

Michigan DOT Research 2011

Implementation of Quick Clearance in Michigan

final

report

prepared for



Michigan Department of Transportation

prepared by

Cambridge Systematics, Inc.

with

Kimley-Horn & Associates EPIC-MRA James B. Bolger

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16. Abstract

The subject of this research effort is the "If You Can Steer It, Clear It" law, passed by the Michigan legislature in 2010. This legislation requires motorists to move disabled or wrecked vehicles to the side of the road if: 1) the car is operable; and 2) there are not any serious injuries or fatalities. For many people the concept of moving a car out of the roadway if there has been a crash is contrary to what they learned in driving school. The objective of this research was to determine what actions can be taken to improve understanding of the quick clearance law, and compliance with it, in order to attain the full mobility and safety benefits of the law. The research involved a literature search, a survey of 800 Michigan commuters and a workshop and outreach program to first responder stakeholders. Research established that most drivers comply with the law but are not aware that it is a requirement. Demographic groups less aware of the law and less likely to comply include older drivers, those with lower education levels and residents of rural regions. Based on the research a variety of low-cost marketing and outreach strategies are detailed in the report, all featuring a common, recognizable graphic theme, a superhero character Captain Clearlt. Strategies for using both traditional media and social media are proposed. The report also includes an analysis of the statewide incident management database and recommended modifications.

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1.0 Introduction

Quick clearance of disabled vehicles and other obstructions in a roadway provides a number of societal benefits. Across the country, the Federal Highway Administration (FHWA), state departments of transportation (DOT), State Police, local law enforcement, and transportation agencies have made quick clearance a priority in order to help address congestion and safety problems that result from vehicles that are unnecessarily obstructing traffic. The presence of these vehicles increases the likelihood of secondary crashes and reduces roadway capacity, resulting in increased delays.

The subject of this research effort is the "If You Can Steer It, Clear It" law, passed by the Michigan legislature in 2010. This legislation requires motorists to move disabled or wrecked vehicles to the side of the road if: 1) the car is operable; and 2) there are not any serious injuries or fatalities. For many people, particularly older drivers, the concept of moving a car out of the roadway if there has been a crash is contrary to what they learned in driving school. Unless there is widespread understanding of the quick clearance law, and compliance with it, the full mobility and safety benefits cannot be achieved.

The overall goal of the study was to establish a strategy, or strategies, for accurately and effectively communicating information about the quick clearance law to the motoring public of Michigan. Five tasks were conducted to accomplish this:

- A literature review and outreach to identify best practices in other states which is documented in Section 2.0;
- A telephone survey of 800 Michigan drivers to better understand their awareness of the law, their behavior related to the law, and their sources for transportation information which is documented in Section 3.0;
- A workshop and series of telephone calls to law enforcement, dispatch, and tow company personnel to review their experience with Quick Clearance law and identify improvements in both communication and incident management practices; documented in Section 4.0;
- Identification of marketing and outreach strategies to inform the public about the Quick Clearance law, documented in Section 5.0; and
- Development of recommended enhancements to the current Microsoft Access Database for Traffic Incidents, documented in Section 6.0.

The research identified the level of awareness and traveler information sources of Michigan drivers and the views and practices of first responders with regard to the Quick Clearance law. The information collected provided a strong basis for the recommended marketing and outreach strategies. It should be noted that many of these strategies are already in use by MDOT and also that those

recommended here can be applied to a broader range of safety initiatives. Major findings of the research are summarized as follows:

- It is generally accepted nationally that Quick Clearance laws requiring
 motorists to move their vehicles when there are no apparent injuries and the
 vehicles are moveable is a sound safety practice and should be put into law.
- The literature search demonstrated that a wide range of both outreach and operational strategies is in use related to Quick Clearance laws. Most outreach strategies used have been relatively low-cost, including brochures and use of agency web sites and social media. Operational strategies also have been focused on use of existing resources such as service patrols although a number of states have developed specialized programs designed to expedite removal of larger vehicles.
- While some of the materials provide good models for MDOT in publicizing quick clearance laws, there has been very little effort nationally to measure public awareness and compliance in a scientific manner.
- The survey results represented a good cross-section of Michigan automobile commuters, with most reporting that they travel the State's highways on a regular basis. Most respondents are not aware that the Quick Clearance requirement is law (72 percent) but indicate that they would behave in a manner that is in accordance with the law. Groups least likely to be aware of the law or behave in accordance with it include:
 - Drivers who live in rural regions;
 - Drivers with a high school education or less;
 - Drivers over the age of 50;
 - Drivers who are not aware of the Quick Clearance law; and
 - Drivers who travel on a less frequent basis than regular commuters.
- Sources for traveler information are becoming increasingly fragmented but the largest number of respondents still use what could be called "traditional" media sources; radio and television reports.
- There has been increased awareness of both MIDrive and MDOT social media sites since 2010 but a majority of respondents; 74 percent for MIDrive and 90 percent for social media sites, are not aware.
- While use of social media sites, primarily Facebook, is increasing, few respondents reported using these sites for transportation information.
- Dynamic Message Signs have the highest market penetration among survey respondents. Regular drivers in all regions reported high levels of familiarity with portable changeable message boards having increased visibility.
- The first responder stakeholders agreed, for the most part, that drivers tend to observe the Quick Clearance law even if they do not know it is a

requirement. There was agreement that additional training is needed for local law enforcement, dispatch, and towing personnel to make sure everyone is aware of the law. This training needs to be ongoing since there is significant personnel turnover in these organizations, and needs to be relatively brief. The stakeholders felt that the law could be explained relatively easily in a short session with supporting materials. This should be supplemented with a standard script for dispatch personnel that would include a reminder to move vehicles when there are no injuries and the vehicles are moveable. A sample script is provided in Section 5.

- Marketing strategies were developed on the basis of both the public survey and the stakeholder outreach effort, which indicated that a variety of methods were needed to reach the target audience. It also was concluded that a branding tool would be helpful in helping the public recognize and remember the concept. Other key elements of the marketing strategy include:
 - Messages related to Quick Clearance should emphasize that "it's our law."
 - Social media presence, and the entire marketing effort, should be enhanced by a contest that would focus on development of a YouTube video and a jingle. A mascot character, Captain ClearIt, has been presented in this report. This character could be incorporated into the video.
 - MDOT should make use of both fixed Dynamic Message Signs and Portable Changeable Message Boards wherever possible to inform the public on Quick Clearance. The use of portable boards will be somewhat constrained by the limited space available and should be supplemented by other means.
 - Since rural residents are an important target market for Quick Clearance messaging, MDOT should consider use of traditional media in lower-cost markets, including MDOT's Southwest, Superior, and North Regions. This would include radio and television public service spots, along with articles and press releases geared toward daily and weekly newspapers in smaller communities. Sample media spots and a sample press release are shown in Section 5.
 - Information flyers or brochures should be distributed through the Secretary of State's office with license and registration renewals by insurance companies with their renewals and by first responders and tow companies at the scene of minor crashes.

2.0 Literature Search

The first task of the MDOT research project OR 10-027, Quick Clearance in Michigan, involved the identification of best practices from other states' quick clearance strategies, public outreach efforts, and legislation. The purpose of this literature search was to identify agencies who have successfully implemented quick clearance legislation and have developed effective public outreach and awareness strategies to promote such policies and programs. Additionally, this literature review served to identify agencies with good record-keeping and evaluation programs, as well as innovative strategies for enhancing quick clearance activities. In summary, the main elements of the search were:

- Obtaining knowledge of quick clearance best practices;
- Identifying agencies with quick clearance laws and programs;
- Identifying agencies with good record-keeping and evaluation programs; and
- Discovering innovative strategies for enhancing quick clearance programs.

While the focus of this project is on Quick Clearance, the literature search addressed several other safety initiatives that require public outreach. These included "Move Over" and "Open Roads" policies that require motorists to make room for emergency vehicles or move over when these vehicles are on the side of the road. Work zone safety information was reviewed as well although this was not as high a priority.

Three primary sources were used to obtain an overview of the status of Quick Clearance laws:

- Traffic Incident Management Quick Clearance Laws A National Review of Best Practices, Texas Transportation Institute. December 2008;
- I-95 Corridor Coalition web site for Quick Clearance Workshop (http://i95coalition.org/i95/Training/QuickClearanceWorkshop/tabid/188/ Default.aspx); and
- State DOTs and Highway Patrol web sites for highway safety and incident management.

The results of this literature search are presented in Tables 2.1 and 2.2 and focused on two areas of interest:

- Public outreach, awareness, and educational strategies for promoting quick clearance laws and policies; and
- Incident management or other operational strategies that promote and/or reinforce quick clearance laws.

Both Tables 2.1 and 2.2 provide a column labeled "Relevance," which summarizes the various policies and programs implemented by other states into a list format that enables MDOT to easily identify particular strategies that may be relevant to their own "If You Can Steer It, Clear It" law. The last column field, featured in both tables, identifies where additional follow-up was made with agencies that have strong and innovative public outreach activities and/or incident management operations strategies, as noted by the marked check boxes.

2.1 OUTREACH ACTIVITIES

As documented in Table 2.1, a wide variety of outreach methods were identified as part of the literature search, including:

- Brochure/pamphlets/press releases;
- Billboards/signage, including both static signs and Dynamic Message Signs;
- Radio and/or televised public service announcements;
- Social media (Facebook, Twitter, YouTube); and
- Agency web sites for the Policy or Program.

Overall, 16 states were identified that had public outreach and awareness strategies for quick clearance policies. The three most frequently used methods were:

- Brochures/pamphlet/press releases;
- Billboards/signage; and
- Public service announcements.

Specific agencies contacted for additional information on outreach activities included:

- Caltrans Headquarters Outreach materials related to "Move Over" law, including brochures, billboards/signage, media public service announcements, and social media. The media kit uses a common theme for multiple media and is available on the web at the following link: http://www.dot.ca.gov/moveover/.
- Florida Highway Patrol and Florida DOT Press releases, billboards, traditional media, and social media outreach for the "Move It, Yes You Can" campaign. (http://www.flhsmv.gov/fhp/misc/SafeEdCamps.htm).
- Minnesota DOT Press releases and outdoor advertising for "Steer It, Clear It" campaign. (http://www.dot.state.mn.us/newsrels/04/07/21steerit.html).
- Maryland DOT Regulatory policy for "Move It! It's the Law" campaign (http://traffic.md.gov/moveit/moveit.asp) and on-line survey for Incident Response feedback (http://traffic.md.gov/moveit/survey.asp).

- Ohio DOT Complete set of outreach activities (brochures, outdoor advertising, traditional media, social media, web site, and training materials) for "Move Over, Slow Down" campaign. Training and workshop materials for responders. http://www.com.ohio.gov/fire/docs/fire_QuickClearProgram.pdf).
- South Carolina DOT "Steer It and Clear It" law benefit/cost analysis and information on outdoor advertising campaign. (http://info.scdot.org/PressRelease/Lists/Posts/Post.aspx?ID=1069).
- Tennessee DOT Complete set of outreach activities (brochures, outdoor advertising, traditional media, social media, web site, and training materials) for "Move Over" law. (http://www.tn.gov/safety/moveover.shtml).
- **Houston TranStar** Outdoor advertising and media campaign for "Steer It…Clear It" law. (http://www.houstontranstar.org/sici.aspx).
- City of Houston Information on enforcement strategies and complimentary services.
- Virginia DOT Media campaign and brochure for "Move It/Move Over" law.
 (http://www.virginiadot.org/travel/resources/rules_of_the_road_brochure .pdf).
- WashDOT Web site for "Move It Over" law marketed by both public safety agencies and DOT, and incentive program for incident response. (http://www.wsp.wa.gov/traveler/docs/laws/emergency_zone_brochure. pdf).

Table 2.1 details the various public outreach and awareness activities implemented by other states to promote their quick clearance policies and programs.

2.2 INCIDENT MANAGEMENT AND RESPONSE STRATEGIES

Twenty-one states were identified with quick clearance laws and applications of incident management strategies that applied directly to those laws. Information provided generally applied to the "Move It" laws that are the focus of this study, as well as "Move Over" laws which require drivers to safely "yield the right of way and immediately drive to a position parallel to and as close as possible to the right-hand edge or curb of the roadway, clear of an intersection, and stop and remain in that position until the authorized emergency vehicle has passed, except when otherwise directed by a police officer...upon the immediate approach of an authorized emergency vehicle equipped with not less than one lighted flashing, rotating, or oscillating lamp exhibiting a red or blue light visible under normal atmospheric condition from a distance of 500 feet to the front of

the vehicle and when the driver is giving audible signal by siren, exhaust whistle, or bell:"(Michigan Vehicle Code:257.653)." Some of the incident management practices identified included:

- Towing Incentive Programs and Strategies for Rapid Removal of Complex Incident Scenarios, including:
 - Florida Rapid Incident Scene Clearance (RISC) as well as information on regulatory policies, incentive programs, and training workshops for responders.
 - (http://www.dot.state.fl.us/trafficoperations/Traf_Incident/pdf/2010_ 2011AnnualRISCReportFINAL.pdf)
 (http://www.youtube.com/watch?v=3HPfEj0TCqI).
 - Ohio DOT Training and workshop materials for responders http://www.com.ohio.gov/fire/docs/fire_QuickClearProgram.pdf).
 - Georgia DOT Incentive programs and training related to Towing and Recovery Incentive Program (TRIP) and Traffic Incident Management Enhancement (TIME) program. (http://www.timetaskforce.com/trip.html) (http://www.timetaskforce.com/).
 - Minnesota DOT Press releases and outdoor advertising for "Steer It, Clear It" campaign. Regulatory authority and complimentary assistance for Freeway Incident Response Safety Team (FIRST). (http://www.dot.state.mn.us/newsrels/04/07/21steerit.html) (http://www.dot.state.mn.us/rtmc/first/overview.html).
 - North Carolina DOT Training and accident investigation sites for quick clearance of commercial vehicles. (http://www.ncdot.gov/travel/roadrules/).
 - Pennsylvania DOT Quick clearance best practices report. (http://www.operationsacademy.org/PDF/ListServer/2010/Moveitor QuickClearanceLaw/Attachments/Gannett_Fleming_Quick_Clearance_ February_2009%20%28Dec%2013%202010%29.pdf).
 - Wisconsin DOT Deployment of crash investigation sites (http://www.dot.wisconsin.gov/travel/stoc/crashsites.htm) to support incident clearance law. (http://www.dot.wisconsin.gov/travel/stoc/incident.htm).

Table 2.2 identifies various state and regional agencies with active quick clearance legislation and details the various incident management operations strategies these agencies have implemented to enhance their quick clearance activities.

