRCC's responsibilities.
- Adversarial relationships among agencies and among the TRCC members.
- Poor communication of system changes (e.g., newly built roadways not identified in crash or roadway-related systems).
- Inadequate access to other data systems (e.g., files reside in different departments, agencies, or jurisdictions).
- Inadequate training and feedback for consistent data collection.
- Lack of linkages with other databases resulting in duplicate data collection.
- Changes in forms and procedures without adequate communication and review.
- No standardized methods of identifying locations for all roads in the State.

1. **Project Purpose and Tasks.** The USDOT Traffic Records Coordinating Committee (USDOT|TRCC) developed this Traffic Records Coordinating Committee Noteworthy Practices project. The Federal Highway Administration (FHWA) Office of Safety, in cooperation with the National Highway Traffic Safety Administration (NHTSA) Traffic Records Team contracted the project to identify and promote the attributes of successful Traffic Records Coordinating Committees.

   The purpose of the project was to develop a guide to noteworthy practices for State practitioners who manage or participate in a TRCC. The document is intended to help TRCCs become more effective by a) adapting and adopting noteworthy examples in other

States, and b) implementing recommendations based on the noteworthy practices and advice from subject matter experts.

2. **Existing Guidance for TRCCs.** To develop this document, the project team reviewed material from the NHTSA (2012) *Traffic Records Program Assessment Advisory* sections on TRCCs and strategic planning, as well as other sources of guidance, including NHTSA's strategic planning training materials, presentations, reports, and other training resources. The team also reviewed relevant grant program requirements promulgated by NHTSA, FHWA, FMCSA, and other funding sources.[1]

B. METHODOLOGY

1. **Role of the Advisory Group.** The project team established an Advisory Group comprised of practitioners and stakeholder organizations. The Advisory Group assisted the project staff in:

   - Identifying the case study approach and potential State TRCCs noteworthy practices. (See section B.2.)
   - Selecting potential case studies from a list of options presented by the project team.
   - Identifying challenges and barriers for State TRCCs, especially as related to economic, political, technological, and social issues. (See section B.3.)
   - Evaluating the outline and draft versions of this document.

2. **Case Study Approach.** The Advisory Group assisted the project team in identifying States that have successfully implemented TRCCs. Input from TRCC Roundtable sessions held during the Traffic Records Forum and pertinent literature and presentations also identified potential State TRCCs for inclusion in the case studies. The project team contacted nine States. The USDOT|TRCC, with input from the Advisory Group, selected six of these to develop into the case study reports appearing in Chapter III of this document. The project team and participating States collaborated in selecting multiple noteworthy practices to highlight in each case study.

3. **Issues and Barriers to Effective TRCC Management.** The project team identified institutional, organizational, and systemic barriers that obstruct improvements to the various data sources needed to establish and evaluate programs to reduce injuries and fatalities due to traffic crashes. State TRCCs improve communication and may directly address some of the following issues and barriers. For all of the issues listed, the project team prepared a summary of topics discussed during the 2013 and 2014 Traffic Records

Forum TRCC Roundtable Sessions, augmented with input from the Advisory Group. These served as a guide during interviews with the six case study States.

a) ***Economic Issues:*** Economic issues may include funding for the TRCC's own efforts, managing grant funds, and spending available traffic records funds wisely.

b) ***Political Issues:*** Political issues may include negotiating interagency, legislative, and executive level commitments and raising the awareness of decision makers to traffic records.

c) ***Technological Issues:*** Technological issues may include the role of IT staff in the TRCC, coordination of the various strategic planning efforts, and project selection/monitoring.

d) ***Social Issues:*** Social issues may include broadening TRCC participation, getting the message out about traffic safety, and communicating the importance of data-driven decision making.

This noteworthy practices document examines each of these issues and describes practices a TRCC may implement to address them. Examples are drawn from the six case studies, discussions with the Advisory Group, the Traffic Records Forum TRCC Roundtable Sessions, and contributions from States that participated in interviews leading up to the case studies, but were not selected for inclusion as a case study.

C. AUDIENCE

1. **Target Audience.** The primary audience for this document consists of the TRCC coordinators in each State, along with the other State TRCC members, participants, and stakeholders. State agency executives and TRCC sponsors make up another audience for this document as they provide oversight and direction to their States' TRCCs.

2. **Relevance to the Target Audience.** The relevance of this document may differ depending on the role filled by the members of each audience segment.

a) ***TRCC Coordinators:*** The chair of each State TRCC, and any staff who directly support the TRCC's efforts (such as the Traffic Record Coordinator) are people dedicated to making the TRCC—and traffic records improvement—a success. They work to foster effective communication, build coalitions, promote projects, and communicate the need for traffic records improvement. This document provides TRCC coordinators with concrete examples of effective ways to structure and manage a State TRCC. The noteworthy practices will help these TRCC leaders make efficient use of TRCC members' time and help them to foster the most productive cooperation possible for a statewide focus on safety data and analysis.

b) ***TRCC members, participants, and stakeholders:*** These contributors to a State TRCC will find useful examples in this document for encouraging productive meetings and fostering a statewide focus on traffic records data improvement. The noteworthy practices will help these audience members define what they hope to achieve in their State's TRCC and recognize their own role in making the TRCC a success, improving traffic records data quality, and communicating the traffic records improvement needs in their own agencies.

c) ***Agency executives and other top level managers:*** Leadership personnel in State and local agencies may include the data custodians and IT professionals, as well as the agency executives who must ultimately approve the actions proposed by the TRCC. These individuals may also serve on the executive level TRCC and set the vision for the TRCC. This document describes ideal practices and structures for a State TRCC. It also describes common barriers that TRCCs must overcome. Agency executives will find ideas in the noteworthy practices to help them in their oversight and approval roles and in providing the support and leadership that the TRCC needs to be successful.

D. ROADMAP OF THE DOCUMENT

This document is divided into four chapters and one major appendix. The four chapters are:

I) This **Introduction** describing the project and the intended purpose of this document.

II) **Common Practices of Successful TRCCs** providing a conceptual definition of a successful TRCC and describing the methods and structures that best promote success.

III) **Case Studies** providing documentation of the six highly successful State TRCCs and their noteworthy practices.

IV) **Recommendations** providing a summary of all the recommended practices discovered and described during this project.

The **Funding and Resources Appendix** (Appendix A) describes sources of funding commonly used by TRCCs to fund their own efforts and improve traffic records data. The State of Washington's Traffic Records Committee **Memorandum of Understanding** (Appendix B) provides an example of a formal TRCC foundational document.

II. COMMON PRACTICES OF SUCCESSFUL TRCCS

A. CONCEPTUAL DEFINITION OF SUCCESSFUL TRCC

This chapter presents descriptions of successful TRCCs. The purpose is to offer a conceptual definition of a successful TRCC. The conceptual definition is not one size fits all. There is more than one way for TRCCs to be effective, and this chapter presents multiple descriptions of successful TRCCs, with some commonalities. The chapter ends with a discussion of the common practices of successful TRCCs. These are presented as models for a State TRCC's leaders and members to consider for adoption in their own group.

1. **Structure and Management.** The *Traffic Records Program Assessment Advisory* (DOT HS 811 644) (NHTSA, 2012) prescribes a two-tiered TRCC, as follows:[1]

> *The ideal TRCC comprises an executive and technical level. The executive group members hold positions within their agencies that enable them to establish policy, direct resources within their areas of responsibility, and set the vision and mission for the technical TRCC. The executive TRCC's portfolio also includes the review and approval of actions proposed by the technical group.*
>
> *The TRCC's technical group includes representatives from all stakeholder groups and organizations and is responsible – as defined by the executive TRCC – for the oversight and coordination of the State's traffic records system. Together, the two tiers of the TRCC are responsible for developing strategies, coordinating implementation, and tracking progress of programs and projects detailed in the TRCC's strategic plan…*

The Code of Federal Regulations (23 CFR 1200.22) establishes the uniform procedures for State traffic safety information system improvement grants.[2] While the Moving Ahead for Progress in the 21st Century (MAP-21) legislation did not specifically require States to establish a two-tier TRCC, the description of the TRCC's duties encourage States to include agency leaders (decision makers with authority over systems) along with technical level staff and stakeholders from outside the agencies with ownership of the core traffic records data sources. Specifically, the TRCC must have:

- *A multidisciplinary membership that includes, among others, owners, operators, collectors and users of traffic records and public health and injury control data systems; highway safety, highway infrastructure, law enforcement*

and adjudication officials; and public health, emergency medical services (EMS), injury control, driver licensing and motor carrier agencies and organizations.

- *Specific review and approval authority with respect to State highway safety data and traffic records systems, technologies used to keep such systems current, TRCC membership, the TRCC coordinator, changes to the State's multi-year strategic plan, and performance measures used to demonstrate quantitative progress.*

- *[Responsibility for] considering, coordinating and representing to outside organizations the views of the State organizations involved in the administration, collection and use of highway safety data and traffic records.*

These requirements can be met in multiple ways; however, as noted in the NHTSA *Traffic Records Program Assessment Advisory*, States are assessed against the standard of a two-tiered TRCC with the executive level responsible for top level direction and oversight and a technical level responsible for broad, multidisciplinary involvement.[I] As seen in the remainder of this section, some flexibility in that definition is evident in current practice.

Subcommittees of the TRCC

The "ideal" description does not address another common structural feature of State TRCCs—permanent and ad-hoc subcommittees. Permanent subcommittees are established by TRCCs to address issues such as data integration that are specific to a subset of the membership and will remain as issues for the foreseeable future. Ad-hoc committees are often established to bring together subject matter experts charged with making recommendations to the full TRCC on an issue that would otherwise occupy too much time to be practically managed in the usual TRCC meeting context. One example would be the periodic effort to update the crash report. Subcommittees are quite common and often serve to foster participation by individuals who would not otherwise be part of the TRCC.

Examples of State TRCC Noteworthy Practices

In the case studies (Chapter III) and noteworthy practice discussions, several structures are described, each of which work well for their respective State.

For example:

- **Connecticut, Florida, Louisiana, and Michigan each have a one-tier TRCC.** In Florida and Louisiana, the TRCC is best described as a blending of executive and technical levels—both levels participate together without official delineation except in limited circumstances. For example, Louisiana limits voting to a core set of agencies with ownership over traffic records system components. In Michigan the Crash Data Users Group (CDUG) has taken on the functions of a technical committee, but it is not officially designated as such. Connecticut operates differently in that the TRCC is a technical committee but they have access to executive input as needed through the State's Strategic Highway Safety Planning (SHSP) process.

- **Massachusetts, Minnesota, Utah, Vermont, and Washington have two-tiered TRCCs.** The States vary in the responsibilities taken on by the two TRCC levels. In Massachusetts, the executive level meets only to vote on project approval when funding is scarce—if the technical level TRCC identifies funding for all recommended projects, the executive level does not need to meet. In other States (Minnesota, Utah, Vermont, Washington State), the executive level meets on a regular basis and has distinct responsibilities beyond approval of funding requests.

- **Subcommittees are a frequent feature of TRCC structures, regardless of whether the TRCC is considered one-tier or two-tier.** Other than Vermont (an example of a small State TRCC) every TRCC included in the case studies and noteworthy practices discussions uses subcommittees at least on an ad-hoc basis. These function as working groups that come together to address a specific issue for a limited time and then disband once they make their recommendations to the full TRCC. Examples include Louisiana's electronic citation working group and Connecticut's crash report revision working group. Some TRCCs have permanent subcommittees. For example, Washington State established the data integration and eTRIP (a statewide data sharing resource) subcommittees as permanent parts of the TRCC.

Summary of TRCC Structure

One-tier or two-tier TRCCs are both found to be effective, under the right circumstances. Careful review of the six case studies provides convincing evidence that a single-tier, technical level-only TRCC can work (see Connecticut), but that the TRCC in such cases must take on all of the functions normally reserved for the executive level—

specifically the review and approval functions of a TRCC. Moreover, all of the one-tier TRCCs described in this report have access to a higher level executive authority as needed.

The conclusion, based on the examples in the case studies and prior discussions, is that it is most important that TRCCs are able to fulfil both the executive and technical functions described in the MAP-21 legislation (and elsewhere). States would do well to formally establish the authority for those functions within a TRCC structure that is sustainable and fosters engagement by the people involved.

Finally, most TRCCs have yet another operational level—subcommittees or working groups. These may be temporary or permanent in nature, but their role is to narrowly focus on a specific issue and make recommendations to the larger, decision making levels of the TRCC. Rather than specify a new *three-tiered* model of TRCC structure, it would be most useful for States to acknowledge that there are needs that are best met by bringing together a group of technical experts who may or may not be members of the full TRCC to discuss and propose ways to resolve important issues in their domain of expertise. Subcommittee examples discussed in this report include those focusing on data integration, statewide electronic communication standards, and specific tasks such as revisions to data collection forms or software. As will be seen in the next section, TRCCs might also consider establishing performance measurement or data quality management subcommittees to address the need for expert guidance in this TRCC role.

2. **Performance Measurement.** The *Traffic Records Program Assessment Advisory* describes data quality performance measurement review as a function of the TRCC.[1] In each of the core system areas of crash, roadway, driver, vehicle, citation and adjudication, and injury surveillance, the *Advisory* describes a formal, comprehensive data quality management program for the data included in that core area. One of the components of data quality management is performance measurement including periodic reporting to the TRCC. In addition, the TRCCs have a role in reviewing and approving traffic records improvement projects, especially those that are part of the State's *Traffic Records Strategic Plan*. To be eligible for NHTSA's §405(c) State traffic safety information program improvement grant funds, States must demonstrate measureable progress in at least one of the six data quality attributes of timeliness, accuracy, completeness, uniformity, integration, or accessibility.

Examples of State TRCC Noteworthy Practices

- **System-wide data quality performance measurement is still not widely practiced by States.** This observation comes from the case studies and noteworthy practices discussions, but also from recent traffic records assessments and data-improvement projects by NHTSA and FHWA—the Crash Data Improvement Program (CDIP) and the Roadway Data Improvement Program (RDIP). Data quality measurements are found routinely for two core systems, crash and injury surveillance; however, most of the other systems' data quality is not measured or reported. As the one exception described in this report, Michigan's TRCC added their system-wide data quality management role into the strategic plan. At the time of this report, the TRCC is working to develop performance measures for each of the six core traffic records systems.

- **TRCCs exercise responsibility for *data quality* performance measurement at the project level.** TRCCs, by virtue of their role in project selection and management of the strategic plan, may oversee the projects and receive periodic updates on data quality performance. For example, in Louisiana the full time TRCC coordinator is responsible for assisting with grant applications and reporting progress to the TRCC. The Louisiana Highway Safety Commission is responsible for grant management, but works together with the TRCC coordinator to enforce standards for the §405(c) grant applications, including the requirement for data quality performance measurement.

Summary of Performance Measurement

Performance measurement is addressed at the project level, and typically only as part of the requirements for §405(c) (or other) grant funding, where data quality improvement targets and progress reporting is required. While there are relatively few examples of formal management of data quality *by* a TRCC, the State TRCCs do exercise control over project selection and inclusion in the strategic plan—a role that includes review of the project's promised data quality improvements. Cooperation between the TRCC and the State Office of Highway Safety, as in Louisiana, can help to formalize the TRCC's role in project level data quality measurement and oversight. Michigan's approach—that of formalizing the TRCC's role in system-wide data quality management—is the most noteworthy practice. This effort stems from a data linkages project focused on integrating data from five statewide databases. States would do well to adopt a similar approach. Establishing a subcommittee to review, advise, and establish data quality performance

measurement and reporting for all of the core traffic records systems would help State TRCCs accomplish this goal.

3. **TRCC Roles and Responsibilities.** When forming a TRCC, a State must answer the question "What does the TRCC do?" This section addresses the required functions of a TRCC; later sections address the broader roles fulfilled by successful TRCCs. It should be understood that a TRCC meeting the minimum requirements under law and the grant programs would still derive significant benefit from examining their current practices against the noteworthy examples outlined in this report. While obtaining grants is a mark of success for TRCCs, a truly successful TRCC will be effective in the broader areas of activity described throughout this report and not just in securing grant funding.

The MAP-21 legislation and Code of Federal Regulations provide specific requirements related to State's management and oversight of the traffic safety information system improvement grants program.[2] The Federal Register (78 FR 4985) published the rules for Uniform Procedures for State Highway Safety Grant Programs (Federal Rule). The description of §405(c) grant requirements requires that TRCCs:[3]

- Review State highway safety data and traffic records systems and technologies.
- Review membership and the TRCC Coordinator position.
- Participate in the State's multi-year strategic plan.
- Review performance measures demonstrating progress.
- Coordinate with outside organizations involved in collection, management and use of traffic records.

Strategic Planning

The Federal Rule does not strictly require that the TRCC *develop* the State's *Traffic Records Strategic Plan*; however, all of the noteworthy practices and case study States described in this document have assigned that responsibility to the TRCC—usually in cooperation with the State's Highway Safety Office. Moreover, the noteworthy practices of the case study States highlighted in this report go well beyond strategic plan development. In Washington State, the TRCC updates the strategic plan annually, and conducts a major revision process approximately every five years (the last major revision

was in 2009, and 2015 marked the start of a new major revision process). The State combines this annual planning routine with strong follow-through in tracking projects including milestones, deliverables, and performance measures. The *Traffic Records Strategic Plan* should be coordinated with the data improvement section(s) of the State's Strategic Highway Safety Plan and a State's Highway Safety Plan. Strategic plans include projects regardless of funding source so that the plan addresses all traffic records improvements, not just those due to projects funded with §405(c) grant money.

Quantifiable and Measureable Progress

Model Performance Measures for State Traffic Records Systems (DOT HS 811 441) is a source of *data quality* performance measures and a format for reporting data quality improvement.[4] Note that there are other important performance measures recommended for State use (e.g., number of fatalities, fatality rate, etc.) but the TRCC has a clear role in developing and monitoring those intended to measure data quality. States are free to adopt any suitable traffic records data performance measures; however, the Rule strongly encourages States to adopt those described in the Model. While the Rule does not specifically require that a State's TRCC must be involved in measuring and reporting data quality improvements, the Rule references the NHTSA *Traffic Records Program Advisory and Assessment*, which (as noted earlier) does include a specific role for State TRCCs in a formal, comprehensive data quality management system. Under that guidance, State TRCCs should, at a minimum, receive periodic reports of data quality improvement progress for all of the core traffic records systems.

Traffic Records System Assessment

The Federal Rule describes a five-year cycle for updating a State's traffic records assessment, and requires that the State list *and describe how it addressed* each of the recommendations in its most recent traffic records assessment. Based on discussions in the Traffic Records Forum TRCC Roundtable sessions, States meet this requirement in two ways: 1) by inclusion of the required list in the §405(c) funding request, and 2) by direct reference to the recommendations in the strategic plan. Thus, the TRCC has a role in addressing the assessment recommendations because it selects the projects that go into the plan, and that are submitted as part of the State's §405(c) application. The State Highway Safety Office is given the responsibility for submitting the package of information to NHTSA, but the TRCC has a central role in producing the lists of projects and the strategic plan that make up the core of that submittal.

Beyond meeting the requirements for §405(c) grant applications, a well-functioning and fully representational TRCC is also tremendous asset to a State undergoing an assessment. The TRCC should be the first stop of the State's assessment coordinator as he or she works to identify appropriate respondents for the assessment questions. When a TRCC enjoys active participation from all six system areas, this task is made much easier and the resulting assessment report of significantly higher quality.

Examples of State TRCC Noteworthy Practices

The preceding sections describe *required* roles of the TRCC for States seeking §405(c) grant funding. Any State may assign additional roles and responsibilities to its TRCC based on agreement among the participating agencies, or decisions taken at the executive level (for example, in setting the charter or mission for the TRCC). Notable examples of additional roles and responsibilities include:

- Minnesota's TRCC has assumed control and management responsibility for the statewide crash records system. With the approval of the State Department of Public Safety, the TRCC negotiated with the Division of Motor Vehicles to allow the TRCC to manage the crash system upgrade project including appointing a project leader, selecting a contractor, updating the data elements for field data collection, and establishing data standards.

- A subcommittee of the Washington TRCC is responsible for making operational decisions on statewide electronic citation and crash data. Through a combination of executive and technical participation, the subcommittee provides policy oversight, program direction, funding and cost sharing, implementation, maintenance, update and enhancement for the State's Electronic Traffic Information Processing (eTRIP) system. This subcommittee has developed projects for hardware acquisition, training, and software development.

4. **TRCC Interaction with Other Planning Efforts and Groups.** In the examples drawn from Traffic Records Forum TRCC Roundtable discussions and the case studies provided in this report, every TRCC is responsible for developing and approving their State's *Traffic Records Strategic Plan*. States engage in other strategic planning efforts, some of which have obvious relevance to traffic safety information systems and traffic records data quality. The SHSP is required under MAP-21. FHWA has published guidance (http://www.fhwa.dot.gov/map21/guidance/guideshsp.cfm) to help States meet the SHSP requirements including:

- **Consultative Approach:** The SHSP must be developed with input from a multidisciplinary group of stakeholders and be based on shared safety data and information systems.

- **Coordination:** The SHSP must be consistent with other plans developed by the State. This section does not explicitly mention the *Traffic Records Strategic Plan*; however, the intent is clear that all safety-relevant planning should be coordinated.

- **Data Driven Safety Analysis:** States are required to review a list of safety factors when they identify their SHSP emphasis areas. The intent is that the problems identified in each emphasis area be described numerically— this requires traffic records data.

- **Performance-Based Approach:** States must also track, using performance measures, the success in achieving their plan.

Addressing these SHSP requirements has led States to better recognize the value of including traffic records data quality in their planning. The *Traffic Records Strategic Plan* addressing data quality can be included in the SHSP as part of a "data" emphasis area. Alternatively, the State may choose to address data quality in each emphasis area of the SHSP. For example, a State may identify roadway departure crashes as an emphasis area and include among the strategies to address that problem an effort to improve the accuracy and completeness of data about roadway departure crashes.

Examples of State TRCC Noteworthy Practices

Several States have developed coordinated planning efforts. The following examples are drawn from the case studies included in this report and discussions at conferences including the Traffic Records Forum:

- Michigan and Vermont both charge the TRCC with an explicit role in coordinating planning efforts. In Michigan, the TRCC is an action team within the State's SHSP management structure. The SHSP includes the *Traffic Records Strategic Plan* as part of the data emphasis area. In Vermont, a small State in which committee membership often overlaps, the SHSP and *Traffic Records Strategic Plan*s are developed by the same individuals.

- California funded a project aimed specifically at coordinating and reconciling differences between their SHSP and *Traffic Records Strategic Plan*. This project

included facilitated meetings bringing together TRCC members and SHSP committee members in joint sessions, followed by release of a report and final plan that incorporated input from both sources.

Summary of TRCC Interaction with Other Planning Efforts and Groups

The most notable examples of coordination are between the TRCC's strategic planning efforts and the SHSP effort. The requirements under MAP-21 do not explicitly require States to create links between the two efforts; however, this coordination is especially helpful for States that wish to address data quality among the strategies presented in the SHSP. In its MAP-21 Guidance, FHWA recommended that States develop MIRE Fundamental Data Element implementation plans and include those plans in the State's Traffic Records Strategic Plan. Noteworthy State TRCC examples of successful coordination are based on joint committee membership, incorporation of the TRCC within the SHSP committee structure, and purposeful coordination through joint meetings of separate TRCC and SHSP committees.

B. COMMON PRACTICES OF SUCCESSFUL TRCCS

This section presents information on how effective TRCCs manage their activities and focuses on developing the organization in ways that promote effective collaboration among technical experts and upper level decision makers.

1. **Dedicated Support.** The States included as case studies in this document have each developed methods of directly supporting the TRCC with staff, funding, and, in some cases, a full time TRCC chair. Examples include:

   - **Connecticut and Florida hired contract staff to support the TRCC.** Connecticut hired a highly experienced consultant under a long-term agreement to provide meeting facilitation, meeting coordination, and strategic planning assistance. The State's traffic records program manager works closely with the contractor to support the TRCC and manage traffic safety information improvement grants. Florida has a similar arrangement with a contractor dedicated to TRCC support who also assists in monitoring projects funded through §405(c) grants.

   - **Louisiana, Minnesota, Utah, and Washington hired a full time TRCC Coordinator.** In Louisiana, a staff person in the LSU Highway Safety Research Group (HSRG) serves as the full time TRCC Coordinator. This is a grant-funded position within the university-based research group that is responsible for the

State's crash data management and traffic records data integration. Louisiana has selected HSRG to lead crash data management and a large portion of the traffic records system management and support. This is a long-standing contractual relationship that has expanded over the years from manual crash data entry to the lead management role HSRG performs today. The Coordinator provides direction, oversight, and coordination of the *Traffic Records Strategic Plan* and supports TRCC activities such as scheduling and facilitating meetings, preparing information for members, and establishing subcommittees of the TRCC. The Coordinator works with potential grantees to assist with data gathering, completing the application, and presenting information about proposed projects to the TRCC members. In Minnesota, the Department of Public Safety, Office of Traffic Safety (OTS) created a full time position combining the duties of TRCC Coordinator and TRCC Chair. The Coordinator manages projects and serves as a point of contact overseeing all NHTSA grants and preparing the *Traffic Records Strategic Plan*. The position is part of the OTS leadership team and duties include handling media and legislative requests related to traffic records and safety data. Washington State created a full time TRCC Coordinator with similar duties to those described for the Coordinators in Louisiana and Minnesota. In addition, Washington's TRCC is explicitly responsible for relationship building and resolving disputes among stakeholders.

2. **Clear Purpose and Well-Defined Roles.** TRCCs can be self-directed or have their purpose and role defined by upper level managers in the stakeholder agencies (i.e., by the executive TRCC). The *Traffic Records Program Assessment Advisory* says that "the ideal TRCC is— at both the executive and technical level— formally chartered by memorandum of understanding [MOU], charter or other foundational document that describes the powers and duties of each as specified in enabling State legislation."[1] In practice, States do not establish their TRCC as a result of enabling legislation, but rather by agreement among the agencies that have ownership of the core traffic records system components. The MOU or charter then lists the authority under which each participating agency enters into the agreement. Foundational documents are those which establish the TRCC and charge the committee with specific responsibilities. The following examples show how an up-to-date State TRCC charter or MOU can help members and leaders work toward common goals.

   - **Washington State updates the MOU annually and publishes it online**. The MOU for Washington's Traffic Records Committee lists the nine participating agencies, explains the importance of their shared responsibilities for traffic records

data, describes the purpose of the committee, sets the committee's mission, goals and operational authority, and establishes the two-tiered organizational structure. The responsibilities of the executive and technical TRCC committees are listed individually. Member agencies are listed along with the process for appointing a representative to the TRCC. The MOU includes a formal process for replacing members who fail to attend meetings on a regular basis, and for adding members from newly identified stakeholder agencies. The director of each participating agency signs the updated MOU each year. Washington State uses the MOU update process to refresh the agency directors' understanding of the importance of the committee's work and to reinforce the ideal of inter-agency cooperation. Washington State's MOU appears in Appendix B.

- **Michigan updates the TRCC charter annually along with the strategic plan**. The Michigan strategic plan and Charter are treated as one document which is updated annually to coincide with the NHTSA grant cycle. The goal of including a charter update in the strategic plan sign-off process is to refresh agency executives' understanding of the purpose of the TRCC and of the strategic plan. The document is also used as part of orientation for new members since it provides the vision and mission of the TRCC along with a description of the importance of each component of the traffic records system.

3. **Ownership Among Participants.** TRCC members are stakeholders in traffic safety and in traffic records data. They are the data collectors, managers, and users of traffic safety information. Throughout the noteworthy practices discussions during the Traffic Records Forum TRCC Roundtables, and in the discussions with the States providing case study and noteworthy practices material for this report, it was clear that foundational documents establishing the TRCC are necessary for success, but not sufficient to guarantee it. Participants need to be "engaged" in the work of the TRCC. As individuals representing an agency they need to understand why they are there, and what the benefits are to sharing their agency's plans and its resources in an attempt to improve *all* of the State's traffic records systems, not just the ones that they or their agency manage. The following examples show how TRCCs have developed the necessary sense of ownership among the member agencies and their representatives.

   - **Minnesota and Washington State TRCCs have ownership of systems and projects**. As noted earlier in this report, the Minnesota TRCC has taken control of the crash records system upgrade, and Washington's eTRIP system is managed by a standing subcommittee of the TRCC, the Operations Governance Team. Both of these efforts are recognized within their respective TRCCs as a

core activity that is necessary for safety decision making. In Minnesota, the crash records system upgrade was stalled behind other high priority projects and the TRCC agreed as a group to take on the responsibility for the contract so that this critical need could be met in the near term. As a result, the people who care most about the crash data have a direct say in how the upgrade is managed. The TRCC chair is the project lead. In Washington, eTRIP is the backbone for all traffic-related data reporting, including the electronic citation and crash systems. It is a partnership among State and local agencies and the individuals serving in the subcommittee are empowered to develop new projects using the eTRIP structure. They worked together for several years to plan and develop the Statewide Electronic Collision & Ticket Online Records (SECTOR) program.

- **Vermont's TRCC implemented a coordinated approach to crash records improvement project management.** The Vermont TRCC developed an understanding of the interdependence among several projects aimed at improving crash data and its utility for highway safety analysis. By considering all of the projects as part of a cohesive whole, Vermont was able to take advantage of interdependencies among several crash data improvement projects. They have developed a plan that coordinates web-based crash reporting, new software interface design, an all-public-roads linear referencing system, a map-based location coding application, interfaces with local law enforcement records management systems, and secure wireless data transmission for law enforcement. Each of these projects were worthy of TRCC support on their own, but when packaged in a plan that coordinates the delivery of capabilities, the combination helps the State's law enforcement agencies and the State DOT extract the maximum benefit in the shortest time possible. The coordinated plan also helps the State sequence the tasks in multiple projects to avoid delays waiting for necessary precursor tasks to be completed.

- **Connecticut TRCC led the State to adopting all-electronic, highly MMUCC-compliant crash data reporting, and integrated law enforcement system development.** The TRCC voted to promote near 100 percent compliance with the Model Minimum Uniform Crash Criteria (MMUCC) guideline (4th Edition) and pressed the State DOT to revise the crash records system.[5] The DOT subsequently adopted the TRCC's plan and expanded it to include a Business Plan for all law enforcement data (crash, citation, contacts, crime reporting, etc.). Ultimately, the DOT worked with the TRCC, FHWA, and

NHTSA to fund an electronic crash reporting system and State crash database update that entered implementation in January, 2015.

- **Louisiana TRCC created and managed an EMS run reporting system.** In partnership with the Louisiana Emergency Response Network (LERN) and the LA Ambulance Alliance, the TRCC purchased laptop computers for installation in ambulances throughout the State. As part of this agreement, the TRCC gained an advisory role in EMS data quality management and established a subcommittee charged with making recommendations on integrating EMS injury severity data with crash reports.

These examples demonstrate ownership by TRCCs of specific projects. They also serve to illustrate how a TRCC can take on leadership roles as an equal partner with the agencies that have, by legislation, custodial responsibility for traffic records system components.

4. **Cohesion/Trust.** The kinds of successful project management opportunities described in the preceding section cannot happen without strong interagency cooperation and trust. Throughout the discussions with State TRCC members at the Traffic Records Forum and elsewhere, the existence of "silos" was a frequent topic of discussion. Silos occur when related systems cannot easily share data *and* when the system's owners fail to cooperate with each other in finding ways to share data. Foundational documents and a clear charge to the TRCC members to work in the best interests of the State help send a message that the TRCC should work cohesively to bring about traffic records system improvements. Dedicated TRCC leadership and support helps make the TRCC effective when it takes on larger scale projects. Examples of successful project development and management *by* the TRCC foster energy and commitment among the members. The following examples show how TRCCs can encourage cohesion and trust among the members.

    - **Washington Traffic Safety Commission (WTSC) acts as a neutral party and specifically takes on the conflict resolution role in the TRCC.** The WTSC does not own or manage *any* of the traffic records system components. They support the TRCC with a full time TRCC Coordinator and with support for grantees developing funding requests and monitoring progress on funded projects. The TRCC Coordinator's job explicitly includes fostering cooperation among the member agencies and resolving disputes as they arise. Because WTSC serves as an "honest broker" in the traffic records and safety decision making efforts of the

State, the stakeholder agencies have come to trust their advice and direction.

- **Michigan foundational documents and strategic plan point TRCC members toward cooperative action.** As noted in the earlier section, the Michigan *Traffic Records Strategic Plan* and TRCC Charter are one document, updated annually. One additional aspect of this unified approach is that the TRCC members see readily and precisely how their agency fits into the larger picture of safety data and decision making. The traffic records system is described as a whole system rather than a series of pieces, and that system's importance in the State is emphasized. As a result members feel that their efforts in the TRCC are aimed at the best statewide impact and that they are not merely there "in name only" but are charged with creating a system that supports safety decision making processes.

5. **Safe Space for Resolving Conflict.** Among the barriers listed by TRCC members in the Traffic Records Forum TRCC Roundtable discussions is the negative, non-constructive criticism that is sometimes heaped on data owners when their systems do not perform up to the expectations of data collectors and users. With volunteer organizations—even with upper management support—cooperative action and trust are difficult to achieve when some members feel put upon or when they meet with abuse rather than helpful understanding. Several of the case studies highlight "relationship building" as a key source of success in the TRCC. The following examples show how deliberate, focused action by the TRCC Coordinator and Chair can create an atmosphere of mutual respect. This in turn helps nurture the cooperation needed to build trust.

   - **Minnesota's TRCC Coordinator consciously sought to promote more constructive discussions.** When the Coordinator was hired, the TRCC had fallen into inactivity and one of the key TRCC members was threatening to stop sending a representative because they felt as if every meeting became an opportunity for the other members to complain about their systems. Without knowing in advance what would be discussed, that agency's representative felt ambushed by the (even legitimate) complaints of the other members. To improve the situation, the Coordinator polled each member prior to the meetings to determine if any difficult or contentious topics were likely to come up during the meeting. She then contacted the member who would have to respond to those comments and help that person to prepare for the meeting. As a result, the meetings became more productive because the lead agencies came prepared to discuss problems raised by other members, and the Committee became focused

on resolving rather than merely discussing problems.

- **Vermont developed an environment that brings together IT staff and project managers.** Vermont has for many years faced several information technology (IT) problems with its traffic records system components, particularly with crashes. The TRCC members have, typically, on a moderate level of IT knowledge and yet many of the topics at the meetings revolved around IT-related solutions. The Traffic Records IT project manager/Coordinator was invited to attend the TRCC meetings and, more importantly, was given time to research answers to specific questions that TRCC members posed. The TRCC members and the IT Coordinator have developed a good working relationship such that members can ask questions without fear of criticism, and the Coordinator can provide answers without getting bogged down in the technical details. In a broader sense, the TRCC is also using technology to promote more effective meetings. Materials are posted to a SharePoint where members may obtain meeting minutes, agendas, documents to review, funding applications, and other information prior to each meeting. This helps to move the meetings forward at a more rapid pace, and gives all members equal access to the information.

- **Michigan TRCC includes the statewide IT agency staff.** Michigan's TRCC has also benefited from IT involvement. In particular, the TRCC serves as a means for the IT staff to learn about traffic records and for the traffic records practitioners to learn about the needs of their IT staff. Michigan has a statewide IT department that serves all agencies and staffs the IT needs for each of the traffic records system components. Investing in IT involvement in the TRCC thus brings traffic records issues and understanding up to the decision making level of the statewide IT utility. In recent years, the IT agency's representatives on the TRCC have taken the lead in promoting traffic records data integration projects. Their presence on the TRCC has enabled the committee to take on large-scale, multi-year projects.

- **Washington Traffic Safety Commission sponsors external meeting attendance by TRCC members.** WTSC funds travel for up to 12 representatives from 6 agencies to attend the Traffic Records Forum. WTSC also conducts a statewide Traffic Safety Conference drawing participation from law enforcement, prosecutors, public health, engineers, and the private sector. Each year's topics are updated to include new technologies, changes in laws and recent court proceedings, and other emerging topics. The WTSC sees these external

meetings as an opportunity to build cohesion among the TRCC members and other stakeholders in the State and to foster the statewide perspective on traffic records improvement.

- **Connecticut surveyed members and adopted a "bottom up" approach as part of a refresh of the TRCC.** Beginning in 2007, the Connecticut DOT sponsors recognized that the TRCC was not working as well as it should. The TRCC's supporting consultant reached out to members to ask why they were no longer attending and many said that they saw little progress and thus little point in continued participation. As the State worked to meet MAP-21 requirements for data-driven decision making in a performance-based environment, the DOT realized that the TRCC needed to become more active. As part of this process, the consultant and the DOT sponsors worked to identify the best possible representatives for each of the member agencies, focusing on individuals who would be most likely to serve as champions for traffic records improvements in their own agencies. Next, the TRCC leaders focused on delivering notable accomplishments in order to demonstrate the importance of the TRCC and member involvement. As a result, when new projects are taken on by the TRCC, members are confident that the group has the experience and authority to see them through to completion.

C. SUMMARY: ADDRESSING BARRIERS

The introductory chapter introduced a classification of barriers faced by TRCCs. These include economic, political, technological, and social issues. In this summary, the characteristics of successful TRCCs are described in terms of how they address these barriers.

1. **Economic Issues.** Each of the TRCCs described in the case studies and noteworthy practices funds TRCC activities using NHTSA grants. §405(c) and §402 grants are two sources States have used to hire consultants, pay for full time TRCC coordinators, and manage activities of the TRCC. Examples of this include Connecticut, Florida, Louisiana, Minnesota, Utah, and Washington. Providing staff or consultant support to the TRCC has, in these States, helped the TRCC establish stable leadership, demonstrated the State's commitment to the TRCC and its role in producing State-centered strategic plans, managing traffic safety information system funding (§405(c) grants), and building the relationships and trust needed for cooperative action among participating agencies.

Additionally, the case study States use their TRCCs to make important decisions about how available funds are used. In cooperation with the States' highway safety offices, the TRCCs are given the charge to make recommendations, solicit projects, prioritize project proposals, and monitor projects' success. In several of the States included as case studies, the TRCC is leading the way in performance measurement and management in part because of this role in project selection and monitoring. In some of the States, the full time TRCC Coordinator is tasked with assisting grantees with applications and in one State (Minnesota) the Coordinator is also the contract manager for a major project. These responsibilities go well beyond the advisory role and fulfill the MAP-21 description of a TRCC with decision making authority.

2. **Political Issues.** The Traffic Records Forum TRCC Roundtable Sessions have included several discussions of the need for traffic records awareness among top level decision makers. Some of the TRCC noteworthy practices highlighted in this report manage this based on their structure. For example, Louisiana's TRCC is an executive committee with decision makers who have spending authority present at all of the meetings. Others, like Washington, address this issue by vesting power in an "honest broker" tasked specifically with fostering cooperation among the stakeholders. Minnesota provides an example of a third way of addressing these issues. There, the TRCC had the interest and will to take on an important project that was stalled behind other top level priority projects. In effect, the TRCC stepped in to solve a problem for the crash data custodian. It found the money to complete the work, and sold the idea of TRCC control over the crash data update within the State and the NHTSA regional office.

3. **Technological Issues.** The noteworthy practices described in this report related to technological issues center on the role of IT professionals in the TRCC. Vermont and Michigan provide examples of TRCCs that have multiyear histories of IT participation, and the purposeful manner in which the TRCCs have engaged their IT members. In Vermont, IT involvement includes a conscious effort to address TRCC members' questions in a non-threatening way that also allows the IT representatives the time they need to research and provide definitive answers to those questions. In Michigan, the IT staff has led the way in promoting large, multiyear projects and in promoting data integration. In Louisiana, the TRCC Coordinator is part of the same university-based research group that provides IT services in support of the crash system, statewide safety data reporting, and data integration efforts. Another way TRCCs have dealt with technological issues is by sponsoring conference attendance by TRCC members. In Washington, the WTSC pays for members to attend the Traffic Records Forum and puts on an annual traffic safety summit specifically designed to address emerging issues, including those related to new technology. TRCCs can also assist in technological issues by encouraging the system

owners to make documentation available, and by supporting creation of a traffic records system inventory

4. **Social Issues.** Throughout the Traffic Records Forum TRCC Roundtable discussions and the interviews for the case studies presented in this report, the TRCC members and staff reinforced the idea that one reason for success is relationship building. Cooperation and trust are keys to progress in traffic records improvement because so many of the issues impact multiple agencies. Silos, where the traffic records system components do not share data easily, are both a technological and a social barrier. The technology exists to build systems that interact seamlessly, but the responsible agencies have to be willing to share decision making authority in planning the future of their systems. Some States, like Michigan, resolve the issue by putting all the IT functions in a single statewide agency and then charging the IT staff with leading the charge for more efficient data system practices, including data integration. Even in such settings, the data system owners must be willing to participate in joint planning exercises like the *Traffic Records Strategic Plan* and the SHSP. Foundational documents such as a Charter or MOU help agencies to recognize their joint responsibility for all of the traffic records system components. Michigan and Washington refresh their foundational documents annually, in part to serve as a reminder to agency leadership that the TRCC is an important resource worthy of their agency's investment. The case studies from Washington and Minnesota also serve as examples of how purposeful engagement in conflict resolution and careful meeting planning can help to address social issues that otherwise might undermine the cooperation and trust required for joint decision making.

III. CASE STUDIES

States are taking steps to address barriers to an effective TRCC by developing new directives, documentation, and instructions, and by promulgating new tools and standards for crash and other data reporting systems. This section of the report will include case studies of efforts used in some States to transform the existing culture, including implementing incentives; overcoming disincentives; educating and training the decision makers, users, and providers of data; and implementing new processes to overcome barriers.

A. CASE STUDY 1: WASHINGTON

Introduction

The Washington Traffic Records Committee (TRC) has a two-tier structure made up of an Oversight Council (executive level) and Traffic Records Workgroup (technical level). The TRC was formed in 2004 under direction from the Office of the Governor. This is a formal organization governed by Memorandum of Understanding with nine signatory executives from State organizations representing the six core data systems. A staff member from WTSC acts as the full time Traffic Records Coordinator and is responsible for TRC coordination. The TRC is funded entirely by §405(c) State traffic safety information system improvement grant funds and has oversight responsibilities for approximately $750,000 annually. The TRC's general rule is to limit project funding to three years with the intention of moving the project to either completion or more sustainable funding resources.

Structure

The Oversight Council provides policy oversight, approves strategies and projects, and annually evaluates progress towards implementing the traffic records strategic plan. This committee includes executive representatives from WTSC, Washington Office of the Courts, Washington State Patrol, Washington State Department of Transportation, Washington State Department of Licensing, County Road Administration Board, Washington State Department of Health, and Washington Association of Sheriffs and Police Chiefs. The Oversight Council meets four times a year. The Traffic Records Workgroup and Oversight Council develop the strategic plan jointly and the Oversight Council approves the final document.

The Traffic Records Workgroup creates, coordinates, and implements improvement projects. There are 16 Workgroup members representing seven of the Oversight Council agencies and the State Office of the Chief Information Officer. Representatives are appointed by the Oversight Council member from their respective agency. US Department of Transportation

representatives are appointed from the regional or division level of their respective agencies and are non-voting members. Meetings occur almost every month.

Noteworthy Practices

The following noteworthy practices of the Washington TRC exemplify successful practices of Traffic Records Coordinating Committees:

1. *A two-tiered structure creates opportunities for focused workgroups* – The Washington TRC implemented a two-tiered structure in 2004. The Oversight Committee serves as the Executive Level Committee, the Traffic Records Workgroup is the technical level committee, and project-specific workgroups and subcommittees are established on an as needed basis.
2. *High level membership on the Oversight Committee and Traffic Records Workgroup* – High level representation at the decision making level have the authority and access to quickly make policy level decisions and move projects forward.
3. *Recognition and support from the highest level of the State government* - Representation from the division director and manager level has increased the exposure of and respect for the TRC from the State governor.
4. *An emphasis on building relationships and open communication* – Washington emphasizes the importance of strong relationships for the success of the TRC and accomplishes this through several strategies.
5. *Excellent strategic planning abilities and follow-through* – The Washington TRC strategic plan is updated annually and fully revised on a five year cycle. It includes a Project Portfolio that tracks progress towards the plan.

Noteworthy Practice Descriptions

Noteworthy Practice #1: Two-tiered structure

The Oversight Committee was established in 2004 to serve as the executive traffic records committee. Meetings occur quarterly. The Oversight Committee is responsible for approving the traffic records strategic plan, approving traffic records projects, and providing general oversight and policy direction. The Traffic Records Workgroup is the technical traffic records committee. It is responsible for reviewing the projects and making recommendations to the Oversight Committee.