Table 2.1 Public Outreach and Awareness Best Practices

Recommended	D	
Contact Information		
Source	http://www.dot.ca.gov/moveover/	http://www.fihsmv.gov/SafetyTips/ MoveOverTips.htm and http://www.fihsmv.gov/fhp/misc/ SafeEdCamps.htm
Relevance	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other:	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other: Bumper Stickers
n Description/Key Findings	A statewide media campaign began on July 11, 2011 featuring the State's "Move Over" law which tells driver they must move if safe to do so. During the campaign (first two weeks), the dynamic message signs showed reminder of the move over law. They have informed the public through various media outlets − public service announcements, press releases, billboards, YouTube videos, and various social media outlets like Facebook and Twitter.	Florida's media campaign to educate and promote its Move Over Law (vehicles must move over and/or slow town when an emergency vehicle is parked on the side of the road) includes promotional/educational materials through Florida DOT and Highway Patrol (web sites, brochures, radio announcements, videos (television ads), and bumper stickers. There also are signage on Florida roads to remind motorists of the Move Over law.
Program/ Regulation Title	Move Over Law	Move Over
Agency	Caltrans	Florida Highway Patrol and Florida DOT
State	Salifornia	Florida

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Follow-Up	D		
Contact Information			
Source	Source 1: http://www.ocfl.net/YourLocal Government/County Departments/Public/Works/Traffic/ MoveltCampaign.aspx; Source 2: http://www.flhsmv.gov/fhp/misc/ SafeEdCamps.htm	Brochure: http://www.i95coalition.org//95/Portals/ 0/Public_Files/uploaded/Incident- toolkit/documents/Filer/Filer_Move_ GA.pdf; Safety Tips: http://www.dot.ga.gov/ informationcenter/Documents/ TeenDriving/index.htm	http://itd.idaho.gov/NewsReleases/ Brochure_Quick_Clearance_2011.pdf
Relevance	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other:	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other:	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other:
Description/Key Findings	The "Move It! Yes You Can!" Policy was initiated to encourage drivers to pull over to the side of the road should they need emergency repairs or in the case of an incident, given that their vehicle is operable. To promote the "Move It! Yes operable. To promote the "Move It! Yes operable. To promote the "Move It! Yes or and the Florida Highway Patrol have used radio and televised public service announcements, brochures, videos available on Florida DOT and Highway Patrol web sites, press releases, and billboards.	Steer It and Georgia also has a "Steer It and Clear It" law similar to other states. They also have an informational brochure promoting the law. The campaign was much more active in 2004-2006 and even had a web site. The web site is no longer active and law is only briefly mentioned in some safety tips provided on the GDOT web site.	Idaho's "Ouick Clearance" Law was enacted in July 2005. Public awareness and educational campaigns include press releases, public service announcements, and brochures.
Program/ Regulation Title	Move Iti Yes You Can!	Steer It and Clear It	Ouick Clearance Law
Agency	Florida Highway Patrol and Florida DOT	Georgia	Idaho DOT and Idaho State Police
State	Florida	Georgia	odsbl

Recommended		D	
Contact Information		(1) Mn/DOT – Daneeka Marshall-Oquendo, (651) 296-8609; 2) Department of Public Safety, Nathan Bowie, (651) 296-9754	
Source	http://traffic.md.gov/moveit/moveit.asp	http://www.dot.state.mn.us/newsrels/ 04/07/21steerit.html	https://www.nysdot.gov/divisions/ operating/oom/ transportation-systems/systems- optimization-section/ny- moves/tim/tim-legislation
Relevance	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other: Survey	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other:	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other:
Description/Key Findings	Maryland DOT and CHART established the "Move It!" Program in order to educate motorists on what to do when involved in a vehicle collision. Specifically, this policy requires drivers involved in an incident or vehicle maintenance emergency to move their operable vehicle to the side of the road unless there has been an injury. The "Move It" Program is advertised on the Maryland DOT and CHART web site which features a Fact Sheet, brochure, and a survey.	In St. Paul, Minnesota, a metrowide initiative was launched in 2004 for the program "Steer ItClear It" which calls for motorists involved in freeway crashes of the shoulder of the roadway if there are no injuries and if the vehicles are drivable. The program uses roadside signs that read "Fender Bender? Drive Vehicle onto Shoulder."	New York's driver removal law to other states' policies. The o available promotional/public aw materials available on-line incluseveral press releases and a bit several press releases.
Program/ Regulation Title	Move Iti It's the Law	Steer It, Clear It	Steer ItClear It
Agency	, DOT	Minnesota DOT	New York State DOT
State	bnelylaM	stozanniM	Ием Үогк

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Follow-Up Recommended			
Contact Information	Jennifer Portanova, NCDOT, (919) 233- 9331, ext. 224	Howard Wood, Ohio DOT, (614) 466-2255, Howard:wood@dot. state.oh.us	
Source	http://www.ncdot.org/fravel/roadrules/ Jennifer Portanova, NCDOT, (919) 233-9331, ext. 224	http://www.dot.state.oh.us/Divisions/ Operations/ Traffic/publications2/Ohioquickclear/ Pages/default.aspx	http://statepatrol.ohio.gov/moveover. stm
Relevance	Public Awareness and Outreach Strategies include: ☑ Brochure/pamphlets/press releases ☑ Billboards/Signage ☑ Radio and/or TV Public Service Announcements ☑ Social Media (Facebook, Twitter, YouTube) ☑ Web Site for Policy/Program ☐ Other:	Public Awareness and Outreach Strategies include: ☑ Brochure/pamphlets/press releases ☐ Billboards/Signage ☐ Radio and/or TV Public Service Announcements ☐ Social Media (Facebook, Twitter, YouTube) ☑ Web Site for Policy/Program ☑ Other: Training Materials and Workshops	Public Awareness and Outreach Strategies include: □ Brochure/pamphlets/press releases □ Billboards/Signage ☑ Radio and/or TV Public Service Announcements ☑ Social Media (Facebook, Twitter, YouTube) □ Web Site for Policy/Program □ Other:
Program/ Regulation Title Description/Key Findings	Fender NCDOT initiated a combined campaign Bender to educate drivers on the Fender Bender Law, Move and the Move Over laws. Included Over Laws commercials on television and other outreach efforts.	Ohio Quick Ohio DOT developed a Quick Clearance Best Practices Guide that is mainly Include: Program Intended for professional responders and Semental Processional responders and Semental Officials. They also provide additional training and workshops to educate and promote quick clearance strategies. Sequental Public Service Ann Social Media (Facebook, Twitter, Yoedducate and promote quick clearance Strategies. Sequental Service Ann Social Media (Facebook, Twitter, Yoedducate and promote quick clearance Strategies. Sequental Sequental Service Ann Social Media (Facebook, Twitter, Yoedducate and promote quick clearance Strategies. Sequental Sequental Service Ann Social Media (Facebook, Twitter, Yoedducate and promote quick clearance Sequental Sequ	Move Over, To promote their "Move Over law, Slow Slow Down" law, the Ohio DOT and State Highway Patrol have sponsored several videos (available on YouTube) and public service announcements.
Agency	NCDOT	Ohio Department of Trans- portation	Ohio Oppartment of Trans- portation
State	Morth Carolina	oidO	oidO

Recommended	D	Σ	
Contact Information	(1) Doug Tomlinson, BHSTE Technical Manager, dtomlinson@state.pa.us, (717) 787-3657 (2) Michelle Tarquino, BPR Contract Manager, mtarquino@state.pa.us, (717) 787-5243 (3) Eric Rensel, Gannett Fleming/GeoDecisions, erensel@gfnet.com, (717) 763-7212 (4) Bob Taylor, Gannett Fleming/GeoDecisions, itaylor@gfnet.com, (717) 763-7212 (4) Taylor, Gannett Fleming/GeoDecisions, itaylor@gfnet.com, (717) 763-7212		
Source	http://www.operationsacademy.org/ PDF/ListServer/ 2010/MoveitorQuickClearanceLaw/ Attachments/ Gannett_Fleming_Quick_Clearance February_ 2009%20%28Dec%2013%202010% 29.pdf	http://etd.lib.clemson.edu/documents/ 1202410153/ umi-clemson-1405.pdf	http://www.tdot.state.tn.us/incident/ MoveItBro.pdf
Relevance	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other: Best Practices Report and Survey	Public Awareness and Outreach Strategies include: □ Brochure/pamphlets/press releases ☑ Billboards/Signage □ Radio and/or TV Public Service Announcements □ Social Media (Facebook, Twitter, YouTube) □ Web Site for Policy/Program ☑ Other: Benefit/Cost Analysis	Public Awareness and Outreach Strategies include: ☑ Brochure/pamphlets/press releases ☐ Billboards/Signage ☐ Radio and/or TV Public Service Announcements ☐ Social Media (Facebook, Twitter, YouTube) ☐ Web Site for Policy/Program ☐ Other:
/ n Description/Key Findings	This report identified best practices nationwide regarding quick clearance policies and strategies with the objective of providing the state guidance and recommendations in enhancing their incident management program. The report also discusses a national incident management survey that PennDOT administered in 2008 regarding incident management and quick clearance activities. Additional interviews also were administered to the State's Towing Association, FHWA personnel, and the State Police.	Steer It and South Carolina "Steer It. Clear It" is Clear It similar to other states' driver removal policies/laws. To make the public aware of the law, the SC DOT had a media campaign that included signage and billboard advertisements along the freeway, as well as radio and television commercials. Costs of such advertising versus savings (congestion reduction or incident reduction) can be found in the paper cited in the resource.	Tennessee DOT calls their driver removal law "Move It, Yes You Can!" Promotional materials (brochure) and information can be found on their web site.
Program/ Regulation Title	Ouick Clearance Best Practices Report	Steer It and Clear It	Move It, Yes You Can
Agency	Pennsylvania Quick DOT Clears Best Practii Repor	South Carolina	DOT
State	Pennsylvania	South Carolina	Tennessee

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Follow-Up	\square		
Contact Information			
Source	http://www.moveovertennessee.org/, http://www.tn.gov/safety/ moveovermain.shtml	aspx	http://www.virginiadot.org/travel/ move_it_move_over.asp
Relevance	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other: Heavy fines and enforcement, bumper stickers	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other:	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other:
Description/Key Findings	Tennessee's Move Over law is similar to other states except for its expansion to utility service employees. Information is available through the Tennessee Department of Safety and DOT web sites, as well as on the dedicated "Move over" law web site. It also features testimonials from workers and victims. The public outreach efforts include print, radio and television ads, public service announcements, bumper stickers, and press releases. Additionally, the law also is heavily enforced.	To encourage compliance to Houston TranStar's "Steer It Clear It" law, the State has instituted accident investigation sites and promote public awareness of the law through television and radio public service announcements.	Virginia DOT has both the Move Over law and the Move It law, both are similar to other states' quick clearance/driver removal laws. Public awareness strategies for both of these laws include ⊠ brochures, televisions advertisements, public service announcements (television and radio news), and information on the UVDOT web site.
Program/ Regulation Title	Move Over	Steer It Clear It	er
Agency	Tennessee DOT	Houston TranStar	Virginia DOT Move IV Move Ov Law
State	Tennessee	Texas	l sinig≀iV

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Follow-Up			
Contact Information	Vince Fairhurst, Incident Response Program Manager; Washington State Department of Transportation 310 Maple Park Avenue S.E., P.O. Box 47344 Olympia, WA 98504-7433 Office: (360) 705-7287; fairhuv@wsdotwa.gov	WisDOT Statewide Traffic Operations Center 433 W. St. Paul Avenue, Suite 300 Milwaukee, WI 53203 (414) 227-2166 E-mail: timeprogram@dot.wi.gov	
Source	http://www.transportation.org/sites/ ntimc/docs/ WSDOT- IR%20Initiatives%20as%20of%2011- 19-07.doc; http://www.wsdot.wa.gov/Operations/ IncidentResponse/default.htm	http://www.dot.wisconsin.gov/travel/stoc/time.htm	http://www4.uwm.edu/cuts/time/es.pdf
Relevance	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program Other:	Public Awareness and Outreach Strategies include: ☑ Brochure/pamphlets/press releases ☐ Billboards/Signage ☐ Radio and/or TV Public Service Announcements ☑ Social Media (Facebook, Twitter, YouTube) ☐ Web Site for Policy/Program ☐ Other:	Public Awareness and Outreach Strategies include: Brochure/pamphlets/press releases Billboards/Signage Radio and/or TV Public Service Announcements Social Media (Facebook, Twitter, YouTube) Web Site for Policy/Program
n Description/Key Findings	Washington DOT and Washington State Patrol (WSP) have formulated the Washington TIM coalition to focus on state-specific TIM needs and to bring forth the objectives of the NTIMC NUG. From their first TIM conference, a list of issues, needs, solutions, and strategies were developed.	Wisconsin has a "if you can steer it, clear it" law which calls for drivers to move their vehicles off the road after a crash, given that their vehicle is operable or that there are no injuries/fatalities involved. Wisconsin provides a brochure promoting the law.	This report is a blueprint or planning document for TIME in Southeastern Wisconsin. The report notes the program goals and objectives and also presents the results of an evaluation on the effectiveness of TIME's incident management strategies. The evaluation includes the results of surveys administered to users, emergency responders, and related staff/personnel.
Program/ Regulation Title	Move It Over Law	Steer It, Clear It t	1 Traffic Incident Manage- ment Enhance- ment (TIME) Blueprint Report
Agency	WashDOT	Wisconsin DOT and Traffic Incident Management Enhancement (TIME)	Southeastern Wisconsin Regional Planning Commission (SEWRPC) and Wisconsin DOT (WisDOT)
State	notenidssW	Wisconsin	Wisconsin

Michigan DOT Research 2011

Table 2.2 Incident Management Operations Best Practices

Follow-Up Recommended			
Contact			
Source	http://law.justia.com/codes/ arizona/2010/title28/28- 674.html	http://www.dot.ca.gov/ moveover/	http://www.metro.net/news/ simple_pr/metro-upgrades- big-rig-tow-truck-freeway- service-p/
Relevance	Regulatory Law/Policy	Regulatory Law/Policy	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:
Description/Key Findings	Arizona has move over, driver removal, and authority removal law.	Caltrans' "Move Over" law requires drivers to move over if safe to do so or slow down when they see amber flashing lights on Caltrans vehicles.	MFSP Big Rig provides services to heavyduty truck operators needing short-term mechanical assistance and/or a tow to a designated drop location off of the freeway that will allow the truck operator(s) to seek long-term assistance from a provider of their choice. In addition, MFSP Big Rig will provide limited fuel and water to move vehicles off of the freeway.
Program/ Regulation Title	Driver Removal and Authority Removal Law	Move Over Law	Big Rig Tow
State Agency	Arizona Arizona Arizona	California	Metro California Service Patrol (Los Angeles Metro Region) in conjunction with California Highway Patrol and Catrans
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Contact Information			
Source	http://www.i95coalition.org/ i95/Portals/0/Public_Files/ uploaded/Incident-toolkit/ documents/Policy/Policy_ ORP_XX.pdf	http://www.fihsmv.gov/Safety Tips/MoveOverTips.htm and http://www.fihsmv.gov/fhp/ misc/SafeEdCamps.htm	http://www.ocfl.net/YourLocal Government/County Departments/Public/Works/ Traffic/MovettCampaign.aspx
Relevance	⊠ Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	⊠ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies □ Training Workshops for Responders □ Complimentary Assistance/Services/Aid □ Other:	⊠ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies □ Training Workshops for Responders □ Complimentary Assistance/Services/Aid □ Other:
Description/Key Findings	Connecticut's policy states that during an incident, blockage should be removed and roadways shall be reopened as soon as safely possible. This includes moving accident investigations (noncritical situations) away from the travel lanes. This policy also gives the DOT and the State Police the authority to direct the removal or relocation of cargo or vehicles from the travel lanes.	To encourage the Move Over law (must move over and/or slow down when an emergency vehicle is parked on the side of the road), Florida issues a fine to violators.	The "Move It! Yes You Can!" policy was initiated to encourage drivers to pull over to the side of the road should they need emergency repairs or incidents if their vehicles are operable. The policy's objective is to prevent secondary crashes as well as reduce congestion.
Program/ Regulation Title	Open Roads Policy	Move Over Law	Move Iti Yes You Can!
Agency	Connecticut	Florida Highway Patrol and Florida DOT	Florida Highway Patrol and Florida DOT
State	Connecticut	Florida	Florida

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Recommended Follow-Up	Di .	>
Contact	Paul Clark, Paul. Clark@dot. state.ff.us	Paul Clark, Paul.Clark@dot. state.fl.us
Source	http://www.dot.state.fl.us/ traff.coperations/Traf_Incident/ Traf_Incident.shtm	http://www.dot.state.fl.us/ trafficoperations/Traf_Incident/ Traf_Incident.shtm
Relevance	□ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies □ Training Workshops for Responders □ Complimentary Assistance/Services/Aid □ Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:
Description/Key Findings	Rapid Incident RISC is an incentive-based program for the Scene Scenarios. Such scenarios can include complete roadway closures or where typical medium to heavy-duty wreckers are incapable of clearing the incident. Qualifying responders must meet RISC contractor requirements (specific training, equipment, and materials, and 24/7 service capabilities). The incentive is provided to RISC contractors who can respond to the incident within one hour following notification and can clear the incident and open the roadway within 90 minutes following the notice to proceed from FHP. If they are unable to clear the incident within 90 minutes, no incentive payments are made. If they are unable to clear the incident and open all travel lanes within three hours of the notice to proceed, liquidated damages can be assessed against the Contractor.	The Florida Open Roads Policy states that roadways will be cleared of damaged vehicles, spilled cargo, and debris as soon as it is safe to do so. Wrecker and supporting equipment must, therefore, arrive within 60 minutes of notification and all incidents should be cleared from the roadway within 90 minutes of the arrival of the first responding officer.
Program/ Regulation Title	Rapid Incident Scene Clearance (RISC)	Open Roads Policy
Agency	Florida DOT, Traffic Incident Management	Florida DOT and Florida Highway Patrol
State	Florida	Florida