There are two standing subcommittees that fall under the Workgroup: data integration and eTRIP. The Data Integration Team was created in response to the *2009 Traffic Records Assessment* recommendation that Washington integrate collision and injury data to derive more precise injury outcomes. This recommendation was supported by the discovery of disparities between officer assessments of personal injuries on collision report forms and actual injury assessment by EMS- and hospital-based health care providers. This project established a temporary position at WTSC to acquire and link datasets, manage the resulting dataset, and conduct in-depth analyses. Once the links were established, the position was no longer needed.

The Electronic Traffic Information Processing (eTRIP) Operations Governance Team is a very active subcommittee based on the need for continual technical coordination among partner agencies. The eTRIP program is a collaboration between State and local agencies working to create and manage a seamless and integrated system for traffic-related information. The subcommittee is responsible for making operational decisions on electronic citation and crash data (eCitation and eCollision) and resolve the issues between the systems. This subcommittee is composed of two groups. The Executive Leadership Team is responsible for policy oversight and program direction, including funding proposals and cost sharing initiatives. The Business/Technical Managers team holds primary responsibility for implementation, maintenance, updates, and enhancement of eTRIP, including administrative and technical guidance, and providing updates to the Executive Leadership Team.

The eTRIP subcommittee worked for several years to plan and develop the Statewide Electronic Collision & Ticket Online Records (SECTOR) program The subcommittee developed projects to support the eTRIP program including: hardware acquisition for local law enforcement; local law enforcement SECTOR implementation support; SECTOR training administrators; SECTOR enhancements, based on eTRIP Governance Team priorities; SECTOR Law Table for Municipalities; SECTOR prosecutor training; and SECTOR implementation. Project management is divided amongst Washington Association of Sheriffs and Police Chiefs, WTSC, and Washington State Patrol.

Topical workgroup meetings are held throughout the year and often lead to the formation of ad hoc subcommittees. Each subcommittee is responsible for the technical work and project implementation in their assigned area. They set their own meeting schedule and report back to the Workgroup at least once per year. Members include both TRC representation as well as subject matter experts from outside of the TRC.

Noteworthy Practice #2: High level membership

Washington TRC enjoys representation from high level positions within State government. The Oversight Committee is composed of upper level managers that are just one or two levels below their agency's Secretary. When issues reach the Oversight Committee, the members have the decision making authority to address them by committing staff, funding, or other resources. Members at this level can commit their agency to cooperative action with other State agencies. A separate level of approval is not required so the TRC can act quickly upon reaching consensus.

Traffic Records Workgroup members come from the manager level. Workgroup members are often able to resolve issues at their level without needing to bring them to the Oversight Committee. If the Traffic Records Workgroup is unable to solve an issue, they ask the Oversight Committee to use their resources to find a resolution.

This structure has resulted in a relative lack of technical subject matter experts participating. The standing and ad-hoc subcommittees are one way that the State has found to bring in more involvement at the non-managerial level. The TRC is exploring ways to involve more technical level people in the future.

Noteworthy Practice #3: Recognition and support

High level representatives on the Oversight Committee and Traffic Records Workgroup have proven to be important advocates for traffic safety issues statewide. TRC members vigorously defended the funding for an electronic messaging component that supports data sharing among multiple citation and collision records systems. With WTSC coordination, TRC members prepared presentations and briefings to agencies' upper managers. Once the Governor's office moved forward with funding, the eTRIP Operations Governance Team was tasked to continue their involvement and provide a report on the long-term efficiencies of the program. This was the first time that the TRC and the traffic records strategic plan were referenced directly in the Governor's annual budget.

Noteworthy Practice #4: An emphasis on the importance of relationship building and open communication for the success of the TRCC

When the TRC was first formed in 2004, State agencies operated independently and autonomously from other agencies. The WTSC is viewed as a bridge among all State agencies. Safety is clearly stated as a mission of the WTSC and they are respected as an agency that

builds trust and cohesion. As the leader and support staff for the TRC, the WTSC recognized their role in demonstrating to TRC members how agencies could operate together.

The TRC charter was the first step in defining the roles and responsibilities of the member agencies and created ownership and buy-in. The charter established a culture of mutual respect and established the standard that meetings serve as an open environment where all participants feel comfortable sharing their thoughts, project ideas, and problems (view the charter here: http://trafficrecords.wa.gov/wp-content/uploads/2014/09/TRC-MOU-September-2014.pdf). The Traffic Records Coordinator acts as a mediator and facilitator at the meetings, as well as a project manager who coordinates the meeting logistics and agendas. Housed under the WTSC, the Traffic Records Coordinator position is unique because the WTSC does not control any of the six core traffic records data systems or their components. When issues arise, the Coordinator organizes meetings between the parties, and facilitates the conversation toward resolution. The Coordinator builds the relationships based on the WTSC's recognized interest in helping agencies find mutually acceptable solutions. Where needed, the WTSC also provides financial support.

TRC relationships are also built and strengthened through the technical work in the Workgroup and subcommittees. Projects require TRC members to meet in person and work through issues together. And, project leaders have the responsibility of setting meetings and building the trust among small groups in the subcommittees in order to move projects forward.

External meetings are also important to building TRC cohesion across the State. Since 2006, Washington has sent up to 12 representatives from 6 agencies to the annual ATSIP Traffic Records Forum. The Traffic Safety Commission is also responsible for conducting a statewide Traffic Safety Conference that draws all agencies related to traffic safety, including law enforcement, prosecutors, public health, engineering, and private sector partners. The meeting centers on new technologies, changes in recent court proceedings, and any other relevant and emerging topics. This meeting is paid for using §402 funds and attracts approximately 30 people from different sectors and agencies.

Noteworthy Practice #5: Excellent strategic planning abilities

The Washington TRC's traffic records strategic plan is updated annually and is fully revised every five years. With the last major revision in 2009, the TRC began working on the next full update in 2015. The plan includes a Project Portfolio, which is an operational plan tracking the execution of each task and project described in the strategic plan. The traffic records program manager in the WTSC is responsible for detailed project tracking in addition to updates to the summaries in the Project Portfolio. For detailed project tracking, all project descriptions include

lists of milestones, deliverables, and performance measures. These details establish the expectations for project managers and contract requirements. The TRC receives project updates once a year, at a minimum.

§405(c) funding is used to support all direct costs for Washington TRC-approved and managed projects. While the intent is to limit project funding to three-year cycles, some worthwhile projects have received continued funding through State agencies working together to pool resources. TRC members are very engaged in monitoring and maintaining an awareness of projects that impact traffic records and many provide supporting resources, such as administrative oversight and project support, which maintain project momentum.

Summary

The emphases on relationship building and participation from high level representatives have been the driving forces behind the noteworthy practices in Washington. Involvement from division directors and management level representatives have increased the visibility of the TRC, and successful collaborations and problem solving among committee members have contributed to the TRC's recognition as a leader in traffic safety and data management in the State.

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B. CASE STUDY 2: VERMONT

Introduction

Vermont is a successful two-tier TRCC in a small State. The TRCC is made up of an Executive Committee and a working level committee. Membership includes representatives of the Vermont Highway Safety Alliance (VHSA), the organization responsible for the Strategic Highway Safety Plan (SHSP). The overlap between TRCC and VHSA membership integrates the TRCC strategic planning and VHSA SHSP efforts seamlessly. The two groups have worked collaboratively in several ways, including a comprehensive campaign to reduce crashes on the US 4 corridor between Bridgewater and Hartford.

Structure

The TRCC Executive Committee is composed of seven members, including executives from the Vermont Agency of Transportation (VTRANS), Department of Motor Vehicles, Department of Public Safety, Department of Health, Department of Information and Innovation, Office of Judiciary, and the director of the Governor's Highway Safety Program. This is a formal committee, with a Memorandum of Understanding established between the seven member agencies. The Executive Committee meets annually with the option for additional meetings as needed or as requested by the working level TRCC.

The working TRCC has 32 members including data analysts and specialists, planners, project managers, law enforcement, as well as program directors and administrators. This committee is less formal than the Executive Committee, with no official documentation required for membership. The committee meets quarterly and attendance generally ranges from 10 to 20 people. The working committee reviews project submissions and decides which projects are put forward for funding.

Noteworthy Practices

The Vermont TRCC has several noteworthy practices, including the following:

1. *A two-tier TRCC built upon trust and ongoing relationships* – Vermont is an example of a successful two-tier TRCC structure in a small State.
2. *Information Technology (IT) involvement provides critical subject matter support* – Involvement from IT subject matter experts and vendors contributes to the success of the committee and fills the knowledge gaps of other TRCC members.

3. *An understanding of data awareness resulted in a primary focus on crash data*– TRCC members have an acute awareness of the importance and interconnectedness of data systems and have implemented many successful crash data improvement projects.
4. *Meetings are designed to elicit conversation and collaboration* – The Vermont TRCC has established a meeting environment that encourages attendees to ask questions, work collaboratively, and move beyond a silo approach to work.

Noteworthy Practice Descriptions

Noteworthy Practice #1: Two-tier TRCC

The two-tier TRCC has worked well in Vermont due to the trust between the Executive Committee and working committees. All TRCC members have extensive knowledge and recognize the interrelationships among traffic records system components. The TRCC chair is voted upon based on volunteers or nominations. The chair position is encouraged to rotate among participating agencies so that no one agency is chair for more than two consecutive terms. Each chair then brings a new expertise and agency perspective to the TRCC.

The executive and working committees hold at least one joint meeting a year. The focus of the joint meeting changes from year-to-year; topics have included funding streams, project specific meetings, and MAP-21 changes. The working committee can also call upon the Executive Committee as needed to address issues or hold additional joint meetings.

Since Vermont is a small State, TRCC members have long established relationships with each other and are actively involved in other committees and initiatives across State programs. Familiarity with each other and other agencies has fostered a better understanding of how the agencies and data systems work together. While Vermont still faces challenges associated with agencies working in silos, the TRCC members are very focused on big picture issues across the State.

Noteworthy Practice #2: Involvement from IT

Vermont TRCC members have a wide variety of skills and knowledge, though not all TRCC members have in depth knowledge of IT. However, the Vermont TRCC benefits from the continued, active involvement of the Traffic Records IT Project Manager/ Coordinator. The person in this position is tasked with providing oversight and guidance on all traffic records IT projects under the State umbrella. This position was funded with §405(c). The IT Coordinator also has the flexibility and the time to research current technologies, reach out to vendors, and

report back to the TRCC with answers to questions or suggestions for moving projects forward.

IT experts' involvement in the TRCC has changed over time and will likely change in the future. The Vermont Department of Information and Innovation is moving toward a statewide centralized IT department so their continued involvement will be a challenge due to dedicated staff availability. However, the TRCC also benefits from the crash project vendor who has been available and willing to discuss IT technologies at TRCC meetings. One of the previous TRCC co-chairs also has an extensive IT background—and was key in identifying IT involvement as critical—and continues to be involved with the TRCC. Both government and vendor IT perspectives have been helpful.

Noteworthy Practice #3: A focus on crash data

As previously noted, many TRCC members are actively involved in—or aware of—other State agencies, programs, and projects due to the small nature of the State. This cognizance has increased the TRCC members' understanding that issues in one data system can affect other systems. This is especially true of the crash records system, as crash data has a central role system wide. As a result, the TRCC maintains a focus on improving the crash records system and encouraging their member agencies to provide training for law enforcement.

The Vermont TRCC views crash data system improvements as a series of projects, spanning multiple years and resulting in a more efficient system. Projects include:

- Web-based crash reporting system: Originally implemented with the State's crash system, this continues to expand to local police departments. The tool could also be used with other applications and similar technologies.
- New interfaces for law enforcement to access the WebCrash system: This interface will be used for the future e-Citation/Ticket application, as well as others.
- Development of a local roadway linear referencing system (LRS): This upgrade will improve location data quality and will be available statewide to all agencies, State and local. And, this will continue to improve.
- Google Maps interface for crash location data collection: This will allow for Google Maps to provide crash location by returning and auto populating the GPS coordinate fields in the electronic field. The tool could also be used in other applications.
- Interfaces with local law enforcement agencies' records management systems.

- Secure wireless data transmission utilities: Vermont State Police and some local enforcement agencies use NetMotion—mobile VPN software that provides secure, reliable mobile and wireless connections—to improve and manage secure wireless connectivity while in the field. Further implementation may include integrating as a tool for Web Crash.

Each project impacts crash data statewide and lays the groundwork for future improvements and new projects.

The TRCC has also been a launch point for multi-agency funding related to crash reporting and crash data interface. Several different sources have been tapped to fund these crash data projects. The overall crash program was started with NHTSA's Section 411 State Highway Safety Data Improvement funds, and more recently has been supported using FHWA State Planning and Research (SP&R) funds. FHWA's Highway Safety Improvement Program (HSIP) funding and Section 164 funds have also been used to support the crash program. Other funding streams like the State's Governor's Highway Safety Program have been helped support projects.

Noteworthy Practice #4: An effective meeting culture

IT integration into TRCC meetings has created an environment that encourages members to ask IT-related questions without fear of criticism or being looked down upon because of a lack of IT technical knowledge. The Traffic Records IT PM/ Coordinator is provided flexibility and time to research answers to questions, collect information on new and current technologies, and reach out to vendors. TRCC members and the IT PM/Coordinator have also established a good rapport, where IT-knowledge is not required to participate in, or understand, IT-related discussions.

VHSA is a broader organization, more focused on marketing, outreach, and education for issues reaching beyond traffic records. VHSA hosts a large group meeting focused on safety that reaches out to many different agencies. This is an excellent opportunity to bring partners together to expand understanding of safety resources and how their work intersects. Several TRCC members are also involved in the VHSA data focus group and understand the importance of a data-driven SHSP and the value of data resources. The link between the organizations fosters opportunity for coordination between the traffic records strategic plan and the SHSP.

The Vermont TRCC is continually trying to move away from agency-specific silos towards efficient interagency interaction. There is already a basis for effective cooperation among some

partners—such as engineers and law enforcement agencies—to work together and acknowledge the various needs of participating agencies.

TRCC members all have access to a SharePoint site that includes meeting minutes, agendas, documents for review, and other materials. The SharePoint also houses the project funding application form, as well as all completed applications, which are available for all members to review prior to meetings. The TRCC reviews project applications as a group, but the availability of the information prior to the meeting helps the discussion move more freely. These meetings are facilitated, open discussions where the TRCC members select projects for funding based on verbal agreements, without scoring or a formal process.

Summary

The two-tiered TRCC approach has been very successful in Vermont. High level representatives in decision making positions and a strong IT presence allows projects to advance and increases the visibility and respect of Vermont's TRCC. Meetings are arranged in ways that encourage collaboration and sharing and this has led to the TRCC members' increased awareness of the importance of data systems. All of these TRCC characteristics have led to the development and implementation of crash data projects that continue to build upon themselves, laying the groundwork for enhanced systems that effectively work together.

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C. CASE STUDY 3: MINNESOTA

Introduction

The Minnesota Traffic Records Coordinating Committee (TRCC) was established in 1998 with the purpose of reviewing and identifying improvements to the State's traffic records data systems. Over the years, the TRCC has grown from 11 representatives from the Departments of Public Safety, Transportation, and Health to 28 total members. One of those members is a full time Traffic Records Coordinator who provides support and acts as the chair of the TRCC. This position is within the Minnesota Department of Public Safety, Office of Traffic Safety (OTS). OTS is responsible for managing all NHTSA safety grant funds, while the TRCC is responsible for vetting applications for §405(c) grant funding. In total, the TRCC has an advisory role in over $3.35 million of available funding for traffic records.

Structure

The TRCC has two levels: executive and technical. The Executive is composed of seven members representing all six core data systems: crash, vehicle, driver, roadway, citation and adjudication, and injury surveillance. This committee meets quarterly; its meetings are set to coincide with major milestones on the traffic records calendar, such as funding requests, strategic plan updates, and annual reporting deadlines. The Minnesota Department of Public Safety (DPS) Chief Information Officer (CIO) is also on the Executive TRCC. The Driver and Vehicle Services (DVS) division of the Minnesota DPS represents three different systems, but only has one representative. Several State agencies rotate their committee membership among senior managers and data system representation sometimes rotates between departments.

The Technical TRCC is composed of 22 members. Monthly meetings focus on building relationships between departments, reaching decisions about key traffic records improvements, and strategic planning and funding. Agency representation includes members from the agencies responsible for the six core traffic records systems along with data collectors and users and federal agency partners. The Technical TRCC is described as informal as it does not have set membership by position or vote; however, the intention is to become more formal in the coming years.

Noteworthy Practices

The Minnesota TRCC has accomplished many milestones since their inception less than 20 years ago and it continues to implement exemplary practices and processes such as:

1. *Establish a full time Traffic Records Coordinator and TRCC Chair to effectively manage the TRCC*– This position is responsible for managing all funding streams, coordinating and building relationships with stakeholders and partner agencies, and overseeing OTS projects.
2. *Actively assist in improving the State's crash records system* – The TRCC has taken the lead in an effort to update the State's crash records system through stakeholder and agency collaboration and TRCC funding.
3. *Demonstrate a successful example of a small Executive TRCC* – Members represent all six core data systems and come from several State agencies.
4. *Accumulate funding over multiple years to pay for large scale IT projects* – The Minnesota TRCC has worked closely with regional NHTSA representatives to use Federal funding over multiple years to support large-scale, long-term data projects.
5. *TRCC Leadership that values building relationships and trust*– The TRCC Chair has worked to create an environment that encourages members to share and collaborate with others rather than feel criticized in their work.

Noteworthy Practice Descriptions

Noteworthy Practice #1: A full Time Traffic Records Coordinator and TRCC Chair

Since the TRCC's inception, the part-time OTS traffic records program manager also supplied logistic support to the TRCC. By the mid-2000s it became clear that the TRCC was not functioning well, that key system owners were dissatisfied with the organization, and that other members were disaffected due to a lack of progress on core system data improvements. There was no one person with centralized authority over traffic records improvement, and thus no identified champion at a statewide level.

The OTS Director established a position to act as the Traffic Records (TR) Coordinator and TRCC chair, oversee all NHTSA funding, and coordinate and prepare strategic plans. This position reports directly to the OTS managers and is part of the Office's leadership team, providing leaders with insight into the data needs throughout all the safety program areas.

NHTSA §402 State Highway Safety Program grant money funds the TRCC Chair position, as well as two and one-half research analysts. Additionally, §405(c) money partially supports a half-time FARS analyst (the other full time position is supported by FARS funding).

The TRCC Coordinator is responsible for managing projects and serving as a point of contact for various programs with traffic safety partners as well as project grantees, media, the public, and legislature. This role also provides subject area expertise and manages OTS projects, ensuring that all applicable and relevant State and federal rules, requirements, and procedures are met. All funding streams from NHTSA (e.g., §402, §405(c) [MAP-21], and some remaining SAFETEA-LU §408 money) are overseen by this position. Grantees that receive traffic records funding (§405(c) and §408) are required to provide updates at TRCC meetings periodically. Other grantee updates often come in the form of roundtable discussions at the end of TRCC meetings.

Noteworthy Practice #2: The TRCC manages the State's crash records system

The DVS implemented electronic crash reporting (eCrash) and electronic data submission in 2003. However, a needed update to the crash system was stalled as DVS resources were dedicated to the higher priority Minnesota License and Registration System (MNLARS) upgrade. Crash data is the linchpin for highway safety decision making and is a top priority for the TRCC.

Due to the high value the TRCC places on crash data, the committee offered to step in and support the crash data update by providing funding, leadership and project management. The TRCC Chair was named the project manager and the TRCC served as the avenue for engaging stakeholders. The Crash Data Users Group (CDUG)—a subcommittee of the TRCC—carefully considered all the possible data elements, definitions, and attributes for inclusion in the new update. CDUG used the Model Minimum Uniform Crash Criteria (MMUCC) 4th edition as a template for consideration of data element definitions.[5] The CDUG's recommendations were presented to the DPS commissioner via the TRCC Chair for review and approval.

Next, the TRCC released a request for proposals and selected a contractor to move forward with the data recommendations as approved by the DPS commissioner. The process is still underway, with the contractor charged with converting 10 years of prior data into the new system format. Throughout the project, the TRCC's responsibility has been to make decisions on issues that came forward, such as the usefulness of retaining old codes as attributes for data elements in the crash report. The TRCC Chair's role was to act as the liaison between the TRCC and the contractor, and to serve as a champion for the project with the DPS executive staff.

Additionally, Minnesota's statewide IT Department (MNIT) worked closely with the TR Coordinator to ensure the end result met the needs of the State. MNIT was responsible for managing the consultant and contractual issues and worked closely with the contractor on specific data elements and needs. MNIT had previously developed a well-documented data

dictionary from the legacy system, and had working knowledge of what to carry through into the next version. This facilitated conversations with the contractor and allowed State staff to easily communicate issues and common errors that should be corrected in the new system.

While DPS owns, funded, and has executive decision power over the project, the goal was always to make this a joint effort between DPS, Minnesota Department of Transportation (MnDOT), and the Minnesota Geospatial Information Office (MnGeo). This multi-year project requires ongoing communication and collaboration through multiple agencies and stakeholders. One limiting factor to this project is that it will require a lot of rework for those who have been using old or out of date standard data reports as the new system will have different data elements and attributes.

Noteworthy Practice #3: Small executive committee

As previously stated, the Executive TRCC is composed of representatives from all six core data systems represented by different State agencies. DPS represents three systems, including one from the DVS member who represents three systems (crash, driver, and vehicle), one from the DPS CIO, and one from the DPS Commissioner's office. MnDOT has one representative that rotates among several offices' senior managers. Minnesota Department of Health now represents injury surveillance in place of the EMS Regulatory Board. The Bureau of Criminal Apprehension (BCA) has ownership of the statewide electronic citation (eCitation) project and represents the citation and adjudication data system. There is interest in expanding the executive committee to also include representation from the State Court System. The seventh representative is the Director of Office of Traffic Safety.

In addition to meeting quarterly to discuss updating the traffic records strategic plan and upcoming funding, the Executive TRCC is also a venue to promote new projects. For example, the Executive TRCC meetings are opportunities for management level personnel to meet and discuss issues or questions that impact all departments, including crash records improvement projects. Similarly, the committee also discusses policy or legislative changes, such as which agency has responsibility over the crash record system. Agency representation at this executive level allows for high level discussions and decision making across departments.

When the TRCC first formed in 1998, the leaders established MOUs between DPS, MnDOT, and the Department of Health. Each agency had one representative. Later, the committee expanded to include representation from each of the six data systems. Minnesota has found that it is important that Executive TRCC members are not just in management roles, but are also knowledgeable about the data systems or have worked directly with data.