Follow-Up Recommended		D		
Contact Information	Michael Roberson, GRTA, (404) 463- 3099; Gary Millsaps, Delcan, (404) 320- 1776 Christine Simonton, Delcan, (404) 320- 1776	Christine Simonton (404) 320-1776		
Source	http://www.ilmetaskforce.com/ trip.html	http://www.timetaskforce.com/ index.html	http://www.i95coalition.org/ i95/Portals/0/Public_Files/ uploaded/Incident- toolkit/documents/Filer/Filer_ Move_GA.pdf	http://itd.idaho.gov/News Releases/Brochure_Quick_ Clearance_2011.pdf
Relevance	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	□ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies □ Training Workshops for Responders □ Complimentary Assistance/Services/Aid □ Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:
Description/Key Findings	The TRIP program was implemented in the Metropolitan Atlanta region to improve incident management especially in regards to commercial heavy vehicles. TRIP encourages quick clearance of heavy vehicle incidents through a performance payment initiative where certified towing and recovery companies receive financial rewards/bonuses for how quickly they can clear such incidents.	TIME Task Force (similar to TIME NJ) is a Coordinated effort amongst various agencies and responders in the Atlanta Metropolitan Area formed with the objectives of providing quick clearance and improving safety across the region's roadways. Additionally, TIME provides training and other educational opportunities to improve incident management activities within and outside of the region.	Georgia's "Steer It and Clear It" law is similar to other states' driver removal/quick clearance laws.	Idaho's "Quick Clearance" law was enacted in July 2005. The law requires drivers to move obstructions (i.e., vehicles involved in an incident) off the road rapidly and safely in the event of a crash that does not cause death or injury, or if the vehicle is not disabled, does not require towing, can operate under its own power and can be safely driven.
Program/ Regulation Title	Towing and Recovery Incentive Program (TRIP)	Traffic Incident Management Enhancement (TIME) Task Force, Inc.	Steer It and Clear It	Ouick Clearance Law
Agency	Georgia	Georgia	Georgia	Idaho DOT and Idaho State Police
State	Ceorgia	Georgia	Georgia	olebl

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Follow-Up Recommended	\supset	Σ	\triangleright	
Contact Barrier		Mary Meinert, Traffic Opps at the TMC mary.meinert@state. mn.us, (651) 234- 7035	(1) Mn/DOT – Daneeka Marshall- Oquendo: (651) 296-8609; (2) Department of Public Safety, Nathan Bowie: (651) 296-9754	
Source	http://traffic.md.gov/moveit/ moveit.asp	http://www.dot.state.mn.us/ rtmc/first/index.html	http://www.dot.state.mn.us/ newsrels/04/07/21steerit.html	http://www.nh.gov/safety/ divisions/nhsp/tsr/tsr 06042009html
Relevance	Regulatory Law/Policy	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:
Description/Key Findings	Maryland DOT and CHART established the "Move It" program in order to educate motorists on what to do when involved in a vehicle collision, particularly moving their operable vehicle to the side of the road unless they has been an injury.	The FIRST Program covers emergency responders who locate, assist, and remove stalled vehicles, crashes, and debris on freeways. The FIRST trucks have portable message signs that can assist State Patrol during incidents. They also have pushbumpers that can remove vehicles from travel lanes. They also have additional tools to assist motorists with vehicle repairs.	In St. Paul Minnesota, a metrowide initiative was launched in 2004 for the program Steer ItClear It, which calls for motorists involved in freeway crashes to drive to the shoulder of the roadway if there are no injuries and if the vehicles are drivable.	New Hampshire Quick Clearance law was enacted in 2005, but reviewed and amended August 5, 2008. The law amendment requires motorists to provide a wide berth to emergency responders with blue, red, and amber warning lights. This also includes tow truck operators and highway crews.
Program/ Regulation Title	Move It! It's the Law	Freeway Incident Response Safety Team (FIRST)	Steer It Clear It	Move It Over/Quick Clearance Law
Agency	Maryland DOT	Minnesota	Minnesota DOT	New Hampshire DOT
State	Maryland	Minnesota	Minnesota	Mew Hampshire

Recommended			
Contact	Assistant Chief Bill Robb, Blackwood Fire Department, R3737af84@aol.com, (609) 217-4555; AND Assistant Chief Bill Robb, Blackwood Fire Department, R3737at84@aol.com, (609) 217-4555		Jennifer Portanova, North Carolina DOT, (919) 233-9331, ext. 224, jportanova@dot. state.nc.us
Source	http://www.timetaskforce.com/documents/presentationsmeetings09/Time%20Task%20Force%20PresentationRobb.pdf	https://www.nysdot.gov/ divisions/operating/oom/ transportation- systems/systems- optimization-section/ny- moves/tim/tim-legislation	http://www.ncdot.org/travel/ roadrules/
Relevance	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	□ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies □ Training Workshops for Responders □ Complimentary Assistance/Services/Aid □ Other:	Regulatory Law/Policy
Description/Key Findings	TIME is collaboration between NJDOT, NJ State Police, the Delaware Valley Regional Planning Commission (DVRPC), Incident Management Response Team (IMRT), emergency service patrols, and the traffic operations center in the Philadelphia Metropolitan area of Pennsylvania and New Jersey. TIME created a policies and procedures manual to encourage cooperation and coordination across all the different agency members and to serve as a playbook that identifies the appropriate response tactics and coordination efforts for all the various incident scenarios. TIME continues to provide training and future initiatives to improve program.	New York's driver removal law is similar to other states' policies driver removal/quick clearance laws. It requires drivers involved in an accident to move their operable vehicles safely out of the travel lane to prevent secondary collisions, unless an injury has occurred.	North Carolina's "Ouick Clearance" law is focused on getting traffic-obstructing vehicles out of the roadway. It states that if law enforcement and NCDOT agree that a vehicle and its cargo pose a safety concem, they can move it by any means necessary without facing any liability.
Program/ Regulation Title	(TIME) Incident Management Task Force	Steer ItClear It	Ouick Clearance Law
Agency	(TIME) Incident Management Task Force of New Jersey	New York State DOT	North Carolina DOT
State	Ием Јегзеу	Ием Үогк	Morth Carolina

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Follow-Up Recommended		\square	D	D
Contact	Jennifer Portanova, North Carolina DOT, (919) 233-9331, ext. 224, jportanova@dot. state.nc.us	Jennifer Portanova, North Carolina DOT, (919) 233-9331, ext. 224, jportanova@dot. state.nc.us	Jennifer Portanova, North Carolina DOT, (919) 233-9331, ext. 224, jportanova@dot. state.nc.us	Howard Wood, Ohio DOT, (614) 466- 2255, Howard.wood@dot. state.oh.us
Source	http://www.ncdot.org/travel/ roadrules/	http://www.ibtta.org/files/PDFs/ Purvis_Brian.pdf	http://www.ibtta.org/files/ PDFs/Purvis_Brian.pdf	http://www.dot.state.oh.us/ Divisions/Operations/Traffic/ publications2/Ohioquickclear/ Pages/default.aspx
Relevance	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid	Regulatory Law/Policy	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:
Description/Key Findings	If an accident or collision occurs on the mainline, ramp, shoulder, or median of a highway, each vehicle shall be moved as soon as possible out of the way of the travel lanes and onto the shoulder, with the exception of injury or death and if the vehicle cannot be safely driven using its own power.	NC DOT has partnered with various local and state law enforcements in the creation of accident investigation sites. These are locations off the highway where those involved in a "fender bender" can go to while they wait for appropriate law enforcement officials to investigate the incident and damage. The purpose of the accident sites are to reduce the congestion as well as secondary crashes that result from onlookers distracted by the crash. Accident sites are available along 1-77 in North Carolina.	Training provided to DOT, law enforcement, and towing companies on efficient means to clear minor accidents, abandoned and disabled vehicles from lanes and shoulders, quick clearance for work zones, natural disasters, and other special events.	Ohio DOT came up with a best practices guide mainly intended for an audience of professional responders and emergency personnel and law enforcement officials.
Program/ Regulation Title	Fender Bender Law	Accident Sites	Ouick Clearance Activities for Light and Heavy Commercial	Ohio Quick Clear Program
Agency	North Carolina DOT	North Carolina DOT	North Carolina DOT	Ohio Department of Transpor- tation
State	Serolina Morth Carolina	Morth Carolina	Morth Carolina	oidO

Follow-Up Recommended				
Contact Information				
Source	http://statepatrol.ohio.gov/ moveover.stm	http://etd.lib.clemson.edu/ documents/1202410153/ umi-clemson-1405.pdf	http://www.tdot.state.tn.us/ incident/MoveItBro.pdf	http://www.moveovertennessee. org/, http://www.tn.gov/safety/ moveovermain.shtml
Relevance	□ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies □ Training Workshops for Responders □ Complimentary Assistance/Services/Aid □ Other:	☐ Regulatory Law/Policy ☐ Incentive Programs/Strategies ☐ Enforcement Strategies ☐ Training Workshops for Responders ☐ Complimentary Assistance/Services/Aid ☐ Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:
Description/Key Findings	Ohio DOT's "Move Over, Slow Down" law is similar to other states' Move Over laws which requires vehicles to slow down or safely move to travel lanes furthest away from parked vehicles with flashing lights (i.e., emergency responders, road and field crews, and law enforcement).	South Carolina "Steer It. Clear It" is similar to other states' driver removal policies/laws which requires drivers involved in an accident to move their operable vehicles safely out of the travel lane to prevent secondary collisions, unless an injury has occurred.	Tennessee DOT's "Move It, Yes You Can" is similar to other states' driver removal policies/laws which requires drivers involved in an accident to move their operable vehicles safely out of the travel lane to prevent secondary collisions, unless an injury has occurred.	Tennessee's Move Over law is similar to other states' Move Over laws which requires vehicles to slow down or safely move to travel lanes furthest away from vehicles parked on the side or shoulders that have flashing lights. This usually covers emergency responders, road and field crews, and law enforcement. Tennessee's law is expanded to also cover utility service employees.
Program/ Regulation Title	Move Over, Slow Down	Steer It. Clear It	Move It, Yes You Can	Move Over Law
Agency	Ohio Department of Transpor- tation	South Carolina	Tennessee DOT	Tennessee DOT
State	oidO	South Carolina	Tennessee	-Tennessee

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Follow-Up Recommended		D
Contact		The Auto Dealers Detail of the Houston Police Department at (832) 394-4869. E-mail: autodealers@cityof houston.net
Source	http://www.houstontranstar. org/sici.aspx	safeclear/
Relevance	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other: Accident Investigation Sites	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:
Description/Key Findings	Houston TranStar also has a Steer ItClear It law – "If an accident occurs on a main lane, ramp, shoulder, median, or adjacent area of a freeway and each vehicle can be normally and safely driven, each vehicle operator shall move the operator's vehicle as soon as possible to a designated accident investigation site, a location on the frontage road, the nearest suitable cross street or other suitable location to complete the requirements of Section 550.023 and minimize the interference with existing freeway traffic flow." They also have accident investigation sites.	SAFEClear is a program that provides any motorist who has a flat tire or who stalls in a travel lane the option of receiving a free tow to the destination of their choice within one mile of the nearest exit (in some situations even greater than one mile). Tires also will be changed for free, if needed. If a tow results from a police investigation (such as an accident or an arrest) or the vehicle has been abandoned, a tow fee will apply. Due to budgetary constraints, the City of Houston now provides tow services at \$50 and onfreeway roadside services (i.e., changing flat tire) at \$30. If the vehicle owner is unable to pay the charge at the point of service, vehicles will be towed and placed in a city approved storage facility for up to 48 hours at no charge to the owner until payment. Storage fees will apply after the first 48 hours in addition to the \$50 towing charge.
Program/ Regulation Title	Steer It Clear It	SAFEClear
Agency	Houston TranStar	City of Houston
State	Техаз	Texas

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Follow-Up		
Contact		Vince Fairhurst, Incident Response Program Manager; Washington State Department of Transportation 310 Maple Park Avenue S.E., P.O. Box 4734 Olympia, WA 98504-7433 Office: (360) 705-7287; fairhuv@wsdot.wa.g ov
Source	http://www.virginiadot.org/ travel/move_it_move_over. asp	http://www.wsdot.wa.gov/ Operations/IncidentResponse/ default.htm
Relevance	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:
Description/Key Findings	Virginia DOT has a Move Over law which requires motorists to move to travels lanes away from a stationary vehicle that is displaying flashing, blinking, or alternating blue, red, or amber light(s). Their Move It law is similar to other states' quick clearance/ driver removal laws that states if a motorist is in a fender bender with no injuries/fatalities, vehicles involved in the accident should be moved away from travel lanes.	Washington DOT's Incident Response Team (IRT) includes assistance patrols that provide services such as assisting motorists with emergency vehicle repairs, providing incident/emergency response, and coordinating with the TMC, the DOT, construction crews, state patrol, and emergency personnel regarding maximizing operations on the State's highway systems during incidents, special events, and construction. The IRT has various initiatives such as the Instant Tow Dispatch Protocol, Blok-Buster Major Incident Tow Program, and Tow Away Zones. With Instant Tow, tow operators, WSP troopers, and incident response technicians are immediately dispatched once they know of a highway incident. Blok-Buster Major Incident Tow Program, tow companies are eligible for up to a \$2,500 bonus for meeting quick-clearance requirements at major incidents, especially when it involves heavy vehicles (since these cause the longest delays). The Tow Away Zones programs includes creating and expanding tow away zones in congested areas to preserve roadway capacity, reduce congestion, and prevent collisions.
Program/ Regulation Title	Move It/Move Over Law	Program Program
Agency	Virginia DOT	Washington DOT
State	sinigıiV	notgnirkseW

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Follow-Up		
Contact	Vince Fairhurst, incident Response Program Manager; Washington State Department of Transportation 310 Maple Park Avenue S.E., P.O. Box 47344 Olympia, WA 98504-7433 Office: (360) 705-7287; fairhuv@wsdot.wa.g ov	State Traffic Operations Center 433 W. St. Paul Avenue, Suite 300 Milwaukee, WI 53203 (414) 227-2166 E-mail: statewide.toc@dot.
Source	http://www.wsdot.wa.gov/ operations/incidentresponse/, http://www.watimcoalition.org/, http://www.wsdot.wa.gov/NR/ rdonlyres/BFB0C36A-DC7E- 4BF5-B283- 9864C36A7B9C/0/Gray NotebookJun11.pdf	http://www.dot.wisconsin.gov/ travel/stoc/crashsites.htm
Relevance	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid Other:	Regulatory Law/Policy Incentive Programs/Strategies Enforcement Strategies Training Workshops for Responders Complimentary Assistance/Services/Aid
Description/Key Findings	JOPS initiated – joint program with WSDOT and WSP with the implementation of Incident Response Teams. They have initiated several Tow programs for incident response (very successful).	Crash investigation sites are designated zones were distressed motorists can relocate to if they are involved in incident along the freeway. Access to these sites are located near freeway exits and are not typically visible from the freeway to remove from distractions and/or obstacles that the incident may occur. Crash sites currently are available in the Milwaukee, Wisconsin region along the 1-94 Corridor and U.S. 45 Corridor.
Program/ Regulation Title	Move It/ Move It Over/ Remove It	Crash Investigation Sites
Agency	WashDOT	Wisconsin
State	notenidzeW	nisnoosiW