The Executive Level TRCC rarely votes on items but reaches consensus through a discussion process. However, the intention is to move towards more formal processes in the future. Currently, the strategic plan is out of date so the intention is to implement a formal process for updating the strategic plan. Also, as interest has grown in the Executive TRCC, the committee is discussing formalizing membership positions. This would allow the group to identify which agencies are missing, at which point, outreach can be conducted to recruit new representation. Furthermore, the Executive TRCC always attempts to be very transparent in their efforts, yet it is not always clear to the Technical TRCC how projects go through the presentation and selection process. While the Executive Committee has not yet disagreed with any project the Technical Committee has put forth (as long as funding is available), Minnesota would like to implement a formal project selection process that would conclude with sign-off by the Executive Committee and the Office of Traffic Safety.

Noteworthy Practice #4: Multi-year funding for large scale IT projects

Information Technology-related projects are complex often requiring multiple years of stable funding. However, NHTSA grant funding rules do not easily accommodate multi-year projects. Minnesota receives approximately $1 million in §405(c) Traffic Records money annually. Additional funding sources include previously-allocated §408 money that supports the crash records upgrade project, Crash Outcome Data Evaluation system (CODES), e-Citations with BCA, and crash report analysis projects and §402 funding supporting occupant protection, motorcycle safety, community programs, traffic records, and police traffic services. The programs receiving funding under these grants support long-term IT projects, like the crash report analysis, centerline mapping, and electronic citation (with BCA).

Recognizing both the importance of such projects and the constraints of the funding streams, the Minnesota TRCC worked very closely with their regional NHTSA representatives to come to a solution to carry funds over multiple years. Both OTS and NHTSA attribute this success to their long standing working relationships and their ability to have transparent and open conversations about the needs and constraints. The process required detailed needs documentation, which the TRCC Coordinator provides through recording the funding totals available from Federal and State sources as well as project expenses broken down by year of funding, spent, unspent, and still needed.

In addition, detailed project plans stemming from strategic planning, updated Strategic Highway Safety Plans, and other such documents illustrate the need for projects both long-term and short-term. The NHTSA regional office uses the detailed financial records and strategic plans to advocate for approval at the federal level to reallocate funding. The inclusion of short-term

projects within those plans demonstrates that the State is trying to meet the grant program requirements and not focusing primarily on long-term IT projects.

All of these efforts are supported by ongoing, frequent, and well documented conversations between the agencies. When the State recently added data as an emphasis area in the SHSP, the NHTSA regional office was able to help the TRCC gather information needed to discuss and decide whether or not to pursue Highway Safety Improvement Program (HSIP) funding. Moreover, documentation is important for tracking which funding streams are eligible to be carried over and the types of projects that can be supported. For example, the FARS funding that supports part of an analyst position must be used or the funding will be lost.

Noteworthy Practice #5: Relationship and trust building

In the mid-2000s, participation at TRCC meetings was at the lowest in history. Eventually, the committee stopped meeting altogether and went over a year before once again reconvening. This was attributed to the perceived lack of accomplishment and the view that meetings often focused on the shortcomings of the member agencies, rather than on opportunities for improvement.

The introduction of the TRCC Chair position was the impetus for the committee to once again reconvene, reconnect, and move towards constructive partnerships. The TRCC Chair took a proactive approach to working with the TRCC members and monitors upcoming agenda items for topics that may be viewed as controversial for some agencies. Upon identifying such an issue, the TRCC Chair meets with the system owner before the TRCC convenes to discuss how best to present the topic and manage the conversation. This allows TRCC members to feel listened to while also keeping the communication channels open and transparent; thus, defusing controversy before it begins.

Additionally, TRCC meetings always end with a roundtable discussion for sharing and informal networking. Often these sessions extend past the allotted meeting time. This time has provided TRCC members opportunities to update others on upcoming projects or issues they are experiencing. These informal discussions have led to many of the successful projects that make the Minnesota TRCC stand out. Non-traditional partners are introduced and the information sharing creates opportunities for agencies to provide insight, expertise, and explore possible partnerships that address issues experienced by other agencies.

During one of the roundtable discussions after a TRCC meeting, law enforcement agencies were discussing options for updating how law enforcement officers capture data in the field. State officials noted that there was a lot of variability in the crash records recording. Many field

officers would provide incorrect or incomplete data resulting in backlogs and user dissatisfaction. Dr. Nichole Morris, representing the University of Minnesota HumanFIRST (Human Factors Interdisciplinary Research in Simulation and Transportation) Laboratory, offered the university's expertise in human technology interaction to help address this issue. This conversation launched a joint research project called the Computerized Crash Reports Usability and Design Investigation. Recommended for funding by the TRCC, the purpose of this project is to create an electronic crash report interface that improves the accuracy, speed, reliability, and meaningfulness of crash report data entry. HumanFIRST researchers have examined the current paper-based crash reports and developed hierarchical task analyses for officers to complete in the lab to further understand see and interact with crash scenes.

This project has now spawned a request for proposals in developing both a form-based and wizard-based tool to be used in the field. And, through the TRCC, this project has continued to grow. Discussions are currently underway to cross pollinate this data system with the State's Enterprise GIS Department, which provides up to the minute mapping of all Minnesota roads. This mapping system will identify and automatically locate and populate the crash location data for the officers. All told, this project will allow officers to map and report crash data more efficiently and accurately.

Summary

Minnesota's TRCC formed in 1998. It has grown and evolved over time. This Case Study highlights practices that have improved the TRCC's ability to discuss, oversee, and even manage traffic records improvement projects. The hiring of a full time traffic records coordinator / TRCC Chair who is also part of the leadership team within the OTS has increased that offices' support for the TRCC and made it clear that DPS is clearly invested in the success of the organization. The TRCC Chair purposefully set out to improve the TRCC's effectiveness by structuring more cooperative and more goal-oriented meetings. The most far-reaching of the TRCC's accomplishments has been to take over responsibility for the crash system modernization—a project that all the TRCC members felt was necessary but had been delayed due to competing priorities within the DPS. Through a combination of willing leadership by the TRCC and the negotiated ability to accrue multi-year traffic safety funding, the TRCC has taken over management of the crash database and has appointed the traffic records coordinator/TRCC Chair as the crash system update project champion. Minnesota also emphasizes the importance of data-driven processes, as well the importance of high-quality data, to support the decisions made on how multimillions of dollars are spent on funding. The TRCC functions well today because of the purposeful relationship building and because of the State's investment in the traffic records coordinator position, responsive executive level involvement, and a collaborative relationship with the federal agency partners.

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D. CASE STUDY 4: MICHIGAN

Introduction

The Michigan Traffic Records Coordinating Committee (TRCC) is an Action Team as part of the Michigan Strategic Highway Safety Plan (SHSP) effort that is overseen by the Governor's Traffic Safety Advisory Commission (GTSAC) and is tasked with the primary responsibility of addressing traffic crash record issues within the State. This is a formal TRCC empowered by Memoranda of Understanding (MOUs) between member agencies (although all membership is voluntary and is subject to change). The Michigan TRCC does not have a full time TRCC Coordinator. Instead, a TRCC Chair helps manage the group. This person is a member of the Executive Committee and the role is rotated among members bi-annually. Meetings are held quarterly.

Structure

The Michigan TRCC is an executive level committee (with a de facto Technical Committee beneath) that has the ability to form sub-committees and work groups as appropriate. The TRCC is responsible for creating and monitoring a *Traffic Records Strategic Plan* that specifies how the State will use over $1.5 million in annual funding. The Executive Committee is composed of seven member agencies representing Department of State Police – Criminal Justice Information Center; Department of State; Department of Transportation (DOT); Department of Community Health; State Courts Administration Office; Michigan State Police – Office of Highway Safety Planning (OHSP); and Department of Technology, Management, and Budget (DTMB). The OHSP is responsible for managing the NHTSA grant programs in Michigan and relies on the TRCC to advise it on spending decisions.

The Crash Data Users Group (CDUG) functions as the technical TRCC. There are 26 members from local and county level agencies, State agencies (statewide and regional), Federal agencies, and university partners. The CDUG meets every other month and focuses on overall crash reporting-related issues—not just data or linkages—and various data users' issues. The Executive Committee and CDUG hold annual joint meetings. There have been three joint meetings to date.

The TRCC also acts as the Traffic Records and Information Systems Action Team for the statewide effort to development the Michigan Strategic Highway Safety Plan (SHSP), which is overseen by the GTSAC. The group receives an update from two staff members assigned to the six action teams responsible for assessing where the State stands in regards to each goal and

emphasis within the SHSP. This reduces agencies working in silos, enhances data sharing, and also allows the TRCC to participate in the decision making process.

Noteworthy Practices

Unique and noteworthy practices of the Michigan TRCC include:

1. *An up-to-date strategic plan and charter that lays the groundwork for the TRCC* – The TRCC has found that the annual update to the formal strategic plan and charter refocuses the attention of the members for upcoming projects, funding, and identifying needs for new membership.
2. *Partnering with stakeholders to assist with project selection* – The TRCC works very closely with the Office of Highway Safety Planning to identify new projects, which included the implementation of a formal project selection process to help prioritize projects when funding is limited.
3. *Meaningful participation from DTMB IT staff* –Both the TRCC and IT staff have benefited from IT involvement in the TRCC. The knowledge and skills they bring to the table is essential for stakeholders' understanding how all the data systems work together.
4. *A data linkages work group that addresses the need for an efficient data system* – Representatives from all data systems—including IT staff—have leveraged their strong relationships in an effort to bridge the gaps between the data systems and agencies. The ongoing process has opened the door for transparent conversations and joint problem solving.
5. *Emphasis on data quality to enhance the statewide system* – As part of the *2014 Traffic Records Program Assessment*, the TRCC identified issues across State agency data systems that would negatively impact data sharing. The TRCC is now focused on establishing data performance measurements for all data systems.

Noteworthy Practice Descriptions

Noteworthy Practice #1: An up-to-date strategic plan and charter

The Michigan TRCC strategic plan and charter is updated annually, as required by NHTSA. Michigan goes beyond this requirement and maintains and uses the strategic plan as a living document. Before submitting any applications for Federal funding, the TRCC reviews the strategic plan and charter and either gives approval for continuation or updates the documents with changes.

This is a formal, and very beneficial, process for the TRCC as it highlights the purpose of the committee and refocuses the members on the new fiscal year. An up-to-date strategic plan and charter allows TRCC members to formally consider completed or upcoming projects for inclusion within the strategic plan and charter. Another benefit of the process is that agencies reconfirm their commitments as part of the strategic plan and charter revision process. The TRCC evaluates agency representation to determine if the current membership is the best possible fit. The member list is updated annually to reflect any changes.

Benefits of the strategic plan and charter update extend beyond the update process. Revisiting general information like the TRCC mission and Executive Committee representation are useful for new members and the general public. The documents act as an orientation for new members and provide insights into the importance of each data system to traffic records and traffic safety decision making. Interested parties can view this information to understand how the traffic records system works as a whole and the role the State has in promoting highway safety.

As stated in the strategic plan and charter, the TRCC is responsible for creating and monitoring a *Traffic Records System Strategic Plan*. The purpose of the plan is to identify existing deficiencies in the State's traffic records system, to specify how those deficiencies were identified, to prioritize the needs and set goals for improving the system, and to identify performance-based measures of progress toward meeting these goals. Additionally, the document specifies how the State will use Federal and State funds to address the identified needs and goals. The most recent update identified expanding the TRCC membership to include representation from the health field. While the TRCC is currently identifying the appropriate partners to meet this need, this opened the discussion of membership having meaning. Representatives want to feel that they add to the TRCC, and are not there "in name only." To address this, the TRCC may add members on an ad hoc basis. The group is exploring opportunities for involvement through working groups as opposed to Executive Committee membership.

Noteworthy Practice #2: Strong partnerships

The TRCC works very closely with the Office of Highway Safety Planning (OHSP) to identify new projects. OHSP sends a request for projects in February of each year to all TRCC partner agencies. The agencies respond with proposals for consideration by March. The form is very brief and covers the issue, how the proposed project addresses the issue, and a budget summary. In 2015 OHSP added the requirement for applications to include data quality attributes that will be affected by the project. This call for projects is open to anyone who has ideas for projects—not just the Executive Committee. It is important to note that while the

TRCC is responsible for overseeing and awarding some funding, it does not have full approval authority over all traffic records projects.

To support prioritization and project selection, OHSP compiles the submitted forms into a package provided to the Executive Committee prior to its spring quarterly meeting. The spring meeting is an open discussion for agencies to present and advocate for their projects. Other attending members can ask questions or express concerns. After the meeting, the TRCC has several weeks to review the projects and submit their prioritized list of approved projects.

The TRCC advises on how to disburse grant money from several sources, including: Highway Safety Improvement Program funds, §408 funds, §405 funds, and §405(c) funds. Additionally, agencies often pool departmental funds in a cooperative effort to support projects. For example, money collected through public purchase of traffic reports, driver's license fees, or court fees may be used to support traffic records-related projects overseen by the TRCC.

If there is sufficient funding for all proposals, then prioritization is not needed. If not enough funding is available, the TRCC must prioritize the submitted projects. In that case, the OHSP Traffic Records Program Coordinator is responsible for compiling the votes. The winning projects' agencies then fill out a grant application or work with OHSP to determine funding structures. The OHSP manages applications for the §405(c) State traffic safety information system improvement grants. If a different source of funding is sought, the application may go through OHSP or through a different office or agency. The grant application includes expanded budget details, project descriptions that include milestones and deliverables, performance measurements, and any other details needed for compliance with the grant program's rules.

Noteworthy Practice #3: Meaningful involvement from IT

IT involvement in the Michigan TRCC is one of the key characteristics that makes the group work together effectively. The primary source of IT representation comes from the Michigan Department of Technology, Management, and Budget (DTMB), which has been a voting member of the TRCC since 2010. Although each State agency is only allotted one vote, DTMB sends between two and three individuals assigned to work directly with the crash data system to stand as representatives at TRCC meetings.

Since DTMB is a statewide agency, its personnel are assigned to different agencies and need to work with the IT staff at each agency. DTMB is responsible for designing and maintaining the crash system. These individuals have a strong knowledge of the systems they support. Their involvement in TRCC-approved projects such as data integration has helped develop and strengthen their understanding of traffic records in general.

The TRCC DTMB IT representatives have been intimately involved in the crash modernization effort that is now in the third year of four project years. DTMB personnel have also taken the lead on the TRCC's data integration project. Involvement in these projects has been useful for both the TRCC as well as IT staff. The TRCC is able to move forward with long-term, large-scale data-related projects while IT staff is able to witness the importance of their work and how it impacts traffic safety decision making processes. Ongoing engagement from IT representatives is essential to the success of IT-related projects.

IT representation also comes from other State agencies. For example, the State Court Administrator's TRCC representative is both a program manager as well as an IT specialist. Other agencies invite their IT staff to TRCC meetings on an as-needed basis.

Noteworthy Practice #4: Effective data linkages working group

The *2009 Michigan Traffic Records Assessment* noted that data systems across the State function as independent silos, resulting in inefficient, delayed, and sometimes non-existent data sharing. The TRCC identified a data linkages project as a priority to address this issue. The goal of the project is to link five different statewide databases: crash, driver/vehicle, roadway, citation and adjudication, and Emergency Medical Services (EMS).

The size and scope of the project has been challenging and required almost a year of front-end work. The process started with a kickoff meeting to gather all the agencies involved. Planned conversations continued over the next several months among the Executive Committee members with the purposes of establishing clear project goals and a clear understanding of agency databases, looking for linkages, and developing a project road map. The TRCC requested and secured DTMB involvement early in the process. Statewide support also comes from the GTSAC.

Once the Executive Committee established a clear vision, the data linkages project ownership passed on to the Data Linkage Workgroup -- a CDUG sub-committee. This serves as an indication that this group's interests and influence have spread well beyond the original singular focus on crash data. Additionally, the TRCC (through OHSP) hired a consultant with §405(c) funds to serve as Project Facilitator. The Project Facilitator conducted individual meetings with each participating agency to better understand the databases and other initiatives that may impact the data linkage project. Once that work was completed, the Data Linkage Workgroup developed a draft action plan for TRCC review.

The Data Linkage Workgroup includes between six and eight people, with at least one representative from each agency and several staff from DTMB. Even more staff has been

involved in the action plan development process and the interviews conducted as part of that process. As the project continues toward completion, more staff across all agencies will be involved. The goal is to incorporate data from other systems—such as healthcare—into the traffic records system to create a holistic data system. The data integration project has spawned a related project focusing on data quality, as described in the next noteworthy practice below.

Noteworthy Practice #5: Data quality and performance measures

The need for improved data quality became evident through work on the data linkages project when partners realized that agency-specific data was available but it not consistent enough across the State to allow for data sharing. Each agency has a system that serves the purpose for the agency, but inconsistencies make sharing nearly impossible. Instead of telling another agency how to improve their data, the TRCC began to think how everyone could work to improve and move towards a common goal together.

Prior to beginning the data integration project, the TRCC focused primarily on the crash records system and its data quality. This was in part due to the need to qualify for Federal funding, as well as the need for the TRCC to focus on the large, ongoing crash modernization project. The TRCC paid particular attention to crash data quality attributes of accuracy and timeliness. To address these concerns, the TRCC identified electronic crash reporting (eCrash) as a high priority and put it in the forefront for several years.

However, the *2014 Traffic Records Assessment* encouraged the TRCC to expand its focus to include data quality management for all systems and attributes. The TRCC will review the report and consider the recommendations for inclusion in the updated strategic plan, which outlines the TRCC's role in data quality management. This process is ongoing as of the date of this Case Study. It should be noted that the TRCC was already beginning to focus on system-wide data quality management as a result of the data integration project. When IT staff began to work with the data and attempted to merge various traffic records sources, it became apparent that the ability to match records among the files critically depended on the data quality in each of the source files. As a result, the TRCC was already primed to act on the assessment recommendation to take a more central role in managing data quality.

The TRCC will first focus on developing performance measures for all traffic records system components, not just crash. Many agencies have been interested in developing performance measures and will manage the process individually for the data sources they each own. The TRCC will take the lead in coordinating this effort at the statewide level, something that has not been done previously in the State. Performance measurement discussions are ongoing, and the TRCC has initiated discussions on the frequency of monitoring and reporting from agencies.

Currently, updates are reported annually to comply with Federal grants, but that is for a limited number of measures and mostly at the project level rather than system-wide.

The overall goal for the TRCC is to identify weaknesses and then work together as a group to move towards effective solutions. With respect to data quality, the TRCC can help identify projects that will help improve agency data, and help the group as a whole move towards improved data and better data quality management.

Summary

Michigan's TRCC is a formal organization, with MOUs established between the Executive Committee member agencies. This Case Study highlights effective practices implemented by the TRCC to better manage traffic records improvement projects and data systems across the State. Key features of the TRCC include the annual practice of updating the strategic plan and charter and the strong role the TRCC plays in selecting projects. Additionally, Michigan emphasizes the importance of working closely with IT staff. This relationship has become even stronger, and more important, as the TRCC has turned their focus to the data linkages project. Michigan is currently outlining a strategy for strengthening data quality management processes.

In addition to these highlights, the Michigan TRCC is engaging and educating local and State agencies interested in traffic safety. All things TRCC-related—from committee updates, accomplishments, meeting minutes, to the Strategic Action Plan—are posted on the website at www.michigan.gov/ohsp (Click on Governors Traffic Safety Advisory Commission; then under Action Teams, click on Traffic Records and Information Systems). Additionally, the TRCC is always part of the State's annual Traffic Safety Summit.

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E. CASE STUDY 5: LOUISIANA

Introduction

The Louisiana Traffic Records Coordinating Committee (TRCC) operates as a single level TRCC where the Executive Committee and Technical Committee meet and act as one, but voting is limited to the Executive Committee members. The Executive Committee has 16 representatives, including the TRCC Coordinator and members from Federal Highway Administration (FHWA), National Highway Traffic Safety Administration (NHTSA), Federal Motor Carrier Safety Administration (FMCSA), Louisiana Department of Insurance, Louisiana State University (LSU) Highway Safety Research Group (HSRG), LA Department of Transportation & Development (DOTD), Louisiana Highway Safety Commission (LHSC), Louisiana Supreme Court, Louisiana District Attorneys Association, Louisiana Ambulance Alliance, Louisiana Emergency Response Network (LERN), Louisiana Office of Motor Vehicles, and the Bureau of EMS. All members, save for the TRCC Coordinator and Federal partners, have voting privileges.

Structure

The Louisiana TRCC makes decisions affecting approximately $500,000 in §405(c) money annually impacting projects and funding the TRCC Coordinator position. Many TRCC members represent agencies that receive funding from other sources, such as FMCSA (High Priority Grant and Safety Data Improvement Program Grant), FHWA (State Planning and Research, Highway Safety Improvement Program), as well as other NHTSA and State programs. If project ideas are not directly data-related or §405(c) project-related, member agencies may step in when appropriate and propose funding under their own resources. LSU's HRSG houses the full time coordinator position. HSRG projects are funded by DOTD using NHTSA traffic records grant funding and other sources. LHSC is the overall grant manager for the NHTSA funding; other federal and State sources are managed by other agencies.

Noteworthy Practices

The Louisiana TRCC is an example of a successful TRCC due to the following noteworthy practices:

1. *Executive Committee and Technical Level TRCC function as a singular TRCC* – The Louisiana Executive Committee and Technical committee meet together as a single TRCC, with

ad hoc committees addressing special issues as they arise. The Executive Committee consists of the voting TRCC members.

2. *Cooperative partnerships between State agencies and universities expand the reach of the TRCC Partnership between Louisiana State University and the TRCC* – Partnerships between LSU's HSRG and the TRCC, DOTD, OMV, and other agencies have opened the doors for improved management and analysis of crash data.
3. *A full time TRCC Coordinator oversees the TRCC and fosters cooperation between agencies* – This individual is responsible for managing the TRCC and acting as a liaison between the partner agencies.
4. *Increased availability of EMS data through connecting agencies and funding equipment*– TRCC funding led to a unique partnership between the TRCC and the Louisiana Ambulance Alliance, and the Louisiana Emergency Response Network to make EMS data more accessible through an ongoing project to monitor and maintain EMS data.
5. *Maintain TRCC communication and materials through online resources* – State agencies and members of the public can keep informed on TRCC meeting dates, presentations, TRCC membership lists, grant funding opportunities, and grant application instructions using the TRCC website. Crash data and dashboards are also available through the HSRG website.