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Follow-Up Recommended	
Contact	WisDOT Statewide Traffic Operations Center 433 W. St. Paul Avenue, Suite 300 Milwaukee, WI 53203 (414) 227-2166 E-mail: timeprogram@dot. wi.gov
Source	http://www.dot.wisconsin.gov/ WisDOT Statewide travel/stoc/time.htm Center 433 W. St. Paul Avenue, Suite 300 Milwaukee, WI 53203 (414) 227-2166 E-mail: timeprogram@dot. wi.dov
Relevance	☐ Regulatory Law/Policy ☐ Incentive Programs/Strategies ☐ Enforcement Strategies ☐ Training Workshops for Responders ☐ Complimentary Assistance/Services/Aid ☐ Other:
Description/Key Findings	Wisconsin has a "if you can steer it, clear it" law which calls for drivers to move their vehicles off the road after a crash, given that their vehicle is operable and that there are no injuries/fatalities involved.
Program/ Regulation Title	Steer It, Clear It
Agency	Wisconsin DOT and Traffic Incident Management Enhancement (TIME)
State	niznooziW

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Michigan DOT Research 2011

Table 2.3 Summary of Agencies Contacted for Information

Agency	Programs	Public Awareness and Outreach Strategies	Incident Management Operations	Contact Information
Caltrans	Move Over Law	⊠ Brochure/pamphlets/press releases ⊠ Billboards/Signage ⊠ Radio and/or TV Public Service Announcements ⊠ Social Media (Facebook, Twitter, YouTube) □ Web Site for Policy/Program □ Other:		Mike Jenkinson, Caltrans HQ, mike_jenkinson@dot.ca.gov (916) 654-6912
Metro Freeway Service Patrol (Los Angeles Metro Region) in conjunction with California Highway Patrol and Caltrans	Big Rig Tow		□ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies □ Training/Workshops for Responders ☑ Complimentary Assistance/Services/Aid □ Other:	Ken Coleman, Motorist Program Services Manager, LA Metro, colemank@metro.net (213) 922-2951
Florida Highway Patrol and Florida DOT	Move Iti Yes You Canl; Rapid Incident Scene Clearance (RISC); and Open Roads Policy	☑ Brochure/pamphlets/press releases ☑ Regulatory Law/Policy ☑ Billboards/Signage ☑ Incentive Programs/Strategies ☑ Radio and/or TV Public Service ☐ Enforcement Strategies Announcements ☑ Training/Workshops for Responders ☑ Social Media (Facebook, Twitter, YouTube) ☑ Training/Workshops for Responders ☐ Web Site for Policy/Program ☐ Complimentary Assistance/Services/ ☐ Other: ☐ Other:	Aid	Elizabeth Birriel, Statewide ITS, elizabeth.birriel@dot.state.fl.us (850) 410-5606
Georgia	Towing and Recovery Incentive Program (TRIP) and Traffic Incident Management Enhancement (TIME) Task Force, Inc.		 □ Regulatory Law/Policy ☑ Incentive Programs/Strategies □ Enforcement Strategies ☑ Training/Workshops for Responders □ Complimentary Assistance/Services/Aid □ Other: 	TRIP: Michael Roberson, GRTA (404) 463-3099 Gary Millsaps, Delcan, (404) 320-1776 Christine Simonton, Delcan, (404) 320-1776 TIME: Christine Simonton (404) 320-1776

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Agency	Programs	Public Awareness and Outreach Strategies	Incident Management Operations	Contact Information
Maryland DOT	Move It! It's the Law		☑ Regulatory Law/Policy	Rick Dye, CHART Center, Maryland SHA, rdye@sha.state.md.us, (410) 582-5619
			☐ Incentive Programs/Strategies ☐ Enforcement Strategies	
			☐ Training/Workshops for Responders ☐ Complimentary Assistance/Services/Aid	
Minnesota DOT	Steer It, Clear It and Freeway Incident Response Safety Team	 ☑ Brochure/pamphlets/press releases ☑ Billboards/Signage ☐ Radio and/or TV Public Service 	 □ Uther: ☑ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies 	Steer It, Clear It: (1) Mn/DOT – Daneeka Marshall-Oquendo: (651) 296-8609
		Announcements ☐ Social Media (Facebook, Twitter, YouTube) ☐ Web Site for Policy/Program ☐ Other:	☐ Training/Workshops for Responders ☑ Complimentary Assistance/Services/Aid ☐ Other:	(651) 296-9754; FIRST: Mary Meinert, Traffic Opps at the TMC mary meinert@state.mn.us, (651) 234-7035
North Carolina DOT	Accident Siles and Ouick Clearance Activities for Light and Heavy Commercial Vehicles		 □ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies ☑ Training/Workshops for Responders 	Jennifer Portanova, North Carolina DOT, (919) 233-9331, ext. 224, Jportanova@dot.state.nc.us
			 □ Complimentary Assistance/Services/Aid ☑ Other: Accident Investigation Sites 	
Ohio Department of Transportation	Ohio Quick Clear Program; Move Over, Slow Down	 ☑ Brochure/pamphlets/press releases ☑ Billboards/Signage ☑ Radio and/or TV Public Service Announcements 	 □ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies 	George Saylor, Sr. ITS Engineer, Ohio DOT, (614) 466-7170, george.saylor@dot.state.oh.us
		cebook, Twitter, YouTube) cy/Program Materials and	☑ Training/Workshops for Responders ☐ Complimentary Assistance/Services/Aid ☐ Other:	

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Contact Information	(1) Doug Tomlinson, BHSTE Technical Manager, dtomlinson@state.pa.us, (717) 787-3657 (2) Michelle Tarquino, BPR Contract Manager, mtarquino@state.pa.us, (717) 787-5243 (3) Eric Rensel, Gannett Fleming/GeoDecisions, ernsel@gfnet.com, (717) 763-7212 (4) Bob Taylor, Gannett Fleming/GeoDecisions, rtaylor@gfnet.com, (717) 763-7212	Don Campbell, ITS Program Manager, campbellde@dot.state.sc.us, (803) 737-1646	Ali Farhangi, Transportation Management Center, Tennessee DOT, (615) 350-4189, Alireza.Farhangi@state.tn.us	David Fink, Texas DOT TranStar Center, (713) 802-5000, David Fink@houstontranstar.org
Incident Management Operations				
Public Awareness and Outreach Strategies	□ Brochure/pamphlets/press releases □ Billboards/Signage □ Radio and/or TV Public Service Announcements □ Social Media (Facebook, Twitter, YouTube) □ Web Site for Policy/Program ☑ Other: Best Practices Report and Survey	 □ Brochure/pamphlets/press releases ☑ Billboards/Signage □ Radio and/or TV Public Service Announcements □ Social Media (Facebook, Twitter, YouTube) □ Web Site for Policy/Program ☒ Other: Benefit/Cost Analysis 	 ☑ Brochure/pamphlets/press releases ☑ Billboards/Signage ☑ Radio and/or TV Public Service ☑ Announcements ☑ Social Media (Facebook, Twitter, YouTube) ☑ Web Site for Policy/Program ☑ Other: Heavy Fines and Enforcement, Bumper Stickers 	□ Brochure/pamphlets/press releases ☑ Billboards/Signage ☑ Radio and/or TV Public Service Announcements ☐ Social Media (Facebook, Twitter, YouTube) ☐ Web Site for Policy/Program ☐ Other:
Programs	Ouick Clearance Best Practices Report	Steer It and Clear It	Move Over	Steer It Clear It
Agency	Pennsylvania DOT	South Carolina	Tennessee DOT	Houston TranStar

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Agency	Programs	Public Awareness and Outreach Strategies	Incident Management Operations	Contact Information
City of Houston	SAFEClear		□ Regulatory Law/Policy □ Incentive Programs/Strategies ☑ Enforcement Strategies □ Training/Workshops for Responders ☑ Complimentary Assistance/Services/Aid □ Other:	The Auto Dealers Detail of the Houston Police Department at (832) 394-4869. E-mail: autodealers@cityofhouston.net
Virginia DOT	Move If/Move Over Law	 ☑ Brochure/pamphlets/press releases ☐ Billboards/Signage ☑ Radio and/or TV Public Service Announcements ☐ Social Media (Facebook, Twitter, YouTube) ☐ Web Site for Policy/Program ☐ Other: 		Catherine McGhee, Virginia DOT, Cathy.McGhee@VDOT.Virginia.gov, (434) 293- 1973
WashDOT	Move It Over Law and Incident Response Programs	□ Brochure/pamphlets/press releases □ Regulatory Law/Policy □ Billboards/Signage □ Incentive Programs/Strategies □ Radio and/or TV Public Service □ Enforcement Strategies Announcements □ Training/Workshops for Responders □ Social Media (Facebook, Twitter, YouTube) □ Training/Workshops for Responders ☑ Web Site for Policy/Program □ Complimentary Assistance/Services/Pother:	Aid	Vince Fairhurst, Incident Response Program Manager; Washington State Department of Transportation 310 Maple Park Avenue S.E., P.O. Box 47344 Olympia, WA 98504-7433 Office: (360) 705-7287; fairhuv@wsdot.wa.gov
Wisconsin DOT	Crash Investigation Sites		□ Regulatory Law/Policy □ Incentive Programs/Strategies □ Enforcement Strategies □ Training/Workshops for Responders □ Complimentary Assistance/Services/Aid ☑ Other: Accident Investigation Sites	Chris Quesnell, State Traffic Operations Center 433 W. St. Paul Avenue, Suite 300 Milwaukee, WI 53203 (414) 227-2166 E-mail: statewide.toc@dot.state.wi.us

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2.3 SUMMARY OF AGENCIES CONTACTED

Table 2.3 summarizes the agencies contacted and the materials were received from some of the agencies identified. The materials identified included:

- Brochures/flyers;
- Customer surveys;
- Training materials;
- Sign messages; and
- Safety-related web sites and social media.

Materials obtained from some of the agencies identified above have been submitted under separate cover.

The literature search demonstrated that a wide range of both outreach and operational strategies is in use related to Quick Clearance laws. Most outreach strategies used have been relatively low-cost, including brochures and use of agency web sites and social media. Operational strategies also have been focused on use of existing resources such as service patrols although a number of states have developed specialized programs designed to expedite removal of larger vehicles.

While some of the materials provide good models for MDOT in publicizing quick clearance laws, there has been very little effort nationally to measure public awareness and compliance in a scientific manner. The MDOT public survey documented in Section 3.0 of this report represents a unique attempt nationally to determine how familiar with public is with the law, and what methods might be most effective in reaching the public.

3.0 Public Survey

A public survey was required as part of the project to determine current levels of knowledge regarding the Quick Clearance law and help identify marketing and outreach strategies for informing the public. Questions also were added regarding the Move Over, Slow Down law since outreach efforts may be designed to cover both. The survey was designed to cover several key areas or questioning, including:

- What are the travel characteristics of respondents?
- What are the trip information sources used and desired by respondents?
- What is the current level of awareness of the Quick Clearance law?
- Whether or not they aware of the law, does the public generally move their vehicles off the roadway when they are drivable and there are no injuries?
- How do they receive travel and other transportation-related information?
- What is public awareness of various MDOT communications activities?

One of the important objectives of this research was to obtain a representative geographic distribution across the State and to collect demographic data to determine whether there are specific groups that MDOT may want to target in an outreach campaign. Demographic data support efforts to target and tailor messages to specific subgroups which are found to be least informed about the law. Results can be cross-tabulated to determine where messages might be most effectively targeted.

Given the nature of the subject, the survey was focused on Michigan residents over the age of 18 who drive on a regular basis. While the data collection requirements were significant, the survey also needed to be relatively short in length in order to maintain interest among the respondents. After discussion between MDOT and the consultant, a goal of 10 minutes maximum for survey completion was established. The target sample size was set at 800 completed interviews, a number that enabled market segmentation by county or aggregations of counties such as media markets, MDOT regions, or other logical aggregations. Demographic questions include:

- Age;
- Income;
- Racial/ethnic group; and
- Gender.

Income was originally considered as well but was eliminated due to the fact that most respondents generally do not choose to answer.

The statewide sampling stratification was proposed to be in accordance with the approximate number of motorists living in each of the State's 83 counties. EPIC MRA, the survey contractor, used a by-county list of Fiscal Year 2009-2010 vehicle registration transactions produced by the Office of the Secretary of State. The listing included registration transactions by County for passenger vehicles, commercial vehicles, and motorcycles. An example of the stratification method applied is shown below:

- Total number of qualified FY 2009/2010 transactions = 8,060,735
 - Grand Traverse County had 80,513 transactions of 1 percent of the total, meaning that a target of 8 interviews out of the 800 total be set for this County.
 - Wayne County had 1,243,646 transactions, or 15.4 percent of the total, meaning that 123 a target of 123 of the 800 interviews would be set for this County.

It should be noted that the targets were not intended to be exact but were designed to assure that the sample was in reasonable proportion to population distribution. The full questionnaire approved by MDOT and used by EPIC MRA to conduct the survey has been submitted separately as Appendix A, which also includes the raw survey result files..

3.1 SURVEY RESULTS

Table 3.1 shows the distribution of survey responses by MDOT region. The distribution obtained was representative of the population distribution through the State of Michigan, with the Metro region including about 40 percent of survey respondents.

Table 3.1 Distribution of Survey Responses by Region

Region	Surveys	Percent
Metro	321	40.1%
University	120	15.0%
Southwest	77	9.6%
Grand	103	12.9%
Bay	101	12.6%
North	51	6.4%
Superior	27	3.4%
Total	800	100.0%

Demographic Summary

Gender distribution of the survey was 53 percent Female, 47 percent Male, also very close to the general distribution of population in the State. Age distribution, on the other hand, as shown in Table 3.2, was skewed toward older residents. The actual percentage of Michigan residents as of 2010, in each age category is listed in parentheses beside the survey distribution. (Parentheses are also used in subsequent tables to show the actual percentage of Michigan population in each demographic category.) This discrepancy was anticipated as a result of the fact that the telephone database used landlines only. Younger residents are increasingly tending to rely on cell phones exclusively and cell phone area codes are not necessarily an indicator of actual residence. It should be noted that a comparison of the two percentages in the 18-29 category somewhat exaggerates the under-sampling for this project since 18-29 years olds (particularly those in the younger portion of the range) are less likely to be regular commuters than those in the age ranges from 30 to 64. To examine the impact of this discrepancy, sampling rates were adjusted but little difference was found in the results.

Table 3.2 Age and Gender Distribution

	G6	ender	
	53%	Female	
	47%	Male	
	Age Di	stribution	
Pct. in Age Group	Age Group		Age Group Date of Birth
5% (21%)	18 to 29 years		(1983 to 1994)
11% (18%)	30 to 40		(1972 to 1982)
21% (17%)	41 to 49		(1963 to 1971)
18% (12%)	50 to 55		(1957 to 1962)
20% (15%)	56 to 64		(1948 to 1956)
23% (18%)	65 and over		(1947 or Before)
2%	Undecided/Refu	ised	

Source of Actual Distribution: U.S. Census 2010 Summary for Michigan File 1

The education distribution of the survey is shown in Table 3.3. The response rate is somewhat skewed to those with higher educational levels. However, combining categories of those with no college education provides an adequate sample to evaluate any differences in awareness, driver behavior, or use of information sources between different educational groups.

Table 3.3 Education Distribution

2% (9%)	1 st to 11 th Grade
20% (31%)	High School Graduate
3%	Non-College Post High School (Technical Training)
20% (26%)	Some College
38% (24%)	College Graduate
16% (10%)	Post Graduate School
1%	Undecided/Refused

Source of actual distribution (): U.S. Census FactFinder 2010 for population 25 and over for Michigan (survey sample includes population 18 and over).

Table 3.4 shows the racial/ethnic distribution of survey respondents. Minority residents are slightly underrepresented in proportion to their share of the State's population. However, this distribution may be closer to the proportion of those who commute regularly via automobile since the minority community has a higher rate of public transit usage than the general population.