Noteworthy Practice Descriptions

Noteworthy Practice #1: Executive and Technical TRCC are one

In 1997, the Louisiana TRCC was established as a two tiered TRCC with an Executive Committee and a Working Group. However, many State agencies and organizations fund their own projects and the Louisiana State University (LSU) Highway Safety Research Group (HSRG) was already doing much of the data work and reporting back to the TRCC. Therefore, the TRCC was not funding many projects and Executive Committee meetings were limited to roundtable discussions, agency updates, and voting to fund small equipment projects. With few TRCC projects to focus on, the two tier approach became unnecessary.

In an effort to streamline the TRCC, the Executive Committee and Technical TRCC began meeting as one. Several characteristics of the Louisiana TRCC make this approach work well: separate voting authority, regular meetings, and established working groups.

Both the Executive Committee and Working Group meet together as one TRCC. Representation on the Executive Committee is very high level. There is policy level leadership

from most of the core data systems. The Office of Motor Vehicles sends two representatives that report back to their Commissioner and the Louisiana State Police send one representative that reports back to agency leadership. Not all Executive Committee members have voting rights—12 of the 16 members have that authority and the meetings also include other non-voting Technical Committee members—so the committee functions like a combined Technical and Executive Committee. This committee of voting members also has the authority to develop, approve, and implement the *Traffic Records Strategic Plan*.

TRCC meetings are held quarterly with attendance ranging between 90 and 100 percent of members present at any given meeting. Many attendees often bring other staff members to sit in as well, which is driving the continued and growing interest in the TRCC.

Along with the growth in the TRCC has come the need for establishing ad hoc committees for issues as they arise, such as data quality, electronic citation (eCitation), EMS, and others. These committees are established as needed and they disband once the work is accomplished. The ad hoc committees have no set meeting schedule, but rather are allowed to direct their own efforts and evolve over time. Ad hoc committees in 2014 included: Court Management, eCitation Working Group, Court Management Project, and EMS/Injury Surveillance.

Noteworthy Practice #2: Partnership with the University

HSRG and the TRCC are all working together to support Louisiana's traffic records system. HSRG is a research group under LSU's College of Business, Information Systems and Decision Sciences. The department houses the TRCC Coordinator position and several HSRG staff provide additional support to the TRCC.

The TRCC receives approximately $500,000 in §405(c) funding every year. In addition, the TRCC carries a balance of unobligated TRCC money that is spent on projects such as strategic planning, Highway Safety Planning, and roadway data improvement. This money remains at LHSC and funds the TRCC Coordinator position, equipment, and TRCC approved projects.

The HSRG is responsible for all crash-related data collected by law enforcement and other agencies across the State. This responsibility includes collecting, maintaining, storing, analyzing, and distributing the data with the primary objective of developing timely data reports. HSRG is also responsible for electronic crash reporting systems and other software development that supports law enforcement data reporting. The DOTD provides funding to the HSRG to support the crash data collection.

HSRG is also funded by the Federal Motor Carrier Safety Administration (FMCSA) as a commercial motor vehicle (CMV) safety data improvements contractor. This work has included rewriting the last crash report. Additionally, HSRG identifies FMCSA-reportable crashes, checks data quality, and then fixes identified issues. The reports are then sent back to the State police to send to FMCSA. HSRG is also responsible for preparing and submitting the reports to FMCSA via SafetyNet. This work helped Louisiana move from a red State to a green State in FMCSA's State data quality ratings. HSRG has also used FMCSA grant money to develop a GIS application for CMV crashes and inspections.

TRCC-directed funds are also used to support some LSU graduate students and student workers at the HSRG. Funded students assist with TRCC-related projects like data quality improvement, GIS, research, training and education materials, and general TRCC support—all of which provides practical experience for students and benefits the State with training and materials. As a perk of working at the University, HSRG employees can attend classes and pursue a degree at LSU utilizing a tuition exemption. HSRG also provides the TRCC with crash data and subject matter experts. The TRCC Coordinator has the benefit of working in the HSRG office, which creates a collaborative environment.

Noteworthy Practice #3: Full Time TRCC Coordinator/Chair

From 2008 until 2014, the HSRG Associate Director also acted as the TRCC Coordinator in a part time capacity. As the TRCC begin to transition from a project driven agenda to one based on a more comprehensive strategic planning approach, it became evident that a full time coordinator was needed. In 2014, the TRCC Executive Committee voted to hire a full time TRCC Coordinator primarily to provide direction, oversight, and coordination of the TRCC strategic plan and to support and coordinate general TRCC-related activities, such as scheduling, running meetings, and establishing working subcommittees. This position also assists with proposal requests and ensures that proposals are vetted by the appropriate TRCC members of committees to consider for Traffic Records grant funding before being brought to the Executive Committee for consideration.

This position is funded entirely through §405(c) Traffic Records money and sits within the HSRG. Prior to 2007, §408 funds supported 90 percent of the TRCC coordination responsibilities. In 2008, the funding was transitioned to a funding source through DOTD to the HSRG. Then the TRCC Executive Committee considered and voted in favor of the move to employ a full time coordinator. After approval, the new position and funding stream were written as any other project proposal and sent to NHTSA for review. Once NHTSA approved,

an amendment was added to the Highway Safety Plan to use §405(c) funds to fund the full time coordinator position.

The TRCC Coordinator also assists grant-seeking agencies throughout the project proposal process. First, the TRCC Coordinator reviews all completed applications to ensure all the information is included, including performance measures. All applications must tie into performance measures—available on the TRCC website—or the TRCC Coordinator will assist applicants in developing new measures. After the TRCC Coordinator approves an application, either a subject matter expert or an ad hoc committee will vet the project proposal. Finally, the entire Executive Committee will review and vote on the project proposal. To assist the Executive Committee in project reviews, the TRCC Coordinator also prepares an explanation of how the proposed project will work and is tasked to answer any questions from the Executive Committee. As interest in the TRCC continues to expand, the TRCC Coordinator and committee members are exploring options to transfer these guiding procedures into written policies.

If a project is approved by a vote of the Executive Committee, the TRCC Coordinator notifies the LHSC to initiate the contracting process and then provides assistance in writing the contract between LHSC and the grantee. Throughout the project, the coordinator and grantees work together to meet performance measures and prepare the documentation semiannually. Although grantees are required to identify project milestones, progress towards the milestones are not currently being tracked. The goal is to establish this as part of the TRCC Coordinator's job responsibilities in the future and give that position authority to follow up on the progress.

Noteworthy Practice #4: EMS data

The Louisiana Emergency Response Network (LERN) was established after Hurricane Katrina to maintain and monitor statewide data on the capabilities and staffing at every Louisiana hospital and to help improve ambulance routing. Working in partnership with LERN, the Louisiana Ambulance Alliance received a grant to purchase EMS run reporting software licenses for every EMS provider in the State. The TRCC approved a project through the LA Ambulance Alliance to provide laptops computers to any EMS provider that agrees to use the run reporting software and send their data to LERN.

The LA Ambulance Alliance distributes the laptops purchased through §405(c) funding, and a part-time position with the LERN—also §405(c) funded—is responsible for promoting the program, recruiting new agencies, and training practitioners on the software and laptops. The software and part-time position were modeled off of the State's eCrash system. And, similar to the law enforcement liaison positions, a retired EMS professional known and respected in the

field was hired to fill the positon, thus making it easier to initiate conversations about the new software.

First, the TRCC voted to agree that the laptops would be provided through the LA Ambulance Alliance. Next, LERN requested funding for its part time position to support the Ambulance Alliance project. The program is still in the building phases and is gaining momentum as it grows. Data quality measurements will be developed as more equipment is distributed and more EMS providers are recruited to use the software. Additionally, a TRCC ad hoc committee is currently discussing ways to merge injury severity data from the crash system with the EMS injury severity data collected through this project.

Noteworthy Practice #5: TRCC website

Louisiana provides two resources for TRCC and data-related information: the TRCC website and the HSRG website. The TRCC website (http://latrcc.lsu.edu/) presents the TRCC membership lists (Executive Committee and technical committee), meeting dates, presentations, agendas and talking points. Agencies interested in funding opportunities may access a printable application through the site. Upcoming updates to the website will include strategic planning information, ad hoc working group membership, and an online project proposal application form. The TRCC Coordinator is responsible for updates to the website.

The TRCC website also directs readers to partner and stakeholder websites. One link directs to the to the HRSG website (http://hsrg.lsu.edu/) for more specific information on crash data. While this is a stand-alone agency and site, much of the information on this website is also of interest to the TRCC members. For example, the HRSG website houses instructional videos on how to complete crash reports and other information related to TRCC projects. The LA Data Reporting website (http://datareports.lsu.edu) was designed to support the Louisiana Strategic Highway Safety Plan's (SHSP) data driven decisions to reduce the number of fatal and serious crashes on Louisiana roadways. Additional SHSP reports can be found on the website (http://datareports.lsu.edu/shsps.aspx) that offer interactive dashboards. This intuitively-designed website displays crash data from 2005 to the present day (1992 – 2004 archived), which is used to inform, educate, and support decision making at the state, parish, and local levels. The State level data is highly instrumental for agencies such as the Louisiana Department of Transportation and Development, the Federal Highway Administration, the Louisiana Highway Safety Commission, and the Louisiana State Police. Parish level data is also easily retrieved to support parish and regional law enforcement agencies, safety coalitions, and educational groups.

Regardless of agency level or affiliation, users of the website enjoy interactive and easy access to crash data, in a visually striking, uncomplicated display. Designed with efficiency in mind, the website's utility is uniquely geared toward allowing users to tailor data to meet their needs. While tabular data is appropriate in some cases, this format lacks ability to visually show trends, easily compare data elements (such as parishes), and quickly identify problem areas. To help address these issues, the HSRG decided to utilize data visualization to assist the Regional Safety Coalitions. By producing visually appealing charts and graphs, the HSRG is displaying the data in a way that is easily to understand, quickly show problem areas, visually display normalized data for comparisons, and addresses multiple crash data dimensions in a single chart. These dashboards help to tell a story and make the data more compelling.

Summary

Louisiana's TRCC is a single level TRCC with both Executive and Technical members. A subset of the TRCC members have voting authority and ad hoc committees are established as needed to address emerging issues that span multiple agencies. This case study highlights the unique partnership between the TRCC, LSU's HSRG, and the LHSC. These organizations each play a role in managing grant funding for projects that will improve traffic records data and create opportunities for collaboration, information sharing, and overlap. The full time TRCC Coordinator is an asset serving to make TRCC meetings, projects, and members organized and effective. The Louisiana TRCC is also demonstrating project innovation through EMS data collection and sharing modeled on previously successful crash data projects. Finally, the TRCC and HSRG websites demonstrate effective communication tools for conveying statewide crash data and sharing TRCC updates, projects, and strategic planning.

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F. CASE STUDY 6: CONNECTICUT

Introduction

The Connecticut TRCC is a single level TRCC supported by the Connecticut Department of Transportation (ConnDOT) Office of Highway Safety (OHS). Administrators from five State agencies—ConnDOT, Department of Motor Vehicles (DMV), Department of Public Health (DPH), Department of Emergency Services and Public Protection (DESPP), and the Judicial Branch—sign letters designating individuals to participate on the TRCC as their representatives. These five agencies form the Executive Committee of the State's Strategic Highway Safety Planning process and are accessible to the TRCC as needed.

Structure

The five agencies' representatives, plus over 100 other individuals, form the TRCC. Attendance includes several offices within ConnDOT (OHS, Crash Data and Analysis Section, Transportation Planning, GIS/Construction/Engineering, Office of Information Systems), the DMV, DPH, Judicial Branch plus Department of Public Safety, Criminal Justice Information System Chief, State's Attorney's Office, as well as representatives from Hospital/Research, Local Law Enforcement, Regional Planning Organizations, Research Consulting, University of Connecticut, Insurance and Mental Health, and Federal Agencies.

Noteworthy Practices

The following are noteworthy practices that highlight the unique characteristics of Connecticut's TRCC:

1. *Connecticut TRCC works efficiently as a single-tier* – The Connecticut TRCC functions as a single-tier, Technical TRCC responsible for generating project ideas and communicating TRCC activities with their respective agencies.
2. *The TRCC is very large and inclusive of a variety of stakeholders* – Over 100 stakeholders representing dozens of agencies and organizations come together monthly to review the six core traffic records data systems.
3. *Very effective in leveraging resources to advocate for crash system updates, eCrash, and eCitation* – Collaboration among TRCC stakeholders has led to the successful implementation of statewide, multi-year, multi-agency projects.

4. *A contract position offers continual support to the TRCC* – The TRCC is supported by an outside contractor responsible for meeting logistics and facilitation.
5. *Use a bottom-up approach to validating stakeholder involvement* – TRCC participation and agency buy-in is a result of an active TRCC focused on quantifiable achievements.

Noteworthy Practice Descriptions

Noteworthy Practice #1: One-tier without an executive level

The Connecticut TRCC functions as a single-tier committee. Several member agencies represent the TRCC as part of an Executive Committee for the *Strategic Highway Safety Plan* (SHSP) process. This executive group is composed of the commissioners of five state agencies to provide top-level safety leadership and decision-making to support the SHSP process. The Executive Committee exists primarily in formal documentation, although the Technical Level has access to the SHSP's Executive Committee if needed. The Connecticut TRCC functions primarily as a Technical committee.

Members of this Executive Committee include delegates assigned by the administrators from ConnDOT, DMV, DPH, DESPP, and the Judicial Branch. These executive level representatives are also in decision making positions, which allows for quicker and easier project implementation.

The remainder of the TRCC is composed of individuals that work with and are most familiar with the data systems and the day-to-day activities of each agency. Many project ideas arise from the members' experiences and knowledge of data system issues and solutions. TRCC representatives are responsible for reporting back to their managers for discussion and final decisions. Many agencies send several members to TRCC meetings so there are multiple voices promoting projects that cover several agencies.

As previously noted, an Executive Committee could be initiated if needed. But Connecticut has found that the Technical TRCC has worked well for the stakeholders. The bottom-up approach has created an environment where ideas are generated from the stakeholders and the responsibility is on the TRCC members to advocate for support and to build buy-in from their respective agencies.

Every member is included in project selection through a formal process. Emails are sent to every stakeholder, to which they can respond with their feedback on the individual candidate projects as well as their priorities. After all the results are tallied, the project list and the overall

priorities are sent to the OHS for the final review and decisions. OHS manages the highway safety grants, including §405(c) traffic records improvement grants, and contracts with the grantees.

Noteworthy Practice #2: A large, inclusive TRCC

The TRCC is composed of over 100 stakeholders, although not all attend every meeting. The average meeting attendance depends on the topic and is around 30 individuals, although "hot topics" like software demonstrations generate higher attendance. A website houses all the meeting agendas, previous meeting minutes, and the *Traffic Records Strategic Plan*.

The TRCC is inclusive of State and local agencies representing the six core traffic records system components. Law enforcement agencies are well represented on the committee, which is directly related to a previous crash report initiative that required involvement from the agencies implementing the changes. Additionally, the SHSP update process identified several partners not already included so the TRCC recruited more members to cover these additional stakeholder groups.

The TRCC emphasizes all six core systems and the importance of having a complete traffic records system. Every meeting includes a discussion of the six core systems and presentations from members providing project updates. Meetings are always open forums and provide all those in attendance the opportunity to speak, ask questions, and learn about projects within other departments. Another way the TRCC includes members is by rotating the location of the monthly meetings to increase exposure to other State agencies and areas around the State.

Noteworthy Practice #3: Pooled resources for eCrash and eCitation

The Connecticut TRCC played a central role in eCrash and eCitation solutions being implemented throughout the State. This has been a multi-year process officially initiated when the TRCC added electronic crash and citation data collection to the 2007 strategic plan. The Capital Area Regional Council of Governments (CRCOG) and the judicial system stakeholders were the TRCC representatives who first recognized that the crash and citation system updates needed to be undertaken as a joint effort. The coordinated approach faced some initial pushback from decision making authorities. To address this, a consultant working with the TRCC met with leadership in the participating agencies several times, presenting the importance of the projects. The TRCC attributes forward progress to sending the best representation to the right people at a decision making level. This success is an example of how the TRCC functions effectively without a formal executive committee.

Between 2007 and 2014, TRCC members volunteered for two ad hoc subcommittees: one to examine the crash report form and one to focus on eCitation. Volunteers worked for over a year on the crash report form, examining the Model Minimum Uniform Crash Criteria (MMUCC) elements versus the existing (1994 revision) PR-1 crash report form.[5] Testing of new electronic forms and a fillable-PDF crash report took place during 2014. The update has been ongoing, with the initial roll-out to 169 jurisdictions across the State starting on January 1, 2015. A project this large required assistance from all TRCC stakeholders, primarily in the form of outreach to promote instructional videos and web links.

The project has faced several barriers. Police departments are the driving force for implementation and many are seeking additional funds to support equipment purchases, such as printers and mobile computers.

Connecticut's large and engaged TRCC has been an asset to the project and influential in moving beyond the barriers. Due to the scale of the project, it appears on every TRCC agenda—this serves as one of the driving factors for increased membership and continued TRCC engagement. As the roll out of the new electronic crash report continues, some towns are still reporting on the old form, so the University of Connecticut and State staff are working together to extract the narrative and diagrams from the old forms and are manually recoding data into the new form.

Once the eCrash and eCitation projects were initiated, the working groups disbanded and the focus shifted to data integration. Both the TRCC and a recent Crash Data Improvement Project (CDIP) technical advisory team identified data integration as the next priority for Connecticut's traffic records improvement efforts. Additional advocacy came from both law enforcement and DOT work zone safety representatives as those agencies were finding they lacked the data to qualify for grants or to help guide improvements in their systems.

Similar to previous projects, the first step in the new priority project was to establish a data integration ad hoc subcommittee. The data integration subcommittee includes DMV, ConnDOT's Office of Engineering, State and local law enforcement agencies, and criminal justice representatives. The first meeting focused on partners discussing their problems with sharing data. The group determined that there are many larger issues in sharing data, so they are first focusing on linking data as an interim step.

Noteworthy Practice #4: The TRCC is supported by a contractor

A part time consultant provides TRCC support and coordination. The consultant is responsible for meeting facilitation and coordinating upcoming meetings as well as providing input into

strategic planning. The most important role the consultant plays is stakeholder follow-up and providing assistance to stakeholders when needed. For example, the consultant stepped in to provide support and technical presentations to decision makers as part of the eCrash and eCitation efforts.

The consultant spends one week a month on site, but works remotely the rest of the time. This position is funded by equal parts §405(c) and §402 funds and has been in place since 2007. The individual in this position is highly qualified and has almost 40 years of experience in traffic records and traffic safety management. The TRCC credits much of their success to the efforts of this consultant who is a nationally-recognized champion for traffic records improvement and data-driven decision making.

Noteworthy Practice #5: A bottom-up approach and making sure the stakeholders feel validated are both keys to success

The TRCC has not always been as large or as engaged as it is today. In 2007, ConnDOT staff recognized that the group needed to be revamped. OHS staff worked with the consultant to reach out to individual TRCC members via email and phone calls to ask why they were not attending the TRCC meetings. Many reported that they did not feel projects were moving forward so they did not see the benefit of the committee. When ConnDOT announced the policies requiring measurable progress as a result of MAP-21's focus on data-driven decision making, the consultant was tasked with reaching out to members and potential members and re-energizing the TRCC. The consultant, OHS, and the TRCC worked together to identify the right partners needed at the table to gain momentum.

Notable accomplishments—like the success of the eCitation and eCrash projects—have been the building blocks of the rejuvenated Connecticut TRCC. Successes such as these demonstrate the importance of the TRCC and of stakeholder involvement. Now, when projects like the data integration effort emerge, the TRCC members feel confident that the project will be completed even though the end-result is still unknown. The successes also make it more likely that TRCC members will take ideas back to their own agencies and advocate for the agencies themselves to contribute staffing and funding.

Ongoing communication with stakeholders has been crucially important to building a successful TRCC. Meetings are set up in a way that allows everyone to speak and these discussions allow stakeholders to have a strong role in project development and selection. Stakeholders are also invited to reach out directly to the consultant and ConnDOT OHS staff to provide feedback and ask questions. ConnDOT also hosts an up-to-date TRCC webpage that includes meeting

minutes, project updates, links to crash data, and other supporting materials that help the TRCC and others stay connected.

Summary

Connecticut's TRCC functions as a single-tier TRCC, with designated executive members and other stakeholders working together on one committee. Ad hoc subcommittees are formed to address specific projects and initiatives, and then disbanded once projects are complete. Over 100 individuals are engaged in the TRCC and their efforts have resulted updated eCrash and eCitation programs, as well as ongoing data integration projects. Connecticut uses a bottom-up approach—it is the responsibility of the TRCC member to report back to their agency to build buy-in and advocate for TRCC projects. The TRCC is also supported by a contractor who builds personal relationships with TRCC members and provides support when stakeholders advocate within and between agencies.

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IV. RECOMMENDATIONS

This chapter presents recommendations for TRCC's consideration. In reviewing the six case studies presented in this report, it is clear that there is no single TRCC that functions perfectly or that meets the ideal exactly as described in the *Traffic Records Program Assessment Advisory*.[1] Each of the TRCCs presented as case studies or that provided noteworthy practices are considered a work in progress. The committees have evolved over time. Some operate on a more formal model than others, some make no distinction between executive and technical level responsibilities, some update their foundational documents annually and others do not. Yet all share functional characteristics and are models of success that other States could emulate. The recommendations in this chapter are not intended as a checklist which every State TRCC should adopt or that map the unerring path to success. Rather, they should be treated as a menu of options that TRCCs can refer to when deciding how to address their own issues and when they see the need to improve their own effectiveness in a particular area.

A. TRCC PERFORMANCE ASSESSMENT

NHTSA, FHWA, FMCSA and others offer multiple assessments with a component related to coordination and planning. States and TRCCs are advised to take advantage of these resources and to include the TRCC in the assessment process.

1. Traffic Records Assessment

The *Traffic Records Program Assessment Advisory* includes a section evaluating the TRCC and a separate section evaluating the State's *Traffic Records Strategic Plan*.[1] Traffic records assessments are required on a five-year cycle for States to maintain eligibility for safety information system improvement grants (§405(c)). The assessment report includes recommendations that the State should use in developing an updated strategic plan including projects aimed at addressing any issues raised in the report.