Table 3.4 Race/Ethnic

85% (80%)	White
8% (14%)	African American/Black
1% (4%)	Hispanic (Puerto Rican, Mexican-American, etc.)*
1% (2%)	Asian
- (1%)	Native American
1% (2%)	Mixed Race
-	Middle Eastern
4%	Undecided/Refused

Source of actual distribution (): 2011 U.S. Census Quick Facts for Michigan (Hispanic category can also be other racial group, thus total adds to greater than 100%).

Travel Patterns

Table 3.5 summarizes the frequency of travel among survey respondents, and shows that the survey effort met its goal of reaching regular drivers. Ninety-six percent of respondents reported traveling via automobile at least several days per week.

Table 3.5 Frequency of Travel

80%	Every day or almost every day of the week
16%	Several days in a week
4%	Several times a month

Another objective of the survey was to make sure that the sample covered respondents who travel at different times of the day. Table 3.6 shows that this objective was accomplished with over 50 percent of the survey respondents reported traveling regularly during all periods except evening (32 percent).

Table 3.6 Time of Day

	Yes	No	Sometimes (Volunteered)
The morning rush, 6:00 a.m. to 9:00 a.m.	60%	34%	6%
During the day between 9:00 a.m. and 4:00 p.m.	71%	20%	9%
The evening rush, 4:00 p.m. to 7:00 p.m.	57%	29%	14%
During the evening after 7:00 p.m.	32%	40%	28%
On either a Saturday, Sunday, or both	74%	9%	17%

Media Usage

Table 3.7 documents the responses to the first of a series of questions used to identify rates of usage of various media for traveler information. Some of these questions were asked in a 2010 survey (results in parentheses) that was conducted for an MDOT research project on Advanced Traveler Information Systems (ATIS). This allowed a comparison of the changes that have taken place in use of traveler information sources over the past two years. Table 3.7 shows that around 55 percent of the respondents make use of radio and television traffic reports, with just over one-third using these sources on close to a daily basis. About 45 percent reported not using these sources at all. Use of these sources, particularly TV, was reported much more frequently in the 2012 survey than in the 2010 ATIS survey.

Table 3.7 Listen To or Watch Media Traffic Reports

Radio	Television	Frequency
35%(35%)	37% (28%)	A few times a week or more
9%(8%)	10% (5%)	A few times a month
10% (4%)	9% (5%)	A few times a year
45% (53%)	44% (62%)	Never listen to radio traffic reports
1%	-	Undecided/Refused

Table 3.8 documents the respondents' awareness of Dynamic Message Signs and the various messages they have seen. The portable changeable message boards

(PCMB) extensively deployed by MDOT for construction and travel time information have been observed by an overwhelming majority of respondents in all regions, with rates ranging from 84 percent to 93 percent. Construction information was the most frequently observed message with 88 percent of respondents statewide having observed messages and regional totals ranging from 76 percent in the North region to 92 percent in the Grand region. Travel times on DMS have been observed by 77 percent of respondents statewide and a majority in all regions ranging from 56 percent in Superior to 84 percent in the Metro region. Crash information was observed by 58 percent of respondents statewide ranging from 35 percent in the North region to 74 percent in the Metro Alternate route information, which is probably most frequently associated with construction activity, was observed by 66 percent of the sample with rates ranging from 56 percent in the Superior region to 72 percent in the Bay region. The percentage of respondents observing other messages on DMS was 39 percent statewide but varied significantly by region with 56 percent of respondents in Metro and 40 percent of respondents in Grand having observed other messages. Percentages in other regions ranged from 14 percent to 28 percent. Metro and Grand have significantly more DMS that other regions and many of these are full-sized overhead signs that provide opportunity for a greater variety of messages.

Comparison with the 2010 survey results indicates generally increased awareness of DMS. The percentage of respondents who reported observing travel times increased from 67 percent to 77 percent, the number of observing other messages increased from 11 percent to 39 percent, and those observing portable changeable message boards increased from 83 percent to 89 percent. Other categories remained relatively stable.

Table 3.8 DMS Messages Observed by Region

Region	Travel Time	Accident Information	Alternate Route Information	Construction Information	Other Messages	Have Seen PCMBs
Metro	84%	74%	67%	91%	56%	86%
University	74%	50%	63%	87%	18%	93%
Southwest	70%	44%	70%	90%	17%	90%
Grand	90%	56%	59%	92%	40%	91%
Bay Area	64%	47%	72%	79%	28%	84%
North	57%	35%	67%	76%	14%	92%
Superior	56%	44%	56%	85%	22%	93%
Statewide	77%	58%	66%	88%	39%	89%
Statewide 2010 ATIS Survey	67%	57%	69%		11%	83%

Table 3.9 shows the other messages observed by respondents in an open-ended question. The three most frequently cited were amber alerts, seatbelt usage (Click It or Ticket), and drunk driving messages.

Table 3.9 DMS Messages Cited in Open-Ended Question

60%	No – Nothing
13%	Amber Alerts
8%	Seatbelt Use – Click it or Ticket – Buckle Up
5%	Drunk Driving Messages
3%	Road Conditions
2%	Cell Phone Use – Text Messages
2%	Public Service Announcements
2%	Weather Information
1%	Don't Veer for Deer
1%	Drive Safely
1%	Speed Limit Information
2%	Other/Undecided/Refused

Table 3.10 addressed ownership and uses of GPS devices, many of which now provide real-time traffic information. Nearly half (45 percent) of the sample reported owning a GPS device; 24 percent owned one which displays traffic information while 21 percent owned GPS which does not. Overall ownership increased from 31 percent in the 2010 survey to 45 percent with virtually all of the increase occurring in devices that display traffic information (11 percent to 24 percent). Additional questions were asked about frequency of usage and future plans to purchase a GPS. Just over 40 percent of those who have a GPS that displays traffic information indicated they use it a few times per month or more frequently. Of those who do not have a device 46 percent said it was "likely" or "very likely" that they would buy one in the next two years.

Table 3.10 Have GPS Device

2012 QC Survey	2010 ATIS Survey	
24%	11%	Yes, also displays traffic information
21%	20%	Yes, but does not display traffic information
54%	69%	No
1%	-	Undecided/Refused

Notes: Of those who have traffic information, 42 percent use a few times/month or more.

Of those who do not have GPS device, 46 percent are either very likely or likely to have in next two years.

Respondents were asked about their familiarity with MIDrive, MDOT's traveler information web site. Table 3.11 shows that 26 percent of respondents reported being familiar with MIDrive, compared to 19 percent in the 2010 survey. This increase occurred among those who expressed "a little" familiarity (15 percent to 21 percent), while those who reported "a lot" of familiarity increased from 4 percent to 5 percent.

Table 3.11 Familiarity with MIDrive

2012 QC Survey	2010 ATIS Survey	
5%	4%	A lot
21%	15%	A little
26%	19%	TOTAL KNOW ABOUT www.michigan.gov/drive?
73%	79%	Have you never heard of it before
1%	2%	Undecided/Refused

Table 3.12 shows frequency of use of MIDrive among those who reported being familiar with the site. About 14 percent reported using MIDrive more than a few times per month, 47 percent reported using it a few times per year, and 39 percent have never used it. More frequent users declined slightly between 2010 and 2012 while those reporting use a few times per year increased slightly.

Table 3.12 Use of MIDrive Web Site

2012 QC Survey	2010 ATIS Survey	
6%	8%	A few times a week or more
8%	12%	A few times a month
47%	43%	A few times a year
39%	36%	Never have used the MIDrive web site
_	1%	Undecided/Refused

Respondents also were asked about use of other web sites for traffic information, as shown in Table 3.13. Only about 14 percent reported using other web sites for traffic information, virtually unchanged from the 2010 survey.

Table 3.13 Use of Other Web Sites

2012 QC Survey	2010 ATIS Survey	
14%	13%	Yes
86%	86%	No
_	1%	Undecided/Refused

Those reporting use of other traffic information web sites were asked which sites they use. Google maps was the most frequently mentioned at 36 percent followed by MapQuest at 23 percent. As shown in Table 3.14, Google maps' share has increased since the 2010 survey, while MapQuest's has declined. Other sources mentioned include Yahoo maps, AAA, and local television news.

Table 3.14 Other Sources of Traffic Information Cited

2012 QC Survey	2010 ATIS Survey	
36%	31%	Google Maps
23%	28%	MapQuest
9%	13%	Yahoo Maps
4%	5%	AAA
9%	11%	Local Television News

Smartphones are being used increasingly for navigation and traffic information, and a question was included about Smartphone ownership. Of survey respondents, 36 percent reported owning a Smartphone (defined as web-enabled cell phone), compared to 30 percent in the 2010 survey. While the reported ownership increase was modest, the use of Smartphones for traffic information increased significantly from 11 percent of respondents in 2010 to 33 percent in 2012. Twenty percent reported using the telephone for traffic information at least a few times per month.

Table 3.15 Smartphone Ownership and Usage

Use Smartphone for Traffic Information					
2012 QC Survey 2010 ATIS Survey					
8%	5%	A few times a week or more			
12%	4%	A few times a month			
13%	2%	A few times a year			
67%	88%	Never use the cell phone for traffic information			
_		Undecided/Refused			

Notes: Thirty-six percent own Smartphone (web-enabled cell phone). Thirty percent owned Smartphone in 2010 ATIS survey.

Awareness of Quick Clearance

The next series of survey questions addressed the behavior of drivers in accident situations that would invoke the quick clearance law. The question was asked as follows:

1%

"If you were involved in a crash on the type of roadway I just described, AND NO ONE IN YOUR VEHICLE WAS OBVIOUSLY INJURED, YOU COULD STILL MOVE THE VEHICLE AND THE AUTHORITIES HAVE BEEN NOTIFIED, what would be your first reaction regarding what to do?"

Table 3.16 shows that 87 percent of respondents would comply with the Quick Clearance law by moving their vehicle off the roadway. The law does allow motorists discretion regarding whether to stay in the vehicle or have passengers exit so both answers are in compliance. Only 12 percent reported that they would behave in a way contradictory to the law.

Table 3.16 Observance of Quick Clearance

Undecided/Refused.

If you were involved in a crash on the type of roadway I just described, AND NO ONE IN YOUR VEHICLE WAS OBVIOUSLY INJURED, YOU COULD STILL MOVE THE VEHICLE AND THE AUTHORITIES HAVE BEEN NOTIFIED, what would be your first reaction regarding what to do?

Move the vehicle to the side of the road out of the way of traffic and have all the passengers remain in the vehicle until the police arrived.

Move the vehicle to the side of the road out of the way of traffic and have all the passengers exit the vehicle until the police arrived.

Leave the vehicle where it was and have all the passengers exit the vehicle until the police arrived.

Leave the vehicle where it was and have all the passengers stay in the vehicle until the police arrived.

A number of cross-tabulations were utilized to determine whether there were differences in the characteristics of those who said they would comply with quick clearance and those who said they would not. While only one of eight respondents reported they would not comply with quick clearance, this still represents a significant potential safety hazard. Identifying any distinguishing characteristics of this group helps to determine what messages and media would be most effective in reaching them. For the most part, there were limited differences between the two groups but several differences did emerge as shown in Tables 3.17 through 3.19. Table 3.17 indicates a slightly greater tendency among drivers over the age of 50 to leave their vehicles in place after an accident. Many of these drivers were trained to do this; at one time, driver training courses taught that vehicles should not be moved until law enforcement arrives. Table 3.18 indicates those with high school degrees or less are more likely to leave their vehicles in place as well. Table 3.19 shows difference in response by MDOT region. Higher percentages of those responding in the more rural Southwest, North, and Superior regions gave a response that is out of compliance with the Quick Clearance law.

Table 3.17 Move It Response by Age Group

Total	18-40	41-49	50-55	55-64	65+	
59%	62%	62%	53%	65%	53%	Move and Stay
		28%	27%			
28%	26%			25%	33%	Move and Exit
7%	6%	5%	11%	6%	5%	<u>Leave</u> and Exit
5%	4%	4%	5%	3%	7%	<u>Leave</u> and Stay
1%	2%	1%	1%	1%	2%	Undecided/Refused

Table 3.18 Move It Response by Education

Total	HS or Less	Post HS	College Grad	
59%	53%	63%	60%	Move and Stay
28%	29%	23%	29%	Move and Exit
7%	10%	8%	5%	Leave and Exit
5%	8%	4%	4%	<u>Leave</u> and Stay
1%	1%	3%	2%	Undecided/Refused

Table 3.19 Move It Response by MDOT Region

Total	Metro	University	Southwest	Grand	Bay	North	Superior	
59%	57%	61%	56%	65%	62%	57%	48%	Move and Stay
28%	31%	30%	22%	25%	25%	29%	15%	Move and Exit
7%	6%	7%	9%	3%	6%	8%	19%	Leave and Exit
5%	5%	3%	8%	4%	6%	6%	11%	Leave and Stay
1%	1%		5%		3%	1%	7%	Undecided/Refused

The survey also asked respondents whether they were aware that clearance of vehicles is required by law in cases where vehicles are moveable and there are no apparent injuries. This is an important distinction since motorists unaware of the legal requirement may leave their vehicles in place under certain circumstances; for example, where fault may be difficult to determine. The survey showed that while most respondents indicated they would comply with the law, only 28 percent were either very aware or somewhat aware of the quick clearance legal requirement. Table 3.20 shows the breakdown of responses. A series of crosstabulations were run to identify the characteristics of those reporting that they are unfamiliar with the quick clearance legal requirement. As shown in Table 3.21, those who were aware of the MIDrive web site had a much higher awareness of the Quick Clearance law than those who were not aware of the web site. This does not necessarily mean they learned about the law from the web site but may indicate a higher level of interest in transportation-related

information. Table 3.22 cross-tabulates awareness of the law with the scenario response summarized in Table 3.16. As expected, those who are aware of the law are more likely to comply with it. Table 3.23 shows the correlation between awareness of the law and age/education. Those over age 50 with less than a college education are less aware of the law than those with a college education and those under age 50. Finally, Table 3.24 includes a summary of Quick Clearance law awareness by MDOT Region. The table shows slightly higher rates of awareness in the urban regions of Metro and University and a significantly lower rate of awareness in the Superior Region.

Table 3.20 Awareness of Quick Clearance Law

-	Undecided/Refused
72%	Not Aware At All of Michigan's "Quick Clearance" law as it affects traffic accident situations
15%	Only Somewhat Aware of the law
13%	Very Aware of the "Quick Clearance" law

Table 3.21 Awareness of Quick Clearance Law versus Awareness of MDOT Web Site

Aware of MIDrive	Not Aware of MIDrive	
37%	24%	Very or Somewhat Aware of QC law
63%	76%	Not Aware of QC law

Table 3.22 Awareness of Quick Clearance Law versus Move It Response

Move It		Leav	e It	
Stay in Vehicle	Exit Vehicle	Stay In Vehicle	Exit Vehicle	•
28%	30%	10%	23%	Very or Somewhat Aware of QC law
71%	70%	90%	77%	Not Aware of QC law

Table 3.23 Awareness of Quick Clearance Law versus Education

18-49 No College	18-49 College	50+ No College	50+ College	
24%	30%	22%	31%	Very or Somewhat Aware of QC law
76%	70%	77%	69%	Not aware of QC law

Table 3.24 Awareness of Quick Clearance Law by MDOT Region

Metro	University	Southwest	Grand	Bay	North	Superior	
31%	28%	22%	25%	27%	24%	15%	Very or Somewhat Aware of QC law
68%	72%	78%	75%	73%	76%	85%	Not aware of QC law

Awareness of Move Over Slow Down Law

Table 3.25 documents the results of an additional question regarding the Move Over, Slow Down law that requires vehicles to move away from emergency vehicles if space is available. The scenario used was as follows "What do you think your first reaction would be if you saw an emergency response vehicle – such as a police car, an ambulance or fire truck, or a tow truck on the side of the road in front of you with its emergency lights flashing, while you were driving along a major roadway, highway, or freeway which had **TWO LANES** of traffic in the same direction?" The responses show that 88 percent responded that they would slow down and move over as the law requires. Table 3.26 shows that a much higher percentage of respondents are aware of this legal requirement, with 81 percent reporting that they are either very aware or somewhat aware of the law. While most motorists are aware of the Move Over, Slow Down law, it could be combined with the Quick Clearance law when disseminating safety messages to the public.

Table 3.25 Slow Down/Move Over Response

What do you think your first reaction would be if you saw an emergency response vehicle – such as a police car, an ambulance or fire truck, or a tow truck on the side of the road in front of you with its emergency lights flashing, while you were driving along a major roadway, highway, or freeway which had TWO LANES of traffic in the same direction? Would you...

- 88% Slow down the vehicle AND move to a lane furthest from the shoulder of the road, if another lane going in the same direction is available.
- 9% <u>Continue driving</u> at your current speed but move to a lane furthest from the shoulder of the road, if another lane going in the same direction is available.
- 2% <u>Slow</u> down your speed and continue driving in the same lane, without moving to a lane further away even if that was possible.
- 1% <u>Continue driving</u> at your current speed in the same lane, but pass the emergency vehicle with caution.
- Undecided/Refused.

Table 3.26 Awareness of Move Over, Slow Down Law

63%	Very Aware of the "Move Over/Slow Down" law
18%	Only Somewhat Aware of the law
19%	Not Aware At All, of Michigan's "Move Over/Slow Down" law as it affects emergency vehicle situations
_	Undecided/Refused

Traveler Information Sources

The final set of questions addressed use of various sources for traveler information. Table 3.27 summarized responses to the following question, "Thinking about where you receive most of your information about travel, traffic conditions, and the latest in requirements for motor vehicles and driving behavior, what would be the most convenient place for you to be informed about it?" The largest number of respondents still rely on "traditional" sources of information such as radio, television, and newspapers. All other sources were reported by less than 10 percent of respondents.

Table 3.27 Sources of Travel/Traffic Information

Thinking about where you receive most of your information about travel, traffic conditions, and the latest in requirements for motor vehicles and driving behavior, what would be the most convenient place for you to be informed about it?

-			
11%	Newspapers/other regular print publications		
31%	Television news/reports		
17%	Radio news/reports		
8%	E-mail		
5%	General word-of-mouth		
4%	Direct mail		
2%	Facebook, Twitter, MySpace, blogs, or other social media		
2%	Free brochures available at public places		
2%	Paid television advertising		
2%	Secretary of State		
1% or less	AAA.com, Billboards, Electronic Road Signs, Google, Internet, MDOT site, radio advertising phone apps, travel web sites		
6%	Other/Undecided/Refused		

Awareness of Social Media

Respondents were asked specifically about their use of social media and results were compared to those of the 2010 survey. About half the sample reported

using some type of social media, with usage up from 40 percent in 2010 to 49 percent in 2012. Frequency of usage was up slightly as well. Among those using social media, Facebook was by far the dominant web site, with 85 percent reporting usage as shown in Table 3.29. No other source was identified by more than 10 percent of respondents.

Table 3.28 Social Media Frequency of Use

. , ,	How frequently do you use social media web sites such as Twitter, Facebook, blogs, or YouTube?					
2012 QC Survey	2010 ATIS Survey					
20%	19%	Every day				
6%	4%	Most days				
10%	8%	A few times a week				
6%	3%	Several times a month				
7%	6%	Seldom				
51%	60%	Or Never				

Table 3.29 Social Media Web Sites Used

85%	Facebook	
7%	YouTube	
2%	Blogs	
2%	Twitter	
1%	Pinterest	
1%	Other	
1%	None	
1%	Undecided/Refused	

Table 3.30 shows the awareness of MDOT social media sites, including its Facebook page and Twitter feeds. While awareness was up slightly from the 2010 level, the survey showed that only 10 percent of respondents were aware of MDOT social media.

Table 3.30 Aware of MDOT Social Media Sites?

2012 QC Survey	2010 ATIS Survey	
10%	6%	Yes
90%	94%	No
		Undecided/Refused

3.2 CONCLUSIONS

The survey results represented a good cross-section of Michigan automobile commuters, with most reporting that they travel the State's highways on a regular basis. Since the survey used landline telephones, the sample was somewhat skewed toward older residents and those with higher levels of education. To address this issue, an alternative weighting scheme was tested to adjust for these biases. This scheme did not produce substantially different results that those shown in this section of the report. Key conclusions of the survey are summarized below:

- Most respondents are not aware that the Quick Clearance requirement is law (72 percent) but indicate that they would behave in a manner that is in accordance with the law.
- Groups least likely to be aware of the law or behave in accordance with it include:
 - Drivers who live in rural regions;
 - Drivers with a high school education or less;
 - Drivers over the age of 50;
 - Drivers who are not aware of the Quick Clearance law; and
 - Drivers who travel on a less frequent basis than regular commuters.
- Knowledge of, and compliance with, the Move Over Slow Down law is significantly higher than that for Quick Clearance.
- Sources for traveler information are becoming increasingly fragmented but the largest number of respondents still use what could be called "traditional" media sources; radio and television reports.
- A comparison of this survey with the 2010 survey conducted for MDOT's Advanced Traveler Information Systems (ATIS) project showed the highest level of growth in:
 - Use of GPS devices for traveler information; and
 - Use of Smartphones for traveler information.
- Use of websites for traveler information has remained relatively stable over the 2010-2012 period, but Google Maps has increased its market share among web sites.
- There has been increased awareness of both MIDrive and MDOT social media sites since 2010 but a majority of respondents; 74 percent for MIDrive and 90 percent for social media sites, are not aware.
- While use of social media sites, primarily Facebook, is increasing, few respondents reported using these sites for transportation information.

 Dynamic Message Signs have the highest market penetration among survey respondents. Regular drivers in all regions reported high levels of familiarity with Portable Changeable Message Boards having increased in visibility.

The implications of the survey data for the marketing and outreach strategies discussed later in Section 5.0 of this report are as follows:

- Messages related to Quick Clearance should emphasize that "it's our law."
- MDOT should make use of both Dynamic Message Signs and Portable Changeable Message Boards wherever possible to inform the public on Quick Clearance. The use of portable signs will be somewhat constrained by the limited space available and should be supplemented by other means.
- Since rural residents are an important target market for Quick Clearance messaging, MDOT should consider use of traditional media in lower-cost markets, including MDOT's Southwest, Superior, and North Regions. This would include radio and television public service spots, along with articles and press releases geared toward daily and weekly newspapers in smaller communities. Sample radio and TV spots, as well as a draft press release, are included in Section 5 of this report.
- Smartphones and GPS are being used by greater numbers of drivers for traveler information. MDOT should examine partnership opportunities to incorporate safety messages into these devices.
- There is great potential to increase visibility of the Quick Clearance law through social media. The use of a YouTube video contest is one effective method of drawing attention and is described in more detail in Section 5.
- Information flyers or brochures should be provided by first responders and tow companies at the scene of minor crashes. They should also be included with Secretary of State license/registration renewals, insurance renewals and made available at public events such as county fairs.

The responder workshop and telephone survey, which are described in the next section, generally confirm the viability of the strategies identified above.

4.0 Stakeholder Outreach

4.1 OVERVIEW

One of the objectives of the project was to obtain feedback from the responder community on their experience with the Quick Clearance law. Topics of interest included field experience with the law, suggestions for improvements in training, and operational procedures and ideas for informing the public about the law. Key stakeholders identified included law enforcement, dispatch, service patrols, MDOT operations personnel, and towing companies.

Three workshops were planned to obtain this feedback; one in Southeast Michigan, one in Western Michigan, and one in the North region. Initial conversations with law enforcement personnel, however, indicated recent budget cutbacks and travel limitations would limit the ability of responders to attend. This was a greater concern for the proposed Western and Northern Michigan workshops, which would require a full day of travel or more for many attendees.

Based on this feedback, the outreach plan was refined as follows:

- Develop a questionnaire for use in a telephone survey of first responders;
- Hold one workshop in the University region to obtain initial feedback and refine the questionnaire;
- Collect a list of responders, including State Police, County Sherriff, local police, dispatchers, and towing companies; and
- Conduct a telephone survey using the list.

The results of the workshop are summarized in the following Section 4.2. Summaries of survey results for Law Enforcement, Dispatch, and Towing are included in Sections 4.3 to 4.5 of this report. Recommendations resulting from this task are summarized in Section 4.6.

4.2 WORKSHOP SUMMARY

The workshop was conducted on May 29, 2012 at the MDOT University Region office in Jackson, Michigan. The workshop included seven MDOT representatives, three representatives of the Michigan State Police, and one representative of the Jackson Police Department. Three members of the consultant team provided facilitation and support for the workshop. The goal of the workshop was to discuss with first responders their experience with implementation of Michigan's Quick Clearance statute, including any related laws, policies, and procedures. The project team also wanted to gain insights

concerning implementation and brainstorm on public informational outreach methods to market the message.

The project team began the workshop by providing the group with a project overview; including the project's goals, the results of the literature search, and the findings of the public survey. The study team next led a interactive session which was organized around four core functional areas to structure the discussions:

- Policy Options;
- Procedures;
- Partnerships, and
- Promotion/Public Information.

The group agreed with the findings of the public survey that most motorists did remove their vehicles in accordance with the law. They did note several operational issues that needed to be addressed, including:

- Dispatchers do not always provide a consistent message when answering the 911 calls. They should be reminding motorists to move their vehicles if they are drivable and there are no apparent injuries. A common script that could be provided to all 911 centers would be helpful, including the questions "Is anyone injured?" and "Can the vehicle(s) be moved?" If the questions are answered "no" and "yes," the dispatcher would immediately instruct the driver(s) to move the vehicles off the roadway.
- County and local law enforcement personnel are often not adequately trained in the law, and have been known to contradict it at times in the field. Given the high turnover in traffic positions, a training module should be developed that can be used for new personnel. It does not need to be very long or elaborate. County road commissions also should be consulted on any awareness program. This could be done at the TSC's regular traffic summits.
- MDOT and MSP should coordinate with insurance companies operating in the State to check the language that they use and ensure it accurately follows the law in this case (i.e., the insurance companies' guidelines to their customers should not conflict with the efforts of the Quick Clearance law).

The group had a number of recommendations related to public outreach, which are developed in further detail in Section 5.0. These included:

• Develop flyers and distribute them with the Secretary of State mail renewal forms. This would require coordination with another agency but would be a low-cost solution that would reach a majority of the motorists. Information also could be provided via Web ads on the Secretary of State web presence for those vehicle owners who conduct their transactions over the web. It was suggested that this campaign be expanded across an entire year to ensure the maximum number of drivers can be reached.

- Engage the insurance operators in the State and include this same flyer (or a similar design) in the monthly billing mail. Again, a web ad could be designed for the insurance companies' web presence.
- Ensure that quick clearance is taught in basic driver education. There was discussion that this is a fairly difficult process given the large number of independent driver instruction schools but it was still deemed a worthwhile effort.
- Develop a check list for the MDOT and MSP web sites targeted to parents that includes "Things you need to share with your kids about driving." This would probably be best done as part of the flyer program or other parts of the outreach.
- Deploy static signs statewide that tell drivers: if it's a fender bender, move it off the road. This approach has been used with success in Ohio.
- Develop wallets or folders for driver registration and insurance paperwork
 that would include a message on the exterior of the wallet that promotes the
 Quick Clear law. This was seen as very popular and a great way to get the
 message out. These could be distributed at county fairs and a variety of
 outreach avenues.
- Partner with radio traffic reporters and have them promote the Quick Clearance law during their broadcasts.

Michigan DOT Research 2011

Table 4.1 MDOT Workshop

	11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law?	Secretary of State messaging: Brochures; verbal warning at crash along with educational brochure; Provide 911 Dispatch a script for quick clearance	DMS; radio spots; TV spots; Secretary of State messaging	DMS; TV spots; Secretary of State messaging, social media	DMS; radio spots;
	10. Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law?	Public service announcements or educational efforts with the public	Public service announcements or educational efforts with the public; Educational efforts with the towing industry	Training of law enforcement and dispatchers, universal understanding of law; Public service announcements or educational effort with the public; Get into drivers education classes, some drivers education teachers allow outside people to make presentations	Change in dispatch procedures; public service announcements or educational efforts with the public; educational efforts with towing services
	9. What problems have you experienced in implementing the quick clearance	None			Exposure of drivers and passengers to moving traffic
	8. What actions/changes did your organization take to help implement the Quick Clearance law?	Helping with educational campaign			
MDOT Workshop Survey Summaries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat tire, running out of gas, etc.) attempt to move their vehicle in accordance with the Ouick Clearance protocol?	%06	75%	25%	95%
p Survey	7. What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	%09	%09	75%	20%
/orksho	6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	10%	2%	20%	2%
MDOT W	5. Briefly describe your understanding of the purpose of MCL 257,618a – Michigan Quick Clearance Statute.	If there is no serious injury, move vehicle off the roadway when safe to do so	In the case of an accident, move vehicles off the main traffic route, if possible	Basic understanding, better flow	To clear vehicles that have been in a non-serious accident from the travel lanes to allow for free flowing traffic
	Years in Current Position			12	
	Job Title			Safety Safety	
	County	All		Молгое, Livingston, Washtenaw	Monroe, Livingston, Washtenaw
	MDOT Region	University	University	University	University
	Agency	Large	Large	Large	Large
	Agency Type	Transportation	Transportation	Transportation	Transportation
	Agency	MDOT	MDOT	МБОТ	MDOT

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	11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law?	DMS; radio spots on traffic reports	DMS; Static signs at state line	DMS; radio spots; TV spots; MDOT web sile; Secretary of State messaging – brochure with license renewal; social media; brochures	DMS; radio spots; Secretary of State messaging; static signing similar to that used in other states
	10. Are there any additional actions or changes that you would like to see responder successfully achieving compliance with the Quick Clearance law?	Training of dispatch and tow operators; Dispatch should inform callers of quick clearance	Public service announcements or educational efforts with the public; Educational efforts with the towing industry		Change in dispatch procedures; public service announcements or educational efforts with the public; educational efforts with trowing services
	What problems have you experienced in implementing the quick clearance law?			Exposure of drivers and passengers to moving traffic	
\$	8. What actions/changes did your organization take to help implement the Quick Clearance law?	Change in Field Operations:I-94 User delay project	Partnered with MSP to get word out	Training: wo workshops a month to local agency first responders: Educational efforts with towing services – workshops	Public service announcements or educational efforts with public: press release
MDOT Workshop Survey Summaries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat lire, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	%0	90%	%06	%06
p Survey	7. What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	20%	20%	70%	%09
/orksho	6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	20%	20%	10%	2%
MDOT W	5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute.	To keep traffic flowing	If there are no serious injuries and the car is drivable, you should it safely off the road	To cause less delay, decrease secondary crashes, provide safety to the traveling public	Clear crash vehicles from roadway if drivable and no serious injuries/ fatalities
	Years in Current Position		10	_	
	Job Title		Road Patrol Officer	Incident Operation Engineer	
	County	Jackson, Lenawee, Hillsdale	Jackson		
	MDOT	University	University	Central	Central Office
	Agency Size	Large	Large	Large	Large
	Agency	Transportation	Transportation	Transportation	Transportation
	Agency	MDOT	MDOT	MDOT	MDOT

4.3 LAW ENFORCEMENT SURVEY

Twenty-one law enforcement officials across the State were contacted through a telephone survey. While law enforcement personnel in urban and suburban areas were more available to answer the survey, a good geographic distribution was obtained. State Police, County, and local law enforcement officials were contacted. The law enforcement survey is included below and results of the survey are summarized in Table 4.1. Seven MDOT staff also filled out the law enforcement questionnaire and their results are included in Table 4.2. individual surveys have been submitted to MDOT under separate cover as Appendix B. Law enforcement officials surveyed were generally knowledgeable about the law and understood its purpose. Most agreed that drivers usually act in accordance with the law and remove their vehicles when there they are drivable and there are no injuries. They felt that public service announcements and general public education activities would be helpful in making sure that Suggestions for disseminating information everyone understands the law. included television and radio spots, flyers/brochures provided with drivers license renewals, incorporation into drivers education classes, messages from the Secretary of State, and use of social media.