States are also encouraged to review the recommendations related to a comprehensive, formal data quality management system as described under each of the six traffic records system components (crash, roadway, driver, vehicle, citation and adjudication, and injury surveillance). The formal data quality management processes described in the *Advisory* include a role for the TRCC in reviewing and providing oversight for the data quality performance measurements. Performance measurement is central to the traffic records data quality management, and the TRCC has a clearly defined role to play.

2. Self-Assessment

States routinely assess their own performance. With respect to the State TRCC, the Coordinator may use a survey of members and potential members, as was done in Connecticut, to identify areas where the members think an improvement is warranted. The State can also use the *Traffic Records Program Assessment Advisory* as a self-assessment tool.[1] For example, answering the questions in the TRCC and Strategic Planning modules would provide a State with a very good idea of how closely its TRCC and strategic planning processes match the ideal described in the Advisory. And departures from the ideal could serve as discussion points within the TRCC so that State could consider addressing those issues or consciously decide to adopt a different solution or process.

3. Other Resources

States can take advantage of resources provided by NHTSA, FHWA, and FMCSA to assess specific data systems. The following descriptions are overviews of the available programs. States are advised to contact the relevant Division or Regional Office staff to obtain complete information and discuss the application process.

Crash Data Improvement Program (CDIP)

CDIP is a NHTSA-sponsored program with two components: A) a detailed, on-site review of a State's crash records system with emphasis on the six data quality attributes, and B) a mapping of the State's crash records data to the MMUCC guideline. States may opt to have only the MMUCC mapping completed or they may request the full CDIP. In the CDIP, a technical assistance team of subject matter experts works with the State to complete a set of pre-visit questions, review available documentation, and conduct a site visit that combines training, evaluation, and a final report including recommendations for improving the State's crash data.

Roadway Data Improvement Program (RDIP);

RDIP is a FHWA-sponsored program that functions much like CDIP—a technical assistance team provides a detailed, on-site review of a State's roadway data systems with emphasis on these data quality attributes: A) roadway data collected; B) analysis using the roadway data; C) how the data is managed and governed within the State DOT; D) data interoperability; E) how roadway data is exchanged between the State and local agencies. The team works with the State to complete the pre-visit questionnaire, review

documentation, and complete a three-day site visit combining training, evaluation and a final report with recommendations for improving the State's roadway data.

NHTSA GO Teams

NHTA's Traffic Records Team established the GO Team project in 2012 to serve as a follow-up companion to the redesigned traffic records assessments. In the assessment, States would learn of opportunities for improving their traffic records system. If a State determined that it needs help addressing any aspect of its traffic records system (whether or not that need is pointed to in its most recent traffic records assessment), the State can complete a GO Team application that details the nature of issue and the type of assistance requested. Two main types of assistance are offered: technical assistance and training. For technical assistance, NHTSA will provide a team of subject matter experts with experience addressing the specific issue that the State raises in its application. The experts will work with the State to plan a project, deliver the requested technical assistance, and provide a final report and recommendations (as appropriate). For training assistance, NHTSA will identify existing sources or identify a qualified team to develop and deliver the requested training to the State. The application process requires States to liaise with their NHTSA Regional representative, and all projects are subject to approval of the NHTSA Traffic Records Team.

Safety Data Improvement Program (SaDIP)

SaDIP is a FMCSA grant program designed to assist States in solving data quality problems that specifically relate to commercial motor carrier safety management. States have used SaDIP grants in the past to fund a portion of their crash data improvement efforts, and to obtain hardware, software, and training. States are encouraged to work with their FMCSA Division Office to pursue a SaDIP grant.

FHWA Data and Analysis Technical Assistance

The FHWA Office of Safety provides customizable technical assistance to State and local agencies on data and analysis. Through this program if an agency is having difficulties or issues regarding the collection or analysis of roadway data, they may request assistance from the FHWA Office of Safety. The Office of Safety will, depending upon the request, provide assistance to address the problem. This assistance may range from providing direct answers to simple questions up to conducting multi-State peer exchanges on the problem issues. Requests for assistance can be submitted through the FHWA Office of Safety website.

B. STRATEGIC PLANNING AND TRCC IMPROVEMENT

TRCCs are required to approve a State *Traffic Records Strategic Plan*. In the noteworthy practices and case studies, the TRCC takes on a more active role in producing the plan by selecting projects and monitoring progress toward achieving the plan's goals and objectives. The NHTSA *Traffic Records Program Assessment Advisory* includes a description of the ideal *Traffic Records Strategic Plan* and planning process.[1] The following is a summary of this information and is consistent with training that NHTSA has offered in the past on the topic of strategic planning.

1. Vision and Mission

The *Traffic Records Strategic Plan* is intended to set a vision for the future of the traffic records system in a State. Vision statements should describe the end goal, perhaps far in the future, for what the traffic records system should be and how it should operate. A mission statement, in contrast to the vision, is expressed in more concrete terms, often including numeric or absolute targets, and describes the intended progress to be made during the current plan's duration (typically a five year window).

The vision and mission statements are useful in describing the TRCC's intentions. They also serve to help guide the decision making portions of the planning process – goal setting and project selection. For this reason, a typical strategic planning process starts by establishing the vision and mission. Later, as the TRCC considers how to address each of the issues by selecting strategies, setting goals, and selecting projects, the vision and mission help to focus the group's thinking on the hoped-for end result when the plan is fully implemented.

2. Goal Setting

A strategic plan is focused on issues that need to be resolved and on opportunities that the State wishes to take advantage of. These are most often expressed as problem statements and lead the TRCC to select strategies addressing each issue or opportunity. The strategies, in turn, are described by a set of numerical goals. The goals lead the TRCC to select projects that will meet those goals. For this reason, every project proposal must include a set of promised performance measure improvements describing the numeric impact that the project will have on timeliness, accuracy, completeness, uniformity, data

integration, and accessibility.

States are strongly encouraged to establish system-wide data quality performance measures. This is a necessary part of a comprehensive, formal data quality management system as described in the *Advisory*. Most importantly, in strategic planning it is very easy to become project focused and for the plan to lose sight of the overall impact of the selected projects on statewide data quality performance measures. Without that larger, system-wide focus, States run the risk of selecting a mix projects that all affect the same portion of the overall problem, and thus rather than achieving an additive effect where the projects each make a separate, incremental improvement in quality, their effects interact and overlap. States run the risk of over-promising on data quality improvements if they focus only at the project level performance measurements in their strategic plan.

Nevertheless, every project proposal should include performance measures that serve as numeric goals by which the TRCC can assess the success of the project. Reporting progress to the TRCC is an important part of the TRCC's strategic planning role. Ideally, the TRCC will review progress toward achieving the strategic plan's goals at least annually, but more often if necessary. The purpose for this review is so that the TRCC may update the plan, removing any projects that are completed or that fail and adding new projects as new needs and opportunities are identified.

3. Action Plan

Strategic plans should always include an *action* plan. An action plan lists the detailed steps for achieving each of the strategies, goals, objectives, and project tasks included in the strategic plan. Action plans are also a tool the TRCC can use to monitor progress at the individual task level. Each task listed in the action plan includes a start date, projected end date, lead agency and assigned project leader, and an indication of the current status. When progress is achieved, or milestone dates arrive, the action plan can be updated with status reports so that the TRCC can assess how well each project is doing. This is especially important when projects include task dependencies and relationships among various projects are complex. The action plan can include details of all of the task dependencies so that the TRCC can instantly assess the impact of delays or project failures on other portions of the strategic plan. Without the detailed tracking supported by an action plan, the TRCC may miss important task dependences and discover too late that a missed deadline in one project jeopardizes the success of major sections of the strategic plan.

C. TRCC MANAGEMENT

This final section presents recommendations about managing an effective TRCC. The examples are drawn from earlier chapters in this report where more detail can be found about how each of the States uses the recommended practices as part of its TRCC management process. States are encouraged to contact their peers in other States to discuss details such as implementation steps and how the manage the changes implied in each of the recommended practices. NHTSA GO Teams may also be of assistance.

1. Foundational Documents, Structure, and Relationship Building

As part of the NHTSA grant program requirements, States must submit evidence of formal endorsement of the *Traffic Records Strategic Plan*. Guidance on the TRCC requirements for the same grant programs describes a formally constituted TRCC with authority for specific activities, including the strategic plan. Successful TRCCs go beyond these required attributes. Michigan and Washington provide noteworthy examples of TRCCs that operate under formal agreements outlined in a Charter or MOU. These TRCCs spend time each year updating their foundational documents and find value in refreshing agency leaders' knowledge of the importance of the TRCC and traffic records.

As shown in the case studies, not all TRCCs operate on such a formal level. Still, even the less formal TRCCs have the authority to make decisions and, in most cases, manage the funding for traffic records improvements. The effective TRCCs have each found a way to make the TRCC's work meaningful to the members. Two of the case studies (Connecticut and Minnesota) include details about past failures of their TRCC. Their cases serve to illustrate the risks when a TRCC lacks purpose and does not focus resources on conducting productive meetings. Rather than an energized, engaged TRCC membership, people feel at a loss to explain to their agency why they should continue to attend. Attendance is absolutely critical to TRCC effectiveness—so much so that the MOU for Washington includes rules for attendance and removal of members who fail to show up.

Connecticut provides an example of using member outreach (surveys and telephone conversations) to improve the TRCC's ability to fulfill its role in inter-agency coordination and building trust. Minnesota and Washington provide examples of how deliberate, purposeful action on the part of the TRCC Coordinator results in better participation, more constructive meetings, and positive relationship building that is so critical to their TRCCs' success.

States are advised to leave room in their Charter or MOU for the TRCC to take on new and expanded roles. Relevant examples include Connecticut, Minnesota, and Washington TRCCs that serve as the *owners* of major systems or as the driving force for major projects such as statewide data integration or crash system upgrades. A too-restrictive Charter or MOU would squash such efforts before they started. Success in promoting and managing major traffic records improvements is one clear way to energize the TRCC members.

Structurally, TRCCs take many forms and self-describe their structure as one-tiered, two-tiered, or even three-tiered. In practice, each of the successful TRCCs highlighted in this report has a committee that fulfills the functions described by NHTSA for a two-tiered TRCC. There are examples of hands-off executive TRCCs (such as Connecticut) as well as those that function almost entirely as an executive committee (Florida and Louisiana). As different as these structures seem at first, they each work well in their respective States. Upon closer examination, the TRCCs meet the intent of the legislation and the NHTSA guidance by taking on those functions and responsibilities that the law or guidance describes. In fact, they go well beyond those requirements and, as discussed earlier, that is what has truly energized their organization.

Perhaps even more important than the one- or two-tiered issue is that all of the effective TRCCs highlighted in this report make regular use of a third-tier -- the subcommittees. Subcommittees offer an opportunity to bring in new perspectives from agencies and experts who are not formally members of the full TRCC. They also provide the TRCC with access to expert level advice on key issues that might be lost in the context of a larger TRCC meeting. States with active TRCCs make good use of subcommittees to get work done in parallel paths. While the full TRCC meets and deals with a large slate of issues, the subcommittees meet to deal with a single issue and then report back to the full TRCC.

2. Program Management and TRCC Support

The successful TRCCs highlighted in this report have taken on specific program management duties. In some cases, as noted earlier, the TRCC acts as the owner and manager of a traffic records system component. Other TRCCs do not have quite that much direct responsibility for project management; however, all of the TRCCs described in this report have a direct impact on decisions regarding project selection and funding.

Their impact is also indirect in that they produce the *Traffic Records Strategic Plan*, but it should be recognized that the direct impacts are more likely to energize the TRCC membership. Connecticut's member survey identified the chief complaint was that the TRCC never accomplished any of its goals. The chief desire was for productive involvement. When the TRCC refocused its efforts to take on and complete large projects, the membership expanded and member engagement increased.

It is very difficult for an all-volunteer organization like a State TRCC to take responsibility for major projects. Members have their own job responsibilities and even if they are fully supportive of the TRCC as an ideal way to achieve the best traffic records system for their State, that positive attitude may not translate into action by individual members or their agencies. The case studies show examples of TRCCs with funded support positions with responsibility for scheduling and facilitating meetings, providing TRCC members with information and materials, managing the strategic planning process, assisting potential grantees, and following up on progress on funded projects or projects of interest to the TRCC. Another, perhaps easily overlooked, aspect of paid support for the TRCC is that by doing so a State frees the members' time and provides continuity in leadership. This means that the Coordinator serves as a constant resource, and that makes it easier to build relationships and hold constructive and productive meetings. Most importantly of all, with paid support it becomes some individual's *job* to make sure that the TRCC is effective. That person, as in Minnesota and Washington, in particular, is tasked with making the connections and building the TRCC as a force for improvement. An empowered TRCC Coordinator can accomplish much.

3. Performance Monitoring and Measurement

Unlike the other areas of success described in this report, it remains difficult to find a TRCC that is truly effective in data quality performance management. This is admittedly a difficult role for a TRCC to take on since the data owners are ultimately responsible for data quality management, and (as shown by recent Traffic Records Assessments, CDIPs and RDIPs) not many data owners have a formal data quality management program in place. Lacking the programs at the system level, the TRCC's role in monitoring those programs is moot. The best example among the case studies is found in Michigan which has established a performance measurement subcommittee of the TRCC. This subcommittee is very new at the time of this report. Its initial charge is to develop recommendations and coordinate among the system owner agencies to create statewide data quality performance measures.

States are strongly encouraged to establish a role for the TRCC in monitoring data quality performance. A subcommittee, like that being implemented in Michigan, is one way for the TRCC to help define that role. States may also wish to consult the system-specific sections of the *Traffic Records Program Assessment Advisory* to understand what the ideal envisioned by NHTSA.[1] The *Model Performance Measures for State Traffic Records Systems* is a good resource for a *minimum* set of data quality performance measures. States are advised to treat that document as a minimum.[4] Most importantly, States should develop a set of performance measures that meet the needs of their data collectors, users, and managers. The TRCC can help to define those measurements simply by virtue of being an organization that brings all of the required stakeholders together in an environment focused on productive dialog among its members.

As a final recommendation, though not explicitly covered in any of the examples in this report, States are strongly encouraged to calculate a baseline value for every performance measure they create. Baseline data define the starting conditions and support the kinds of comparisons that the State will need in order to prove that its programs and individual projects have had the desired impact on traffic records data quality. Without baseline measurement, the projects' impacts are mixed in with the data that then describe the "new" baseline and an opportunity to take credit for improvements is lost.

4. Sources of Assistance

There are several resources that States can use to support their TRCC and their traffic records data improvement projects. Sources of funding are described in Appendix A and will be mentioned only briefly here. Earlier sections of this report also describe technical assistance programs offered by NHTSA, FHWA, and FMCSA.

State TRCC Coordinators and other support staff are encouraged to contact the individuals listed at the end of each of the case studies. Where there are good ideas that a TRCC can adapt for its own use, peer-to-peer discussion can help provide important details about other States' experiences during implementation. NHTSA and FHWA will be happy to help facilitate the contacts among States.

Technical assistance from NHTSA GO Teams and the CDIP are available upon request through the NHTSA Regional Office. FHWA RDIP and Data and Analysis Assistance are available through the FHWA Office of Safety and by request through the Division Office. FMCSA SaDIP projects and funding may be pursued through the Division Office or directly with FMCSA headquarters personnel. States are advised to put their requests in

as early as possible as there are limited resources for these efforts in each Federal Fiscal Year.

States may always make use of resources from NHTSA, FHWA, FMCSA, and others. For example, there are many guides and templates for strategic planning. The *Traffic Records Program Assessment Advisory* is a ready reference for States to self-assess their TRCC or strategic planning process.[1] States may also use available grant funds to hire consultants to help them with TRCC efforts, as is done in Connecticut on a long-term basis, or for shorter term efforts such as strategic plan facilitation or performance measurement system design.

In conclusion, this report provides information for State TRCCs. It is intended as a resource describing noteworthy practices and providing recommendations for TRCCs to improve their effectiveness. The document addresses issues relating to TRCC structure, responsibilities, and methods of operation. While the primary audience for this report is the TRCC Coordinators and Chairs who are tasked with supporting the TRCC, it is hoped that all TRCC members and the stakeholder agency executives will find the examples and recommendations useful as they are called upon to review and approve changes to their State's TRCC.

REFERENCES

1. U.S. Department of Transportation, National Highway Traffic Safety Administration. (2012). *Traffic Records Program Assessment Advisory (DOT HS 811 644).* Available at: http://www.dot.gov/sites/dot.gov/files/docs/NHTSA%20Traffic%20Records%20Program%20Assessment%20Advisory.pdf

2. U.S. Department of Transportation, National Highway Traffic Safety Administration and Federal Highway Administration. (undated). *Code of Federal Regulations (23 CFR 1200.22).* Available at: http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=23:1.0.2.13.1

3. U.S. Department of Transportation, National Highway Traffic Safety Administration. (2013). Uniform Procedures for State Highway Safety Grant Programs; Final Rule. *Federal Register,* 78 (15), 4985-5003. Available at: https://www.federalregister.gov/articles/2013/01/23/2013-00682/uniform-procedures-for-state-highway-safety-grant-programs

4. U.S. Department of Transportation, National Highway Safety Traffic Administration. (2011). *Model Performance Measures for State Traffic Records Systems (DOT HS 811 441).* Available at: http://www.ghsa.org/html/files/resources/planning/Records.Perf.Msrs.pdf

5. U.S. Department of Transportation, Federal Highway Administration, Federal Motor Carrier Safety Administration, National Highway Traffic Safety Administration, and Governors Highway Safety Association. (2012). *Model Minimum Uniform Crash Criteria (MMUCC) guideline, 4th Edition.* Available at: http://www-nrd.nhtsa.dot.gov/Pubs/811631.pdf

APPENDIX A: FUNDING AND RESOURCES

As noted in the body of this guide, funding is a challenge for TRCCs both in terms of finding the resources to staff the TRCC itself, and in deciding which sources of funding are best suited to specific projects. Funding traffic records improvements is a responsibility that TRCCs and the data custodial agencies must address cooperatively. When a State agency is using its own funds to improve a system, those improvements should still be recognized as part of the State's traffic records improvement strategic plan which the TRCC creates and approves. When grant funds are involved, the TRCC's role extends to (at a minimum) determining which projects should be promoted within the strategic plan and among the involved agencies. Frequently, the TRCC actually helps to decide which projects the State will submit as part of various grant funding applications. Based on examples from the noteworthy practices discussions, Traffic Records Forum TRCC Roundtables, and the case studies included in this report, TRCCs typically seek funding from Federal sources, like the Federal Highway Administration (FHWA), National Highway Traffic Safety Administration, and the Federal Motor Carrier Safety Administration. The 2006 Transportation reauthorization legislation, Moving Ahead for Progress in the 21st Century (MAP-21), updated the USDOT funding streams, and many TRCCs have found new opportunities in updated legislation while continuing to fund projects with hold-over money provided under prior legislation. As TRCCs and partner agencies generate projects ideas for long-term and large-scale projects, States are also turning to sources outside of the USDOT for opportunities and are working with their Federal partners to use funds in creative ways.

The purpose of this chapter is to provide TRCCs with information about funding options, as well as examples of how some TRCCs have successfully used these sources. The chapter first provides an overview of the Federal funding sources available for TRCCs. And then presents more detail on the grants available under each source and how States may use this funding to support traffic records initiatives. Finally, the chapter briefly introduces other Federal and non-traditional funding sources available for TRCCs.

FEDERAL FUNDING SOURCES

The U.S. Department of Transportation supports State and local transportation projects through grant programs and other mechanisms included in the Moving Ahead for Progress in the 21st Century Act (MAP-21) transportation reauthorization legislation. Three agencies — FHWA, NHTSA, and FMCSA — manage funding programs under MAP-21 for the purpose of reducing crashes, injuries, and fatalities. Some of these funds can be used to improve the quality of data used in highway safety analyses.

Beyond traditional transportation-specific funding steams, the U.S. Department of Health and Human Services (DHHS) support several Federal health agencies that both directly and indirectly relate to highway safety. The Centers for Diseases Control and Prevention (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA) both distribute funding to support physical and mental health initiatives.

Brief descriptions of the three USDOT Administrations' and two DHHS agencies' grant funding programs are provided below.

Federal Highway Administration (FHWA)

Federal Highway Administration (FHWA) is responsible for administering several programs funded under MAP-21 that are primarily focused on engineering solutions. Under MAP-21, all States receive funding. There are several examples provided where States have used FHWA-managed funding to improve traffic records data quality as a mechanism to support better safety analysis.

National Highway Traffic Safety Administration (NHTSA)

The National Highway Traffic Safety Administration (NHTSA) provides grants to State governments to conduct effective highway safety programs, which fall under MAP-21. There are two sections of funding: Section 402 and Section 405. Section 402 grants support highway safety plans, provide start-up money for new programs, and give direction to existing programs. Section 405 grants support six independent areas: occupant protection, State traffic safety information systems, impaired driving countermeasures, distracted driving, motorcycle safety, and State graduated driver licensing laws.

Federal Motor Carrier Safety Administration (FMCSA)

The Federal Motor Carrier Safety Administration (FMCSA) offers safety grant funding opportunities to State and local agencies. Projects should focus on commercial motor vehicle safety activities, especially on motor carriers regulated by FMCSA. And, so long as the impact on CMV safety is apparent, FMCSA may also fund projects that have a broader impact. Capacity to work with highway traffic safety stakeholders is essential for FMCSA funding. Successful applicants often work with law enforcement agencies, State departments of public safety, departments of transportation, TRCCs, associations that focus on commercial motor vehicle safety and training issues, and other similar industry stakeholders.

Centers for Disease Control and Prevention (CDC)

The CDC supports many programs and agencies focused on improving health and preventing diseases and death. The National Center for Injury Prevention and Control is a branch under the CDC concerned with several motor vehicle safety topics, including: child passenger safety, seat belts, teen drivers, impaired driving, distracted driving, older adult drivers, and motorcycle safety. Transportation-related injuries are listed as a focus area in the CDC Injury Research Agenda 2009 – 2018. The National Institute of Occupational Safety and Health is another agency under the CDC umbrella. Workplace Safety and Health Topics that be relevant to TRCCs include distracted driving, motor vehicle safety, and surveillance. Funding supports research and training programs, State surveillance programs, and multidisciplinary education and research centers.

Substance Abuse and Mental Health Services Administration (SAMHSA)

SAMHSA supports programs for substance abuse disorders and mental illnesses. While not directly related to highway safety and data, this agency focuses on issues such as driving while impaired and risk-taking behaviors that impact health and safety. A key factor in the SAMHSA prevention framework is assessing the nature and distribution of substance abuse and related consequences by using epidemiological data.

More information on the specific Federal funding opportunities and requirements are presented in the remainder of this chapter.

FEDERAL FUNDING OPPORTUNITIES

The following section provides more details on the programs and grant opportunities listed in the previous section. Each grant includes a program description and goals as well as other useful information. Several examples of how different TRCCs have used successfully used the funding streams for implementation are included throughout. The last section provides resources for transportation-related funding from non-traditional resources.

FHWA PROGRAMS

Direct Funding

Highway Safety Improvement Program (HSIP)

Description: *MAP-21 continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.*

Highway Safety Improvement Program (HSIP) funding can be used for any strategy, activity, or project on a public road that is consistent with the data-driven State Strategic Highway Safety Plan (SHSP) and corrects or improves a hazardous road location or feature or addresses a highway safety problem. HSIP projects are not limited to those on the MAP-21 list of eligible activities. Workforce development, training, and education activities are also considered eligible use of funds.

To qualify for HSIP funding, a State must develop, implement and update a SHSP, produce a program of projects or strategies to reduce identified safety problems, and evaluate the SHSP on a regular basis. States are required to have a safety data system to perform problem identification and countermeasure analysis on all public roads, adopt strategic and performance-based goals, advance data collection, analysis, and integration capabilities, determine priorities for the correction of identified safety problems, and establish evaluation procedures.

State TRCCs may use HSIP funds for traffic records initiatives as long as data is included as an emphasis area in the SHSP. Several TRCCs have successfully used HSIP funding for traffic records programs, such as the Louisiana TRCC, which supports the collection of fundamental data elements on all public roads using HSIP funds. These funds supplement the existing pavement management data collection van to support the collection of roadway data on public roads concurrently. And, since the van collects information on all public roads, local municipalities and MPOS can pay for the data processing of the roadway data collected in their area. This reduces the pressure on the local agencies to collect their own data and the additional funds collected support the TRCC and data collection efforts.

More information on HSIP funds is available here: http://www.fhwa.dot.gov/map21/funding.cfm.

Highway Planning and Construction

Description: *To assist State transportation agencies in the planning and development of an*

Previous awards supported roadway projects such as roadway widening, resurfacing, and bridge replacements. An environmental impact assessment is required for most projects under this program. Often times TRCCs turn to their partner agencies to help supplement project funding, and Highway Planning and Construction funds are sometimes added to this pool. Michigan has made the case to their partners, emphasizing the relevance of projects that benefit everyone and was able to pool funds from several agencies, including these funds, to support projects.

More information is available at: http://www.federalgrantswire.com/highway-planning-and-construction.html#.VQw6XI7F-lc.

State Planning and Research Program (SP&R)

Description: *The Moving Ahead for Progress in the 21st Century Act (MAP-21) requires that States set aside 2 percent of the apportionments they receive from four of the core Federal-aid programs for State planning and research activities. Of this amount, States must allocate 25 percent for research, development, and technology. These activities involve researching new areas of knowledge; adapting findings to practical applications by developing new technologies; and transferring these technologies, including the process of dissemination, demonstration, training, and adoption of innovations by users.*

Under the State Planning and Research Program (SP&R), State DOTs are required to develop a unique management plan that includes a process for conducting a research program. Eligible projects include planning real-time monitoring elements; develop and implement management systems, plans and process under HSIP; or, develop and implement engineering and economic surveys and investigations.

State DOTs have the freedom and flexibility to manage the research program and management plans vary from State to State. These funds may be used with University Transportation Centers program and many States work with closely with universities and stakeholders to manage these funds. The partnership between Louisiana State University and the Louisiana Highway Safety Research Group, which receives funding from the Louisiana Department of Transportation, is an example of such a partnership.

New Jersey DOT uses SP&R money to fund Plan4Safety—which provides online access to safety data and analysis tools—and administers the funds to Rutgers through a grant. CAIT provides training, technical support, and expert analytic assistance for Plan4Safety users through the CAIT Transportation Safety Research Center. The program operates on a two-year contract, which can be renewed each period and is included in the State Transportation Improvement Plan (STIP) for long-term funding.

More information about the program is available here:
http://www.fhwa.dot.gov/publications/research/general/spr/index.cfm and
http://www.fhwa.dot.gov/map21/factsheets/spr.cfm

Other Programs / Opportunities

Roadway Data Improvement Program (RDIP)

Description: *The Roadway Data Improvement Program (RDIP) helps transportation agencies improve the quality of their roadway data to better support safety and other improvement initiatives. The RDIP focuses on the content, process, and practices used by the agency for collecting, managing, and utilizing their roadway data.*

This program from the FHWA Office of Safety provides free safety data technical assistance to help an agency improve data collection across the following key areas:

- Roadway Data Collection and Technical Standards.
- Data Analysis Tools and Uses.
- Data Management and Governance.

- Data Sharing and Integration.

A technical assistance team reviews and assesses a State's roadway data system for the content of the data collected, ability to use, manage and share the data and to offer recommendations for improving the roadway data. This team also examines the State's ability to coordinate and exchange roadway data with local agencies.

The purpose of this program is to help States improve the roadway data the State uses to develop their SHSP, and TRCCs can engage in this process to better understand how to include data as an emphasis area in the SHSP, therefore, opening the door for HSIP funding. More information and an online application are available here: http://safety.fhwa.dot.gov/rsdp/technical.aspx.

Roadway Data Extraction Technical Assistance Program (RDETAP)

Description: *RDETAP is intended to assist States to identify, extract and record Model Inventory of Roadway Elements (MIRE) from commonly available existing sources of data, such as State video logs, Google Earth and Bing street view maps. The RDETAP will build upon a technique of data extraction that was pilot tested with the New Hampshire DOT as part of the MIRE Management Information System project in 2012-2013.*

This free technical assistance program that provides a guide with instructions on how to extract roadway data and translate it into a State's roadway inventory system. Direct technical assistance to State DOTs and local agencies provides additional instruction on how to use the data extraction techniques. More information is on RDETAP available here: http://safety.fhwa.dot.gov/rsdp/technical.aspx.

The Office of Safety Technical Assistance Program

From time to time, other peer-to-peer and technical assistance programs become available. More information on the programs, as well as guidance on applications, are available on the technical assistance page on the Roadway Safety Professional Capacity Building Program website: http://rspcb.safety.fhwa.dot.gov/technical.aspx.

NHTSA PROGRAMS

Direct Funding

Section 402 State and Community Highway Safety Grant Program

Description: *The State and Community Highway Safety Grant Program, commonly referred to as Section 402, was initially authorized by the Highway Safety Act of 1966 and has been reauthorized and amended a number of times since then, most recently under MAP-21, with relatively few changes from SAFETEA-LU.*

The program administered by NHTSA at the Federal level and by the State Highway Safety Offices (SHSO) at the State level.

The purpose of this program is to provide grants to States to improve driver behavior and reduce deaths and injuries from motor vehicle-related crashes. Eligible States will have a highway safety program that is approved by the Secretary of Transportation. Funds can be used for the following: reduce impaired driving, reduce speeding, encourage the use of occupant protection, improve motorcycle safety, improve pedestrian and bicycle safety, reduce school bus deaths and injuries, reduce crashes from unsafe driving behavior, improve enforcement of traffic safety laws, improve driver performance, improve traffic records, and enhance emergency services.

While many States use Section 402 to fund traditional projects, several States have found creative and non-traditional uses for these funds. In Washington, the TRCC uses 402 funds to hold an annual statewide traffic meeting that focuses on relevant and emerging topics and attracts representatives from many different sectors and agencies. Similarly, Michigan holds a State Traffic Safety Summit annually that covers all traffic safety disciplines. This meeting does require registration fees, so some costs to the State are offset.

Furthermore, several States have used the funds to pay for staff positions that support TRCCs. For example, Connecticut pays for a part-time consultant that helps manage the TRCC. Similarly, Minnesota uses Section 402 to fund a full time Traffic Records Coordinator, as well as augment research assistance for programs such as FARS.

More information on funding requirements is available here: http://www.ghsa.org/html/stateinfo/programs/402.html.

Section 405b Occupant Protection

Description: *To encourage States to adopt and implement effective programs to reduce highway*

This incentive funding is available to State Highway Safety agencies to implement and enforce occupant protection programs, in compliance with established criteria.

Eligible uses of funding under Section 405b includes supporting high-visibility enforcement, training occupant protection safety professionals, public education campaigns, providing community child passenger safety services, establish and maintain information data systems, and to purchase and distribute child restraints to low-income families.

Previous projects that were funded include programs which increased the use of seat belts and child safety seats, law enforcement training on occupant protection, and sustained enforcement and participation in the National Click It or Ticket mobilization.

More information on funding requirements is available at: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div5&view=text&node=23:1.0.2.13.1&idno=23#se23.1.1200_121.

Section 405c State Traffic Safety Information System Improvement Grants

Description: *Encouraged States to adopt and implement effective programs to improve the timeliness, accuracy, completeness, uniformity, integration and accessibility of State data; to evaluate the effectiveness of efforts to make such improvements; to link these State data systems, including traffic records, with other data systems within the State; and to improve the compatibility of the State data systems with national data systems and data systems of other States to enhance the ability to observe and analyze national trends in crash occurrences, rates, outcomes, and circumstances.*

This program continues, with some changes, from the previous SAFETEA-LU Section 408 program. To qualify, a State must demonstrate that it has accomplished the following:

- Established multi-disciplinary highway safety data and traffic records coordinating committee.
- Developed a multi-year safety data and traffic records strategic plan.
- Approved by the coordinating committee and containing performance-based measures.

- Certify that the State has adopted and is using the model data elements determined by the Secretary to be useful or certify that grant funds will be used toward adopting and using the most elements practicable.

Section 405c funds are the most commonly used funds by State TRCCs and the uses vary State by State. Florida has used Section 405c to develop the strategic plan and fund projects. Other States, such as Connecticut and Louisiana, use funds the hire full time staff or consulting positions that manage the TRCCs. Michigan has used these funds to send TRCC contingents to the Traffic Record Forum. Representatives are selected based on the agenda of the meeting and the relevance to the statewide initiatives.

Minnesota is unique in that they have worked very closely with their Regional NHTSA office to carry Section 405c funds over multiple years. Both the State and NHTSA recognize that IT projects move slowly and require multiyear funding to remain sustainable. Decisions like these are the result of open communication and strong planning efforts that establish the need a long-term vision for the funding.

More information is available here: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div5&view=text&node=23:1.0.2.13.1&idno=23#se23.1.1200_122.

Section 405d Impaired Driving Countermeasure Grants

Description: *Grants are available for States that adopt and implement effective programs to reduce traffic safety problems resulting from individuals driving motor vehicles while under the influence of alcohol, drugs, or the combination of alcohol and drugs or that enact alcohol ignition interlock laws.*

A State is eligible to apply for the grant as a low-range State (average impaired driving fatality rate of 0.30 or lower), mid-range State (average impaired driving fatality rate that is higher than 0.30 and lower than 0.60), or a high-range State (average impaired driving fatality rate of 0.60 or higher).

States may also qualify for a separate grant under this section as an ignition interlock State. Any range State or ignition interlock State must use grants for high visibility efforts, hiring full time or part-time impaired driving coordinators, alcohol ignition interlock programs, training, or media outreach, among other initiatives to reduce impaired driving.

Special conditions and qualifications apply to the different ranges. More information on those restrictions as well is available here: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div5&view=text&node=23:1.0.2.13.1&idno=23#se23.1.1200_123.

Section 405e Distracted Driving Grants

Description: *Grants are available for States that enact and enforce laws prohibiting distracted driving, beginning with fiscal year 2014 grants.*

To qualify for a distracted driving grant, a State must submit documentation that demonstrates compliance with the following requirements:

- A statute that prohibits texting while driving and makes a violation of the law a primary offense, with a minimum fee of $25 for a first violation and increased fines for repeated violations within five years.
- A statute that prohibits drivers under the age of 18 to use cell phones while driving, with a minimum fee of $25 for a first violation and increased fines for repeated violations within five years.

At least 50 percent of the awarded grant funds need to be used for public education through advertising with information about the dangers of texting or using cell phones while driving. Funding can also be used to purchase traffic signs that notify distracted driving laws or for law enforcement costs related to enforcement of the law. More information is available at: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div5&view=text&node=23:1.0.2.13.1&idno=23#se23.1.1200_124.

Section 405f Motorcyclist Safety Grants

Description: *Grants for available for States that adopt and implement effective programs to reduce the number of single-vehicle and multiple-vehicle crashes involve motorcyclists.*

Eligible applicants include the 50 States, the District of Columbia, and Puerto Rico. To qualify for funding, a State must submit documentation demonstrating compliance with at least of the following criteria:

- Provide motorcycle rider training course that provides a formal program of instruction in accident avoidance and other safety-oriented operational skills to motorcyclists.
- Offer at least one motorcycle rider training course either in a majority of State counties or in counties with highest numbers of registered motorcycles.

- Use motorcycle rider training instructors to teach the curriculum.
- Use quality control procedures to assess motorcycle training courses and instructor training courses in the State.

Grant funds can be used for improvements to motorcycle safety training curricula; improvements to program delivery; measures designed to increase the recruitment and retention of motorcyclist safety training instructors; and public awareness announcements and outreach programs.

For more information on documentation required for application and demonstrate compliance, please see: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div5&view=text&node=23:1.0.2.13.1&idno=23#se23.1.1200_125.

Section 405g State Graduated Driver Licensing Grants

Description: *Grants are available for States that adopt and implement graduated driver's licensing laws that require novice drivers younger than 21 years of age to comply with a two-stage licensing process prior to receiving a full driver's license.*

Eligible applicants include the 50 States, the District of Columbia, and all US territories. To qualify, a State must provide documentation demonstrating a graduated driver's licensing law must include a learner's permit state and an immediate stage meeting the minimum requirements.

Total funds allocated among qualifying States is based on the Section 402 apportionment formula. A State may not be awarded an amount exceeding 10 percent of the total amount made available. At least 25 percent of the grant funds must be used to enforce the graduated driver's licensing process; provide training for law enforcement personnel; publish relevant educational materials; carry out administrative activities related to implementing the graduated driver's licensing process; or carry out a teen traffic safety program. No more than 75 percent may be used for eligible projects or activities under Section 402.

More information on specific qualification criteria and the program is available here: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div5&view=text&node=23:1.0.2.13.1&idno=23#se23.1.1200_126.

Other Programs / Opportunities

Crash Data Improvement Program (CDIP)

Description: *The CDIP is intended to provide states with a means to measure the quality of the information within their crash database. It is intended to provide the states with metrics that can be used to establish measures of where their crash data stands in terms of its timeliness, the accuracy and completeness of the data, the consistency of all reporting agencies reporting the information in the same way, the ability to integrate crash data with other safety databases and how the state makes the crash data accessible to users. Additionally, the CDIP was established to help familiarize the collectors, processors, maintainers and users with the concepts of data quality and how quality data helps to improve safety decisions*

CIDIP funding has three considerations: crash data collection; crash data reporting; and, crash data processing. The purpose is to provide a State with measures to assess the deficiencies through each step of the crash data production process and provide greater information about the type of deficiencies that are occurring and how they may be best addressed by corrective measures. More information on the program, States are encouraged to contact their NHTSA Regional representatives: http://www.nhtsa.gov/nhtsa/whatis/regions/.

GO Teams

Description: *NHTSA's Traffic Records GO Team program helps States improve their traffic records systems by deploying teams of subject matter experts to deliver tailored technical assistance and training based on States' actual needs. Each GO Team will consist of up to three subject matter experts who will work a maximum combined total of 120 hours. This program is designed to provide additional resources and assistance for State traffic records professionals as they work to improve their traffic records data collection, management, and analysis capabilities.*

A State may request specific technical assistance that focuses on a targeted problem in the traffic records systems, or provides technical training to State traffic records program managers in an area identified by the State. Key assistance topics should address an issue identified in the State's traffic records strategic plan or identified during the State's most recent traffic records assessment. The GO Team initiative will also be used to deliver existing outreach programs including the Crash Data Improvement Program (CDIP). States are encouraged to submit GO Team requests that address a specific traffic records improvement need, either highlighted

during a State's traffic records assessment or identified by the State's Traffic Records Coordinating Committee (TRCC) and Highway Safety Office.

GO Team projects have clearly delineated scope appropriate to the GO team program – a smaller scale, short-to-medium term need. Focus areas include: data integration, crash, injury surveillance, citation and adjudication, driver/vehicle, roadway, and TRCC management and strategic planning.

State's interested in this program must complete a brief application that provide a detailed description of the technical problem, specific technical assistance being requested, current and past efforts to address the problem, an explanation of how the GO team assistance fits into the TRCC's strategic plan, anticipated improvements, and contact information for the State officials responsible.

More information on the program can be found here: http://www.nhtsa.gov/Data/Traffic+Records.

FMCSA PROGRAMS

Safety Data Improvement Program (SaDIP)

Description: *The Federal Motor Carrier Safety Administration's (FMCSA) objective is to fund State programs designed to improve the overall quality of commercial motor vehicle (CMV) data in accordance with the FMCSA State Safety Data Quality (SSDQ) measures, specifically to increase the timeliness, efficiency, accuracy and completeness of processes and systems related to the collection and analysis of large truck and bus crash and inspection data.*

Grants are awarded for the purpose of improving the overall quality of commercial motor vehicle (CMV) data, and specifically, to improve the timeliness, efficiency, accuracy, and completeness of State processes and systems used to collect, analyze, and report large truck and bus crash and inspection data. The FMCSA gives priority to proposals received from States rated yellow (fair) and red (poor) on the State safety Data Quality Map.

Funding may be used for a myriad of purposes. Some examples include: hire staff to manage data quality improvement programs, hire staff to code and enter CMV safety performance data, revise outdated crash report forms, develop software to transfer data from the State repository to SAFETYNET, purchase software for field data collection and data transfer,

implement data quality initiatives, or improve the overall quality of FMCSA Motor Carrier Management Information System census data.

Louisiana has successfully used SaDIP funding in the past to support TRCC efforts. This included funding an update to the crash report. Furthermore, Louisiana State University is collecting and reviewing FMCA crash data for correctness. Reviewed reports are sent back to State police for review and to fix any data quality issues. Then, the data is transferred to SAFETYNET. Similarly, Massachusetts is using SaDIP funding to move towards creating data quality measurements. This initiative would eliminate the need to recreate an additional TRCC subcommittee focused on oversight of larger projects like eCrash and eCitation and tracking the progress and data quality metrics.

More information is available at: http://www.fmcsa.dot.gov/grants/safety-data-improvement-grant/safety-data-improvement-program-grant-sadip.

Direct Funding

Motor Carrier Safety Assistance Program (MCSAP)

Description: *The MCSAP is a Federal grant program that provides financial assistance to States to reduce the number and severity of accidents and hazardous materials incidents involving commercial motor vehicles (CMV). The goal of the MCSAP is to reduce CMV-involved accidents, fatalities, and injuries through consistent, uniform, and effective CMV safety programs. Investing grant monies in appropriate safety programs will increase the likelihood that safety defects, driver deficiencies, and unsafe motor carrier practices will be detected and corrected before they become contributing factors to accidents.*

This program includes both basic and incentive grant funding. Incentive funding is awarded by submitting a commercial vehicle safety plan (CVSP) that demonstrates the reduction of truck-involved fatal accidents, CMV accident reports, CMV inspection data, and CDL verification during all roadside inspections.

States continue to encourage increased seat belt use by enforcing the State's occupant protection laws. Funds can also be used for any programs or projects that are eligible for Section 402 funds.

More information is available at: http://www.fmcsa.dot.gov/grants/mcsap-basic-incentive-grant/motor-carrier-safety-assistance-program-mcsap-basic-and-incentive.

Other Program Opportunities

Commercial Vehicle Information Systems (CVISN)

Description: *The CVISN grant program provides financial assistance to eligible States to (1) improve the safety and productivity of commercial vehicles and drivers; and (2) reduce costs associated with commercial vehicle operation and Federal and State commercial vehicle regulatory requirements. The program shall advance the technological capability and promote the deployment of intelligent transportation system applications for commercial vehicle operations, including commercial vehicle, commercial driver, and carrier-specific information systems and networks.*

FMCSA will first consider applications for the core deployment of CVISN. Then, remaining funds may be distributed for Expanded Deployment which only be used for the deployment of systems in a State that exceed the requirements of a core deployment of CVISN, improve safety and the productivity of commercial motor vehicle operations, and enhance transportation security. Designated lead agencies in the State's CVISN Program Plan and Top level Design are eligible to receive the program awards. More information is available here: http://www.fmcsa.dot.gov/grants/cvisn-grant/commercial-vehicle-information-systems-and-networks-cvisn-grant.

Performance and Registration Information Systems Management (PRISM)

Description: *This program links Federal Motor Carrier Safety information systems with State commercial vehicle registration and licensing systems and enables a State to (1) determine the safety fitness of a motor carrier or registrant when licensing or registering the applicant of motor carrier or while the license or registration is in effect; and (2) deny, suspend, or revoke the commercial motor vehicle registrations of a motor carrier or registrant that has been issued an operation out-of-service order by the Federal Motor Carrier Safety Administration (FMCSA).*

This grant may be awarded to States that work on highway traffic safety activities and demonstrate a capacity to work with highway traffic safety stakeholders. Financial assistance is for the implementation of the PRISM program to (A) comply with the uniform policies, procedures, and technical and operational standards; (B) possess or seek the authority to possess for a time period no longer than determined reasonable by the Secretary, to impose sanctions relating to commercial motor vehicle registration on the basis of a Federal safety fitness determination; and (C) establish and implement a process to cancel the motor vehicle registration and seize the registration plates of a vehicle when an employer is found liable under

section 31310 (i)(2)(C) for knowingly allowing or requiring an employee to operate such a commercial motor vehicle in violation of an out-of-service order.

More information available at: http://www.fmcsa.dot.gov/grants/prism-management-grant/performance-and-registration-information-systems-management-prism.

OTHER FUNDING SOURCES

States always have the choice of using their own funding toward traffic records improvements. This is especially important when the intended projects are long term, involve increasing headcount, or include other aspects that are not well suited for existing grant funding sources. When a State agency uses its own funds for a traffic records improvement project, it is important that the TRCC still include the project in the strategic plan and track the effects of the program on data quality.

TRCCs are encouraged to look beyond the traditional funding sources to explore other opportunities for funding traffic-related projects and support staff. In fact, many States are already looking to their TRCC partners to help pool money from other State, Federal, and non-traditional funding sources. For example, several States have engaged their court systems within the TRCC to help support projects. In Michigan, the public are allowed to purchase copies of crash reports and money raised through these efforts help support purchasing a traffic crash system. Additionally, other agencies have helped pool their funds from driver's license fees or court fees to help fund projects that would help improve the system statewide. Louisiana has implemented similar strategies where State and self-generated funds from court fees and CarFAX sales have helped finance program equipment. Court fees collected in Vermont have also sponsored the development of an extensive e-Ticket program.