Figure 4.1 Law Enforcement Interview Questionnaire

Law Enforcement Interview Questionnaire

"Implementation of Quick Clearance in Michigan" Interview with Law Enforcement

1.	Age	ncy:				
Lc	cal F				medium to 35 officers, lar	{Post, team or detachment} large ge over 35 officers}
•		Department:		small	medium o 80 deputies, large o	large
					medium popers, large over 25	
2.		OT Region: Superior: North: Bay: Grand: Southwest: University: Metro:	County of: _County			
3.	Job	Title: Road Patrol O Road Patrol D Trooper Field Sergean Traffic Service Other Comma	eputy t es Sergeant		 	in current position years years years years years years years years
4.	Spe	Accident Reco Evidence Tech Emergency Mo	stigator onstructionist nnician edical Technic	ian	uick Clearance:	
			•	-	and Implementa	
5.						purpose of MCL 257.618a – Michigan
6.		at percentage o arance law here			raffic crash woul	d you estimate are aware of the Quick
7.					ash would you e f the law or not?	stimate behave in accordance with the

7a	a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat tire, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?%
8.	What actions/changes did your organization take to help implement the Quick Clearance law? Check all that apply. Training, if so method and number of hours: Change in Field Operations: What, Change in Dispatch Procedures: What, Public service announce or educational efforts with the public: Method, Educational efforts with the Towing Services: Method, Other: Explain None.
9.	What, if any, problems have you experienced in implementing the quick clearance law? Check all that apply. Failure of drivers to remove vehicle(s) from roadway as required by the law: Abandonment/failure to stay with vehicle: Conflict between drivers/participants: Exposure of drivers and passengers to moving traffic: Determining fault for incident – inhibits the ability to conduct a traffic crash investigation: Concern about determining fault for insurance purposes: Determining cause and severity of injuries: Determining need for and type of tow service: Exposure of first responders to moving traffic: Other: None.
10	Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law? Check all that apply. Training, if so method and number of hours: Change in Field Operations: What, Change in Dispatch Procedures: What, Public service announce or educational efforts with the public: Method, Educational efforts with the Towing Services: Method, Other: Explain None. Public Information Outreach Needs
11	Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law? (Check all that apply – but please identify with an * which of these you feel will be most effective.) Dynamic Message Signs: Any suggested message: Radio spots: TV spots (Public Service Announcements: MDOT web site: Secretary of State messaging: Social media (Facebook, Twitter, etc.): Brochures: Outreach at major events: Such as:
	Other (describe).

Table 4.2 Law Enforcement

Law Enforcement Survey Summaries

11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law?	TV spots	Radio spots, TV spots	Radio spots (in the car/ active listeners); social media	Dynamic message signs; Radio spots	Radio spots, social media
10. Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law?	Other: Debris in road causes problems for other motorists, needs to be addressed	None	Training; information needs to be out there	None	Public service announcement or educational efforts with public
9. What problems have you the quick clearance law?	None	None	None	None	Concern about determining fault for insurance purposes; lack of public knowledge
8. What actions/changes did your organization take to help implement the Quick Clearance law?	Change in Dispatch Procedures; told callers to remove vehicles	None	None	Change in Field Operations; Advise people to move cars	Training: trained officers to move vehicles whenever possible
7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat tire, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	100%	%06	95%	75%	70%
7. What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	%06	20%	20%	20%	20%
6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	%06	%09	%0	20%	.00%
5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute.	Did not know what I was referring to until I read the statute	Maintain safe roads, get out of the way so other vehicles can continue on	Improve safety and allow traffic to flow	Clear roadways to prevent further accidents, maintain safe roads	Reduce the hazards of vehicles blocking the roadway
Years in Current Position	င	4	1.5	12	9
Job Title	Field Sergeant	Field Sergeant	Chief	Field Sergeant	Deputy Director
County	Clare/Isabella	St. Clair County	Muskegon	Wayne	Jackson
MDOT Region	Bay	Metro	Grand	Metro	University
Agency Size	Small	Small	Small	Medium	Medium
Agency Type	Local PD	Local PD	Local PD	Local PD	Local PD
Agency	Clare PD	St. Clair PD	Whitehall PD	Flat Rock PD	Blackman Township

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	11. Based on your experience, what do you think would be the best way to disceminate information on the Juick Clearance law?	Dynamic message signs; Radio spots; TV spots; social media	MDOT web site; Brochures given out with license; Test Question	DMS, radio spots; TV spots; Literature from Secretary of State given out in person or through the mail; Flyers for law enforcement to distribute to the public	Radio spols; TV spots; Other (Flyers to hand out)
	10. Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law?	Change in Dispatch Procedures: Alert drivers to move cars right away	None	911 Dispatchers using a uniform set of questions; Television Public Service Announcements	None
	9. What problems have you experienced in implementing the quick clearance law?	None	None	Failure to remove vehicles from readway as required by the law; Conflict between drivers and drivers and drivers and passengers to moving traffic	None
	8. What actions/changes did your organization take to help implement the Quick Clearance law?	Public service announcement or educational efforts with the public: Dynamic message signs	None	Training: Briefing Failure to review of the law. rehicles froadway a required by the law. Conflict between drivers an pedestrare Exposure drivers an passenger	None
aries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat tire, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	95%	40%	%06	70%
Law Enforcement Survey Summaries	7. What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	%08	30%	25%	40%
ment Surv	6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	%09	%0	10%	2%
v Enforce	5. Brieffy describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute.	Traffic safety, prevent other accidents, keep roadways open and moving	Avoid additional incidents	Purpose is for motorists to remove their vehicles from the roadway after being involved in a minor traffic collision in order to allow traffic flow to continue	Clear the roadway and avoid future hazards
La	Years in Current Position	4	20	2	22
	Job Title	Field Sergeant	Road Patrol Officer	Commander	Lieutenant
	County	Kent	Ingham	Jackson	Newaygo
	MDOT Region	Grand	University	University	Grand
	Agency Size	Large	Large	Large	Small
	Agency Type	Local PD	Local PD	Local PD	Sheriff Department
	Agency	Grand Rapids PD	Lansing PD	Jackson PD	Newaygo SD

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	11. Based on your experience, what to disseminate information on the Quick Clearance law?	Radio spots: TV spots: Secretary of State messaging (information included with license renewal	Radio spots; Other (newspapers)	Radio spots: TV spots: Other (Driver's Education)	Radio spots; TV spots; Social media; Other: Drivers Ed	Radio spots; TV spots
	10. Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law?	None	None	Public service announcement or educational efforts with public. Give back front traffic bumpers that were removed	Other: Educating public at Drivers Ed classes	None
	9. What problems have you the quick clearance law?	None	None	Lack of knowledge	Other: Cost of trying to educate public	None
	8. What actions/changes did your organization take to help implement the Quick Clearance law?	Change in Dispatch Procedures: advised drivers to pull cars over	None	None	None	None
aries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat lire, munning out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	%56	%06	%	%06	%08
Law Enforcement Survey Summaries	7. What percentage of those involved in a traffic crash would you estimate Dehave in accordance with the Quick Clearance law, whether they are aware of the law or not?	%56	15%	10% (more in heavily traffic areas)	20%	%09
ement Sur	6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	%09	28%	10%	%0	%0
w Enforce	5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute.	Clear the roadway and avoid further accide nts	Keep the roadway clear	Clear roadway to not impede traffic; reduce possible injuries; have a safer environment to investigate accident	Immediately clear the roadway	Clear hazards from the roadway
La	Years in Current Position	4	-	4 months	22	7
	Job Title	Lieutenant	Uniform Service Division Commander	Detective Sergeant	Deputy Sheriff	Traffic Services Sergeant
	County	Huron	Shiawassee	Saginaw	Southwest Van Buren	Kent
	MDOT Region	Bay	University	Вау	Southwest	Grand
	Agency Size	Small	Small	Medium	Medium	Large
	Agency Type	Sheriff Department	Sheriff Department	Sheriff Department	Sheriff Department	Sheriff Department
	Agency	Huron SD	Shiawassee SD	Saginaw SD	Van Buren SD	Kent SD

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	11. Based on your experience, what do you think would be the best way to disceninate information on the Juick Clearance law?	Radio spols; TV spots	Radio spots; TV spots (News outlets); Social media	Radio spots; TV spots; Other (fines to help spread the word and incorporation into Drivers Ed)	Radio spots; TV spots; Social media	Radio spots; TV spots; Brochures
	10. Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law?	Public Service announce or educational efforts with the public	Training: Education in basic training	Public Service announce or educational efforts with the public (Others Education): Other (Fines for those	None	Other: Education for the general public
	9. What problems have you experienced in implementing the quick clearance law?	Other: Lack of public education on law	None	None	None	None
	8. What actions/changes did your organization take to help implement the Quick Clearance law?	Change in field operations (Road patrol tells drivers to move cars): Change in dispatch procedures (Tell callers to move car, if possible)	None	None	None	None
aries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat tire, nunning out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	%388	20%	%56	N/A	%06
Law Enforcement Survey Summaries	7. What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	20%	%09	%06	%06	10%
	6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	20%	%0	%0	20%	30%
	5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute.	Ensure roadway is clear and prevent further accident or injury	Prevent road congestion	Maintain safety and continuous flow of traffic	Promote vehicle and occupant safet y	Prevent further accidents or injuries to accident victims
La	Years in Current Position	3 months	14	7	4	2.5
	Job Title	Traffic Services Sergeant	Lieutenant	Road Patrol Deputy	Lieutenant	Post Commander
	County	Oakland	Ottawa	Livingston	Kalamazoo	Lenawee/ Monroe
	MDOT Region	Metro	Grand	University	Southwest	University
	Agency Size	Large	Large	Large	Large	Medium
	Agency Type	Sheriff Department	Sheriff Department	Sheriff Department	Sheriff Department	Michigan State Police
	Agency	Oakland SD	Ottawa SD	Livingston SD	Kalamazoo SD	Monroe #14

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	11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law?	Dynamic Message signs: Radio spots; TV spots	Dynamic Message signs, radio spots, description of steer clear steps to be included with insurance renewals
	10. Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law?	Public Service announce or educational efforts with the public	Ask when 911 was calledEducational efforts to towing agencies
	9. What problems have you experienced in implementing the quick clearance law?	Other (lack of public education)	Exposure of drivers and passengers to moving traffic; Exposure of first responders to moving traffic moving traffic
	8. What actions/changes did your organization take to help implement the Quick	Public service announcement or educational efforts with the public (Billboards/PSA)	Training: Academy and training bulletin
aries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat tire, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	NA	85%
rey Summ	7. What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	N/A	20%
Law Enforcement Survey Summaries	6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	15%	***************************************
	5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute.	Get traffic moving as quickly as possible (specialized training in accident reconstruction	If you can move it, get it out of the way
Ľ	Years in Current Position	81	
	Job Title	Traffic Services Sergeant	Traffic Services Sergeant
	County	All Counties	
	MDOT Region	Superior/ North	University
	Agency Size	Large	Large
	Agency Type	Michigan State Police	Michigan State Police
	Agency	óth District	State Police Michigan State Poli

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	11. Based on your experience, what do you think would be the best way to disseminate information on the	DMS; radio spots; TV spots; Brochures; Insurance company liferature that describes what to do in case of a crash	DMS message: "Fender bender? Move over!," TV spots, Secretary of State messaging, MDOT web site, Tadio spots, Social media
	10. Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law?	Training: update on law; Issuing verbal warnings or citations for violation of law at crashes. Dispatchers give instructions to drivers to move vehicles	Training: Change in field operations
	9. What problems have you experienced in implementing the quick clearance law?	Failure to remove vehicles from roadway as required by the law; Abandonment Afailure to stay with vehicle; Determining fault for incident—incident—incident ability to conduct a traffic crash linvestigation; Determining need for and type of tow services; Exposure of first responders to moving traffic	None
	8. What actions/changes did your organization take to help implement the Quick Clearance law?	Traffic law update	Training: Legal updates of an hour or less; Notify motorists of quick clearance law at crash scene
aries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat tire, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	90% (Freeways	%66
Law Enforcement Survey Summaries	7. What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	90% (Freeways only)	%08
ement Sur	What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	%01 	.00%
w Enforc	5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute.	If the crash involves no injuries, or only mind or only mind or so safely, you we to move your vehicle off the main traveled portion of the cradway or quickly as possible following the crash	Purpose is to improve safety and efficiency
La	Years in Current Position	m	2
	Job Title	Assistant Post Commander	Sergeant Sergeant
	County	Livingston and Washlenaw (Brighton Post)	Jackson
	MDOT Region	University	University
	Agency Size	Гаде	Large
	Agency Type	Michigan State Police	Michigan State Police
	Agency	State Police	State Police

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4.4 DISPATCH SURVEY

Representatives of seven 911 dispatch centers across the State were interviewed as part of the outreach effort. A large number of interviews were refused. Many dispatch centers have limited staff and had no one other than the person on duty available. Among those interviewed, knowledge of the Quick Clearance law was limited, confirming the opinions expressed in the workshop. Most did agree with law enforcement that motorists tend to follow the Quick Clearance law and remove their vehicles from the roadway after an incident, even if they are not aware it is the law. However, if the vehicles are not moved immediately, first responders will usually make it a priority. Most of the dispatchers felt that prearrival instructions for responders would help to expedite removal if it has not been done. Two of the respondents noted that local law enforcement will sometimes mandate that the vehicles stay in place, even if they should be moved under the law. They identified DMS as the most effective method of reaching the public, followed by television and radio spots and social media. The dispatcher survey is included below and the results are summarized in Table 4.3.

Figure 4.2 911 Dispatch Personnel Questionnaire

"Implementation of Quick Clearance in Michigan" Interview with 9-1-1 Dispatch Personnel

1.	Agency:	
	.9-1-1 Central Dispatch A 9-1-1 Dispatch Center: mall center less than 10 disp	gency: small medium large atchers, medium center 11 to 16 dispatchers, large center over 16 dispatchers}
2.	North: County of Bay: County of Grand: County of County	
3.	Job Title: 9-1-1 Dispatcher 9-1-1 Dispatch Supervis 9-1-1 Director	3a. Years in current position years or years years
	Have you received any received:	nane to the issue of "Quick Clearance Law": pecial training on the Quick Clearance law?, If yes, type of training nat would be germane to Quick Clearance:
·	·	tence or two, your understanding of the purpose of MCL 257.618a – Michigan
6.	What percentage of the Clearance law here in M	e drivers involved in a traffic crash would you estimate are aware of the Quick chigan?%
7.		e involved in a traffic crash would you estimate behave in accordance with the ether they are aware of the law or not?%
7a		ers who experience a non-traffic crash incident (mechanical, flat tire, running to move their vehicle in accordance with the Quick Clearance protocol?%
8.		col your center utilizes to inform a drive about complying with the Quick you receive a call you tell the driver:
8a		you to have a "Quick Clearance pre-arrival instructions" to inform the driver le off the roadway and to assess the type of tow service required? Yes:

9.	What actions/changes did your center take to help implement the Quick Clearance law? Check all that apply. Training, if so method and number of hours: Change in Dispatch Procedures: What, Public service announce or educational efforts with the public: Method, Educational efforts with the Towing Services: Method, Other: Explain None.
10	.What, if any, problems have you experienced in implementing the quick clearance law? Check all that apply. Failure of drivers to remove vehicle(s) from roadway as required by the law: Abandonment/failure to stay with vehicle: Conflict between drivers/participants: Concern about determining fault for insurance purposes:
	Exposure of drivers and passengers to moving traffic: Determining need for and type of tow service: Other: None.
11	.Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law? Check all that apply. Training, if so method and number of hours: Change in Field Operations: What, Change in Dispatch Procedures: What, Public service announce or educational efforts with the public: Method, Educational efforts with the Towing Services: Method, Other: Explain None.
	Public Information Outreach Needs
12	Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law? (Check all that apply – but please identify with an * which of these you feel will be most effective.)