Successful TRCCs are built upon successful partnerships that span multiple agencies and include representatives with different knowledge bases and backgrounds. Those partnerships are essential for identifying new funding streams and opportunities. As demonstrated by the examples previously listed, justice agencies may offer several unique sources for generating funds. Additionally, more TRCCs continue to collaborate with health agencies, which may also open the door for new funding sources. And as discussed earlier in this chapter, there are several State funding sources—such as HSIP and SP&R—that TRCCs can continue to explore.

Health

- The Centers for Disease Control and Prevention, Injury Center provides a resource for Funding Opportunity Announcements. No applicable funding opportunities are listed at

this time. However, transportation-related injuries are listed as a focus area in the CDC Injury Research Agenda 2009 – 2018. (http://www.cdc.gov/injury/ResearchAgenda/pdf/CDC_Injury_Research_Agenda-a.pdf).

More information on available funding opportunities can be found here: http://www.cdc.gov/injury/fundedprograms/foa/index.html.

- The National Institutes of Health provide a website of open funding opportunities searchable by activity code field. Applicable code fields include the following:

  - E11 – Health Professions Programs: Grants for Public Health Special Projects.
  - G08 – Research Programs: Resources Project Grant (NLM).
  - U17 – Cooperative Agreements: Applied Methods in Violence-Related or Accidental Injury Surveillance Cooperative Agreements.
  - U38 – Cooperative Agreements: Uniform National Health Program Reporting System.

  More information can be found at: http://grants.nih.gov/grants/funding/ac_search_results.htm?sort=ac&text_curr=&Search_Type=Activity.

- The Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health funds cooperative agreement grants. No application funding opportunities are listed at this time. However, the agency supports collaborative surveillance and research opportunities with State health departments, universities, labor unions, and non-profit organizations to be used in preventing occupational diseases and injury. More information can be found here: http://www.cdc.gov/niosh/oep/funding.html.

Non-Governmental Agencies

- The Governors Highway Safety Association provides a quick resource for State Highway Safety Offices that administer grant programs that are authorized and funded through Federal legislation. This provides information on MAP-21, SAFETEA-LU, and Highway Safety Funding, as well as the amount of safety funding allocated to the States and territories and State laws which may impact the amount of type of funding a State is eligible for. More information can be found here: http://www.ghsa.org/index.html.

- AAA Foundation offers opportunities for funding annually. Funding areas in FY 2014 that

may be of interest to TRCCs included: accelerating teen driver learning, crash risk and cognitive distractions, seatbelts and children, exploring loopholes related to DUI enforcement, understanding the safety of novice drivers, and understanding and addressing emerging trends in motorcycle safety. More information can be found here: https://www.aaafoundation.org/request-proposals.

Justice

- The U.S. Department of Justice, Office of Justice Programs provides a list of organizations and government divisions that provide funding to information sharing and technology initiatives. More information on possible grant opportunities can be found here: https://it.ojp.gov/default.aspx?area=implementationAssistance&page=1250.

- PoliceGrantsHelp.com features the most extensive law enforcement grant database available. This website provides information on a range of available Federal, State, local, and corporate grant opportunities and can be searched by key words. There are possible grant opportunities for traffic safety and equipment and technology. Visit the webpage here: http://www.policegrantshelp.com/grants/.

Other Federal Funding Sources

- The Catalog of Federal Domestic Assistance contains detailed program descriptions for over 2,000 Federal assistance programs and provides a searchable database. Possible grant opportunities include:

    - State and Local Implementation Grant Program (DOC/National Telecommunications and Information Administration).
    - Broadband Technology Opportunities (DOC/National Telecommunications and Information Administration).
    - Regional Information Sharing Systems (DOJ/Bureau of Justice Assistance).
    - State Court Improvement Program (DHHS/Administration for Children and Families).
    - Occupational Safety and Health Program (DHHS/CDC).

  Search the database here: https://www.cfda.gov/index?_page_back=1.

APPENDIX B: MEMORANDUM OF UNDERSTANDING

MEMORANDUM OF UNDERSTANDING for the Washington Traffic Records Committee

TRAFFIC RECORDS COMMITTEE WASHINGTON STATE

THIS MEMORANDUM OF UNDERSTANDING (MOU), which shall be effective upon execution by signature of all parties, is entered into among the following agencies, collectively referred to as the parties:

- Washington Traffic Safety Commission (WTSC) pursuant to the authority of chapter 43.59 R.C.W;
- Administrative Office of the Courts (AOC) pursuant to the authority of chapter 2.56 R.C.W.;
- Washington State Patrol (WSP) pursuant to the authority of chapter 43.43 R.C.W.;
- Washington State Department of Transportation (WSDOT) pursuant to the authority of chapter 47.01 R.C.W.;
- Washington State Department of Licensing (DOL) pursuant to the authority of chapter 43.24 R.C.W.;
- County Road Administration Board (CRAB) pursuant to the authority of chapter 36.78 R.C.W.;
- Washington State Department of Health (DOH) pursuant to the authority of chapter 43.70 R.C.W.;

- Washington Association of Sheriffs & Police Chiefs (WASPC) pursuant to the authority of chapter 36.28A R.C.W.; and

- Washington State Office of Financial Management (OFM) pursuant to the authority of chapter 43.41 R.C.W.;

WHEREAS the Washington Traffic Safety Commission is responsible for the planning, development, administration, and coordination of an integrated framework for traffic safety planning and action among all agencies and organizations in Washington and the successful implementation of traffic safety programs must involve the combined efforts of a number of agencies and organizations to be successful;

WHEREAS traffic records data is integral to the completion of such agencies and organizations' shared mission to reduce the number of fatalities and injuries and the severity of injuries related to trauma; and

WHEREAS the parties wish to improve the timeliness, accuracy, completeness, uniformity, integration and accessibility of traffic records data to identify priorities for national, state and local highway and traffic safety programs; and

WHEREAS the parties seek to make such improvements and to enhance interoperability among
Washington's traffic records systems and other state and national systems; and

WHEREAS in support of such purposes the parties named above have established an interagency highway safety data and traffic records coordinating committee, entitled the Washington Traffic Records Committee (TRC); and

NOW, THEREFORE, in furtherance of the foregoing and mutual public benefits derived there from, it is agreed as follows:

Section 1 -OVERVIEW & PURPOSE

I. Traffic Records.
The parties recognize that Washington's traffic records system is a virtual system comprised of the hardware, software and accompanying processes that capture, store, transmit, and analyze the following types of data:

- Collisions
- Citations & Adjudication

- Drivers & Registered Vehicles
- Traffic Fatalities
- Motor Carriers (Commercial Vehicles)
- Injury Surveillance (Emergency Medical Services, Emergency Department, Trauma, Hospital inpatient, Death Records)
- Roadway (Traffic Volume, Features Inventory, Geometries, etc.) and Location (Geographic Information Systems)

Each component of Washington's traffic records system provides key information to support decisions regarding public and transportation safety. The traffic records system provides critical data for problem identification and for the development of policy and countermeasure programs. Information derived from these systems is equally valuable in evaluating program effectiveness and documenting progress toward key measures of performance to enhance management and accountability in public service. Timely, accurate, integrated, and accessible traffic records data is crucial to Washington's efforts to improve public safety.

II. Mission.

The Washington Traffic Records Committee enhances transportation safety through coordinated projects to provide more timely, accurate, integrated and accessible traffic records data.

III. Goals.

The parties agree to cooperate in good faith to achieve the goals following:

1. To provide an ongoing statewide forum for traffic records and support the coordination of multi-agency initiatives and projects.

2. To leverage technology and appropriate government and industry standards to improve the collection, dissemination, and analysis of traffic records data.

3. To improve the interoperability and exchange of traffic records data among systems and stakeholders for increased efficiency and enhanced integration.

4. To promote the value of traffic records data and encourage training opportunities to maximize the effectiveness of the data for decision and policy making.

Section 2 – OPERATIONAL AUTHORITY

The Washington Traffic Records Committee operates under the authority of the agencies with either a custodial or contributive responsibility for the collection, management, use, or support of one or more components of Washington's traffic records system.

Section 3 – ORGANIZATIONAL STRUCTURE

The Washington Traffic Records Committee is comprised of two separate bodies, the Oversight Council and the Traffic Records Workgroup, the missions of which are set forth below. The Oversight Council and the Traffic Records Workgroup serve in distinct capacities as outlined in Section 4 – DUTIES AND RESPONSIBILITIES.

I. Oversight Council.

The Oversight Council provides policy oversight and program direction in creating and approving strategies and projects to improve Washington's traffic records system. The Oversight Council ensures strategic and project alignment with individual agency priorities, standards, and practices and performs an annual evaluation of Washington's traffic records strategic plan.

II. Traffic Records Workgroup.

The Traffic Records Workgroup functions as a technical and managerial forum for the discussion and examination of statewide traffic records issues. The Traffic Records Workgroup is responsible for developing the state's traffic records strategic plan and for creating, coordinating, and implementing improvement projects.

III. Administration.

The Washington Traffic Safety Commission shall provide the necessary support to assist and coordinate the Oversight Council and the Traffic Records Workgroup in fulfilling the mission and goals of Washington's Traffic Records Committee. This support shall include a coordinator to manage federal traffic records grants and to serve as liaison for traffic records activities in Washington.

Section 4 – DUTIES AND RESPONSIBILITIES

I. Oversight Council

The duties and responsibilities of the Oversight Council shall include the following:

1. To provide policy oversight and program direction for statewide traffic records activities.

2. To provide a policy level stakeholder forum for review and discussion of proposed traffic records projects to assess and provide comment on system wide impacts.

3. To review and take action on strategic, project, or legislative recommendations provided by the Traffic Records Workgroup.

4. To promote communication and coordination of traffic records among and within participating agencies.

5. To conduct an annual evaluation for approval of Washington's Traffic Records Strategic Plan.

II. Traffic Records Workgroup.

The duties and responsibilities of the Traffic Records Workgroup shall include the following:

1. To create and maintain the Washington Traffic Records Strategic Plan and Resource Manual.

2. To establish goals, objectives, and strategies to improve the traffic records system.

3. To provide a technical stakeholder forum for review and discussion of proposed traffic records projects to assess and provide comment on system wide impacts.

4. To provide administrative and technical guidance in the planning, coordination, and implementation of traffic records improvement projects.

5. To identify performance measure benchmarks and targets to evaluate the effectiveness of strategies and projects aimed at improving Washington's traffic records system.

6. To recommend procedural, content, and format changes to the Police Traffic Collision Report (PTCR) and related data collection software applications to improve the quality, completeness, and uniformity of statewide collision data.

7. To review current laws and proposed legislation to assess traffic records system impacts.

8. To evaluate new technologies and potential implications for the traffic records system.

9. To conduct periodic audits or assessments of Washington's traffic records system.

Section 5-
MEMBERSHIP

I. Members.

a. The Oversight Council shall include the members following:

1.	Washington Traffic Safety Commission, Director
2.	Administrative Office of the Courts, Judicial Services Division Director
3.	Washington State Patrol, Assistant Chief Technical Services Bureau
4.	Washington State Department of Transportation, Transportation Data and GIS Office
5.	Washington State Department of Licensing, Chief Information Officer
6.	County Road Administration Board, Intergovernmental Policy Manager
7.	Washington State Department of Health, Assistant Secretary
8.	
9.	Washington Association of Sheriffs & Police Chiefs, Chief or Sheriff
10.	Washington State, Office of the Chief Information Officer, Sr. Policy Consultant

b. The Traffic Records Workgroup shall include the members following:

The Traffic Records Workgroup shall be made up of representatives from the agency offices or divisions listed below at positions 1 through 15. Each representative shall be appointed and serve at the discretion of the Oversight Council Member representing that member's respective agency. It is anticipated that the National Highway Traffic Safety Administration, the Federal Motor Carrier Safety Administration and the Federal Highway Administration shall also be members of the Traffic Records Workgroup (known collectively as the U.S. Department of Transportation agencies). The parties contemplate that members representing U.S. Department of Transportation agencies (positions 16 – 18) shall be appointed by and serve at the discretion of the Region or Division Administrator of their respective agencies. Members representing U.S. Department of Transportation agencies shall be non-voting members of the Traffic Records Workgroup.

1.	Washington State Patrol, Technical Services Bureau
2.	Washington State Patrol, Field Operations Bureau
3.	Washington State Department of Licensing, Driver Records
4.	Washington State Department of Licensing, Title & Registration

5. Administrative Office of the Courts, Information Services Division
6. Administrative Office of the Courts, Judicial Services Division
7. Washington Traffic Safety Commission, Traffic Records Program Manager
8. Washington Traffic Safety Commission, Research & Data Division
9. Washington State Department of Transportation, Statewide Travel & Collision Data Office
10. Washington State Department of Transportation, GIS & Roadway Data Office
11. Washington State Department of Health, Community Health System
12. Washington State Department of Health, Center for Health Statistics
13. Washington Association of Sheriffs & Police Chiefs
14. County Road Administration Board
15. Washington State Office of the Chief Information Officer
16. National Highway Traffic Safety Administration, Pacific Northwest Region Office
17. Federal Motor Carrier Safety Administration, Washington Division
18. Federal Highway Administration, Washington Division

II. Term of Appointed Members.
Appointed Members for both the Oversight Council and the Traffic Records Workgroup shall serve at the pleasure of their respective appointing agencies.

III. Resignation.
An appointed Member may resign at any time by delivering written notice to the Chairperson, or by giving oral notice of resignation at any meeting. Upon resignation, the resigning Member shall recommend a replacement to fill the resulting vacancy.

IV. Vacancies.
The Chairperson or Co-Chairs shall bring a vacancy in either the Oversight Council or the Traffic Records Workgroup to the attention of the agency whose appointed member has vacated his or her position. A replacement shall be named at the discretion of such appointing agency within three months of the vacancy announcement.

V. Replacement of Appointed Members-
Absenteeism. a. Oversight Council
Any appointed Member of the Oversight Council who misses three (3) consecutive meetings will have such absences called to the Member's attention by the Chairperson. The Chairperson may advise the appropriate agency of continuing absenteeism and request that the appropriate agency replace the appointed Member.

b. Traffic Records Workgroup
Any appointed Member of the Traffic Records Workgroup who misses five (5) consecutive meetings will have such absences called to the Member's attention by the Co-Chairs. The Co-Chairs may advise the appropriate agency of continuing absenteeism and request that the appropriate agency replace the appointed Member.

VI. Stakeholders.
The Oversight Council may appoint stakeholder representatives to either the Oversight Council or the Traffic Records Workgroup as additional, voting or nonvoting members.

Section 6 – CHAIR PERSONS and CO-CHAIRS

I. Chairpersons.
a. Oversight Council.
The Director of the Washington Traffic Safety Commission shall act as the permanent Chairperson and coordinator for the activities of the Oversight Council.

b. Traffic Records Workgroup.

There shall be two Co-Chairs of the Traffic Records Workgroup. One Co-Chair shall be the Traffic Records Coordinator from the Washington Traffic Safety Commission. The second Co-Chair shall be elected from among the membership of the Traffic Records Workgroup and shall serve for a period of one year. The second Co-Chair may be re- elected upon the expiration of his or her term. The presiding facilitator of a particular Traffic Records Workgroup meeting shall be determined by the Co-Chairs on a meeting by meeting basis.

II. Acting Chairpersons.

a. Oversight Council

In the case of the absence of the Chairperson of the Oversight Council, the Chairperson may designate in advance of a particular meeting an Acting Chair to preside at the meeting. In the case of the absence of the Oversight Council Chairperson, and when an Acting Chair has not been designated, the Oversight Council may delegate the powers

or duties of such officer to any Member for a particular meeting. In the case of a vacancy of the Chairperson of the Oversight Council, the Deputy Director of the Washington Traffic Safety Commission shall be the Acting Chair until the vacancy is filled.

b. Traffic Records Workgroup

In the case of an anticipated absence or vacancy of one or both of the Co-Chairs of the Traffic Records Workgroup, the Co-Chairs may designate in advance of a particular meeting an Acting Chair or Chairs to preside at the meeting. In the case of the absence of one or both of the Traffic Records Workgroup Co-Chairs, and when an Acting Chair or Chairs has not been designated, the Traffic Records Workgroup may delegate the powers or duties of such officer to any Member or Members for a particular meeting. In the case of vacancy of one of the co-chairs, the other Co-Chair shall preside at the meetings until such time as the vacant Co-Chair position is duly appointed or elected, depending on which Co-Chair position is vacant. In the case of the vacancy of both Co- Chairs, the Traffic Records Workgroup may delegate the powers and duties of the
vacant Co-Chairs to any members of the Traffic Records Workgroup for a particular meeting, until such time as one or both of the vacant Co-Chair positions is duly appointed or elected, depending on which Co-Chair position is vacant.

Section 7 – MEETINGS

I. Regular Meetings.

a. Oversight Council.

Regular meetings of the Oversight Council shall be held each quarter at a time and place designated by the Chairperson.

b. Traffic Records Workgroup.

Regular meetings of the Traffic Records Workgroup shall be held monthly at a time and place designated by the Co-Chairs.

II. Special Meetings.

a. Oversight Council

Special meetings of the Oversight Council shall be held at the call of the Chairperson or upon request of any three (3) voting Members.

b. Traffic Records Workgroup

Special meetings of the Traffic Records Workgroup shall be held at the call of either Co- Chairs or upon request of any five (5) voting Members.

III. Quorum.

a. Oversight Council.

A quorum for the transaction of business shall constitute not less than five (5) members of the Oversight Council, and shall include within those five members the presiding Chairperson or designated Acting Chair. The Members present at an Oversight Council meeting at which a quorum is not constituted may elect to proceed only with informational and procedural portions of the meeting.

b. Traffic Records Workgroup

A quorum for the transaction of business shall constitute not less than nine (9) members of the Traffic Records Workgroup, including the presiding Co-Chair or designated Acting Chair. The Members present at a Traffic Records Workgroup meeting at which a quorum is not constituted may elect to proceed only with informational and procedural portions of the meeting.

IV. Meeting Conduct.

a. Discussion.

Only Members of the Oversight Council or Traffic Records Workgroup, appointed Stakeholders, and such other persons as are recognized by the presiding Chairperson shall be permitted to participate in discussion of matters of business, unless otherwise authorized by a majority vote of the Members.

b. Chairperson Votes.

The Chairperson of the Oversight Council and the Co-Chairs of the Traffic Records Workgroup shall have the same voting rights as any other Member of the Oversight Council and the Traffic Records Workgroup.

c. Member Voting.

1. Oversight Council.

Only Members of the Oversight Council may vote. Members may not vote by proxy or through a designee.

2. Traffic Records Workgroup.

Only individuals representing the agency offices or divisions listed in Section 5.1.b may vote. The vote may occur by proxy.

d. Majority Vote.

The action by vote of the majority of the Members present at a meeting at which there is a quorum shall be the act of Oversight Council or the Traffic Records Workgroup.

e. Robert's Rules of Order.

The parties agree to use their best efforts to apply Robert's Rules of Order to meetings of the Oversight Council and the Traffic Records Workgroup and any of its ad hoc or standing subcommittees except as otherwise provided in this MOU.

V. Attendance by Communication Equipment.

Meeting attendance may be by means of conference telephone call or any other communications equipment that allows all persons participating in the meeting to speak to and hear all participants. Participation by such means shall constitute presence in person at a meeting.

VI. Meeting Notices.

Advance notice of all regular and special meetings of the Oversight Council and the Traffic Records Workgroup shall be provided by mail, facsimile transmission or email.

VII. Meeting Minutes.

Minutes shall be made of all Oversight Council and Traffic Records Workgroup meetings. Minutes of Oversight Council meetings will be promptly distributed to members for review and approval at the following meeting. Minutes from Oversight Council and Traffic Records Workgroup meetings will be regularly available on the Washington Traffic Records Committee website (http://www.trafficrecords.wa.gov).

Section 8– SUBCOMMITTEES

I. Ad Hoc or Standing Subcommittees.

The Traffic Records Workgroup may, by the authorization of the Oversight Council, establish such ad hoc or standing subcommittees as deemed appropriate. The ad hoc or standing subcommittee membership and chairperson shall be designated by the Traffic Records Workgroup.

II. Subcommittee Authority.

The Traffic Records Workgroup may delegate project planning, coordination, and implementation authority to ad hoc or standing subcommittees as deemed appropriate.

III. Procedures.

Ad hoc or standing subcommittees shall follow all Traffic Records Workgroup procedures as defined in this MOU.

Section 9– AMENDMENTS

I. By Oversight Council.

The Oversight Council shall have power to make, alter, and amend this MOU and shall not be effective unless in writing and signed by all members of the Oversight Council.

II. By Undersigned Parties.

The undersigned Parties shall have power to make, alter, amend, and repeal this MOU upon written agreement, signed by all parties to this MOU.

Section 10 – GOOD FAITH

I. The parties agree to conduct all activities and perform all obligations in good faith and to work cooperatively with one another to accomplish the goal of providing timely, accurate, integrated and accessible traffic records data.

SIGNED AND ACCEPTED:

Darrin Grondel, Director
Washington Traffic Safety Commission
Date: 6/24/14

Jeff Monson, Intergovernmental Policy Manager
County Road Administration Board
Date: 5/5/14

Dirk Marler, ~~Chief Information Officer~~ JUDICIAL SERVICES DIR.
Administrative Office of the Courts
Date: 7/25/14

~~Martin Mueller, Assistant Secretary~~ Steven Saxe, Director, DCHS
Department of Health
Date: 8/12/14

Assistant Chief Shawn Berry
Washington State Patrol, Technical Services Bureau
Date: 5/5/14

~~Police Chief Tim Quenzer~~
Washington Association of Sheriffs & Police Chiefs
Date: May 5, 2014

Mark Finch, ~~Statewide Traffic & Collision/GIS & Roadway Data Office~~ TRANSPORTATION DATA MGR GIS Manager
Department of Transportation
Date: 5/5/14

Scott Bream, Sr. Policy Advisor
Office of the Chief Information Officer
Date: 6/4/2014

Melissa Spencer, Chief Information Officer
Department of Licensing
Date: 8/4/14

For More Information:

Visit: www.transportation.gov/trcc

FHWA, Office of Safety

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FHWA-SA-15-083