 Table 4.3
 911, Central Dispatch

911 Central Dispatch Survey Summaries

safety agencies of State messaging (DL renewal/ postcards/direct mail): social media: brochures; to public agencies Dynamic message signs; radio spots; TV spots; social media 11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law? changes that you would like to see implemented that would like to see responders successfully achieving compliance with the Quick Clearance law? efforts with the Towing Services 10. Are there any additional actions or Local Law Enforcement may push back 9. What problems have you experienced in implementing the quick clearance law? What actions/changes did your organization take to help implement the Quick Clearance law? Yes; we would ronsider, needs to be cleared by the sheriff 8a. Would it be beneficial for you to have a ''Ouick Clearance pre-arrival instructions" to off the roadway and to assess the type of tow service required? Nothing specific in our protocol To get the vehicle out of the roadway, 8. What is the current protocol your center utilizes to inform a drive about complying with the Quick Clearance Law? When you receive a call, you tell the driver: f possible 7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat lire, running out of gas, etc.) aftempt to move their vehicle in accordance with the Quick Clearance protocol? 90-95% 80% λ . What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not? 6. What percentage of those drivers involved aware of the Quick Clearance law in Michigan? For vehicles to to move to slow down and move to another lane to avoid subjects involved in emergency personnel on accidents or 5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute scene N/A 4. Specialized training germane to the issue of "Quick Clearance Law" None Yes 16 Years in Current Position Job Title Dispatcher 911 Dispatch Super-visor 911 County Oceana/ Mason Sanilac MDOT Region North/ Grand Agency Size Small Small Dispatch 911 Central Agency 911 Dispatch Sanilac County Central Dispatch Oceana/ Mason

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	11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law?	Dynamic message signs (short "in accident, vehicle drivable, move to shoulder immediately"); Radio Spots; TV Spots; MDOT Web State messaging (include fliyer with license plate renewal to rilke material); Social Media (e-mal mass mailing); brochures; outreach at major events	Newspaper ads
	10. Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law?	Training (reading material, 1-2 marterial, 1-2 marterial, 1-2 marterial, 1-2 more): Change in Field Operations (getting police agencies to comply): Change in Dispatch police agencies are receptive): Public Service announcement (relevision, respito): Public Service announcement (relevision, reading police): Public Service announcement (relevision, reading police): Catucational efforts with the Fourier web sites) Educational Educational Educational Educational Services (maybe they to must abide by police): Other must abide by police): Other (infolfrating for fire agencies)	None
	9. What problems have you experienced in implementing the quick clearance law?	All enforcement have to agree to abide by it	None
	9. What actions/changes did your organization take to help implement the Quick Clearance law?	None	None
maries	8a. Would it be beneficial for you to have a "Ouick Clearance pre-arrival instructions" to inform the others about moving their vehicle of the roadway and to assess the type of tow of the roadway and to assess the type of tow	Yes; beneficial to us but police may tell us to do something different different	Yes
vey Sum	8. What is the current protocol your center utilizes to inform a drive about complying with the Quick Clearance Law? When you receive a call, you tell the driver:	If drivable, move out of the way as the way as possible, shoulder or driveway	None
911 Central Dispatch Survey Summaries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat lite; running out of gas., etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	%06	Unknown
iral Disp	7. What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	10-15%	Unknown
1 Ceni	6. What percentage of those drivers involved in a taffic crash would you estimate are aware of the Quick Clearance law in Michigan?	10-15%	10%
91	5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute	N/A	N/A
	4. Specialized training germane to the issue of "Quick Clearance Law".	None	None
	हैं Years in Current Position	cher cher	20 or
	Ob Title	Dispatcher	911 Director
	County	Barry	Eaton
	MDOT	Southwest E	University I
	Agency Size	S aal	Medium L
	911 Central Dispatch / Agency	Dispatch Center	911 Dispatch Center
	Agency	Barry	Eaton

		e G	ing;
	11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law?	Dynamic Message signs	Radio spots: MDOT web site; Secretary of State messaging. Social media
		Dynam signs	Radio spots; web site; Sec of State mess Social media
	changes that you would like to see implemented that would help the lirst responders successfully achieving compliance with the Quick Clearance law?		
	10. Are there any additional actions or changes that you would like to see	None	None
	implementing the quick clearance law?		
	9. What problems have you experienced in	ne	a
		wn None law	None of the contract of the co
	What actions/changes did your West actions/changes did your Clearance law? Cluck Clearance law?	copy of the law	Change in Dispatch Procedures: advise dispatch advise dispatch considerate to provide guidance to drivers
	off the roadway and to assess the type of tow service required?		
ies	"Quick Clearance pre-arrival instructions" to inform the driver about moving their vehicle	No; each accident is treated according to the facts we receive	
nmar	8a. Would it be beneficial for you to have a		O _N
y Sun	8. What is the current protocol your center with the division a drive about complying with the four cherist complying receive a call, you tell the driver:	Safety first, Clear second	Ask if they can move the vehicles off the road
nrve	attempt to move their vehicle in accordance with the Quick Clearance protocol?	Sa	
911 Central Dispatch Survey Summaries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, filat lire; running out of gas, etc.)	%26	%66
Dispa	traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	own	
ntral	Michigan? 7. What percentage of those involved in a	Unknown	25%
1 Cer	6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in	2%	22%
91	5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute	Clear the roadway as quick as possible, keeping the safety of the victim comes first	Drivers involved in motor vehicle collisions on public roadways resulting in property damage and move their wehicles out of the travelices out of the roadway to open raffic lanes, if it is safe to do so further damage/ injury will result
	Years in Current Position 4. Specialized training germane to the issue of "Cuick Clearance Law"	41 None	7 None
	Job Title	911 Dispatch Super- visor	911 Director
	County	Senesee	Berrien
	MDOT	Bay	South- west
	Agency Size	Large B3	N N N N N N N N N N N N N N N N N N N
	911 Central Dispatch Acg		
	91 Cen Disp	911 Dispatch Center	911 Dispatch Center
	Agency	Genesee	Berrien County Safety Commu- Center

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	11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law?	Dynamic message signs ("Car Crash? Not hur? Move out of the way – it's our flamm!"). Radio spots: Secretary of State messaging (poster at SOS while people walt): social media (if you have a following, use it)
	10. Are there any additional actions or changes that you would like to see implemented that would help the first responders successfully achieving compliance with the Quick Clearance law?	Public Service announcement (flyer/info packets)
	9. What problems have you experienced in implementing the quick clearance law?	Failure of drivers to remove vehicles from roadway as required by the law (People do not believe II). Conflict between drivers/ participants (People want the officers to see want the officers to see want the officers to see the damage/fault); Concern about determining fault for insurance purposes (do insurance purposes (do insurance purposes do insurance purposes to moving state law); exposure of drivers and passengers to moving traffic; determining need for and type of tow service (some want closest/fastest and we do a rotation log)
	9. What actions/changes did your organization take to help implement the Quick Clearance law?	Public service announcement (flyer)
maries	8a. Would it be beneficial for you to have a "Cuick Clearance pre-arrival instructions" to inform the driver about moving their vehicle off the roadway and to assess the type of tow service required?	Yes; any/all information is beneficial
rey Sum	8. What is the current protocol your center utilizes to inform a drive about complying with the Quick Clearance Law? When you receive a call, you tell the driver:	To move out of the way of traffic for their safety and responder safety
911 Central Dispatch Survey Summaries	7a. What percentage of drivers who experience a non-traffic crash incident directional filst fire, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	%56
ral Dispa	7. What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?	%06
1 Cent	6. What percentage of those drivers involved in a taffic crash would you estimate are aware of the Quick Clearance law in Michigan?	20%
91	5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Cuick Clearance Statute	Any non- injury car accident must from the roadway in a safe and effective manner
	4. Specialized training germane to the issue of "Quick Clearance Law"	None
	सं Years in Current Position	2
	Job Title	911 Dispatch Super- visor
	County	University Livingston
	MDOT	Iniversity
	Agency Size	Large
	911 Central Dispatch Ag	Dispatch L2 Center
	Agency	Livingston 9 County 6

4.5 TOW COMPANY SURVEY

The cooperation of tow companies is important to the success of the Quick Clearance law. A list of tow companies for potential survey participation was obtained from the Michigan Towing Association. The rate of tow company participation in the survey was relatively low, with seven companies responding. The majority were located in the Jackson area, and were originally on a list of invitees to the Workshop. Those answering the survey demonstrated a limited awareness of the Quick Clearance law although some reported that they had received training or information through the Towing Association and MDOT. Answers regarding driver behavior and awareness of the law varied among the respondents; some felt that most drivers follow the law, while others disagreed. Most feel that additional educational efforts are needed with both the towing community and the general public. They cited radio and television spots, DMS, social media, and newspapers as the best means of reaching the public. The tow company survey is shown below and followed by Table 4.4, which summarized tow company survey results. (Company names have been removed.)

Figure 4.3 Tow Service Providers Interview Questionnaire

Tow Service Providers Interview Questionnaire

"Implementation of Quick Clearance in Michigan" Interview with Tow Service Providers

1.	Company:
1b	Company service area and size:
{Sı	☐ Towing Service: small medium large servicing a county > 25,000 and < 150,000, large servicing a county > 150,000
(O	□ Towing Company Size: small medium large {Small company 1 to 3 wreckers, medium company 4 to 8 wreckers, large company over 8 wreckers}
2.	MDOT Region: Superior: County of: North: County of: Bay: County of: Grand: County of: Southwest: County of: University: County of: Metro: County of:
3.	Job Title: Towing service driver Towing service owner/operator Member of the Michigan Courtesy Patrol 3a. Years in current position years years years
4.	Specialized training germane to the issue of "Quick Clearance": Have you received any training concerning implementation of the Quick Clearance law: Yes, Type of training: No.
5.	Operational Concepts and Implementation Issues Briefly describe, in a sentence or two, your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute:
6.	What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law here in Michigan?%
7.	What percentage of those involved in a traffic crash would you estimate behave in accordance with the Quick Clearance law, whether they are aware of the law or not?%
7a	What percentage of drivers who experience a non-traffic crash incident (mechanical, flat tire, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?%
8.	What actions/changes did your company take to help you understand the Quick Clearance law? Check all that apply. Training, if so method and number of hours: Change in Towing Operations: What, Public service announce or educational efforts with the public: Method, Educational efforts from the Michigan Towing Association or the Michigan Courtesy Patrols: Method, Other: Explain None.

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9.	Wha	t, if any, problems have you experienced in implementing the quick clearance law? Check all that apply. Failure of drivers to remove vehicle(s) from roadway as required by the law: Abandonment/failure to stay with vehicle: Conflict between drivers/participants: Concern about determining fault for insurance purposes: Exposure of drivers and passengers to moving traffic: Determining need for and type of tow service: Exposure of first responders to moving traffic: Other: None.
10		there any additional actions or changes that you would like to see implemented that would help you, the ng service provider, successfully achieving compliance with the Quick Clearance law? Check all that apply. Training, if so method and number of hours: Change in Field Operations: What, Change in Dispatch Procedures: What, Public service announce or educational efforts with the public: Method, Educational efforts with the Towing Services: Method, Other: Explain None.
		Public Information Outreach Needs
11		ed on your experience, what do you think would be the best way to disseminate information on the Quick rance law? (Check all that apply – but please identify with an * which of these you feel will be most effective.)
		Dynamic Message Signs: Any suggested message
		Radio spots:
		TV spots (Public Service Announcements: MDOT web site:
		MDO1 web site:
		Social media (Facebook, Twitter, etc.):
		Brochures:
		Outreach at major events: Such as:
		Other (describe):

Table 4.4 Towing Companies

Towing Company Survey Summaries

1	İ	l .	l	I	ı
11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law?	Dynamic Message Signs; Newspapers	Brochures; Mail	Radio spots; TV spots	TV spots; Social media	Other (Inform drivers at the DMV)
10. Are there any additional actions or changes that you would like to see implemented that would like to see towing company successfully achieving compliance with the Quick Clearance law?	Education efforts with the Towing services (was not advertised very well)	Educational efforts with the Towing Services (Info packets)	None	Public Service announce or educational efforts with the public	None
9. What problems have you experienced in implementing the quick clearance law?	None	Failure of drivers to remove vehicles from roadway as required by the law; Abandonment/failure to stay with vehicle	Failure of drivers to remove vehicles from roadway as required by law, Concern about determining fault for insurance purposes; Determining need for and type of tow service	Failure of drivers to remove vehicle's from roadway as required by the law; Concern about determining fault for insurance purposes	Failure of drivers to remove vehicles from roadway as required by the law
8. What actions/changes did your organization take to help implement the Quick Clearance law?	Training (received brochures)	None	None	Other (Employee meetings)	Educational efforts from the Michigan Towing Association or the Michigan Courtesy Patrols
7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat tire, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	75%	%09	Some	21%	A lot
7. What percentage of those involved in a traffic crash would you estimate behave in a ccordance with the Quick aware of the law or not?	20%	%08	Very little	7%	A lot
6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	N/A	A lot	Very few	7%	100%
5. Briefly describe your understanding of the purpose of MCL 257,618a – Michigan Quick Clearance Statute.	Was not aware of law until I summarized it	N/A	Not sure what it is	N/A	N/A
Specialized Training	ON.	S.	O _N	ON.	Various state and towing training
Years in Current Position	20	വ	27	25	A while
Job Title	Dispatcher	Office Manager	Owner	Assistant Manager	Office Manager
County	Jackson	Jackson	Jackson	Jackson	Ingham
MDOT Region	University	University	University	University	University
Company Size	Small	Small	Small	Small	Large
Company Service Size	Small	Medium	Medium	Medium	Medium
Сотрапу					

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	11. Based on your experience, what do you think would be the best way to disseminate information on the Quick Clearance law?	Dynamic Message Signs; Radio spots; TV spots; Social media; Newspapers	N/A
	10. Are there any additional actions or changes that you would like to see implemented that would like to see schieving compliance with the Quick Clearance law?	Public Service announce or educational efforts with the public	N/A
	9. What problems have you experienced in implementing the quick clearance law?	None	Failure of drivers to remove vehicles from roadway as required by the law
	8. What actions/changes did your organization take to help implement the Quick Clearance law?	None	
nmaries	7a. What percentage of drivers who experience a non-traffic crash incident (mechanical, flat lite, running out of gas, etc.) attempt to move their vehicle in accordance with the Quick Clearance protocol?	2%	
rvey Sur	7. What percentage of those involved in a traffic creah would you estimate behave in a cocordance with the Quick Clearance law, whether they are aware of the law or not?	Very little	2%
Towing Company Survey Summaries	6. What percentage of those drivers involved in a traffic crash would you estimate are aware of the Quick Clearance law in Michigan?	20%	25%
	5. Briefly describe your understanding of the purpose of MCL 257.618a – Michigan Quick Clearance Statute.	N/A	N/A
	Specialized Training	No	No
	Years in Current Position	15	N/A
	Job Title	Dispatcher	N/A
	County	Washtenaw Dispatcher	Macomb
	MDOT Region	Metro	Metro
	Company Service Company Size	Large	Large
		Large	Large
	Сотрапу		

4.6 SUMMARY OF STAKEHOLDER OUTREACH

While a larger response was received from law enforcement, the findings of this outreach effort were relatively consistent across the different groups involved. Stakeholders agreed, for the most part, that drivers tend to observe the Quick Clearance law even if they do not know it is a requirement. There was agreement that additional training is needed for local law enforcement, dispatch, and towing personnel to make sure everyone is aware of the law. This training needs to be ongoing since there is significant personnel turnover in these organizations, and needs to be relatively brief. The stakeholders felt that the law could be explained relatively easily in a short session with supporting materials. This should be supplemented with a standard script for dispatch personnel that would include a reminder to move vehicles when there are no injuries and the vehicles are moveable.

Stakeholders suggested a variety of methods for reaching the public, including Dynamic Message Signs, radio and television spots, flyers included with of license renewals and insurance company notices, and social media. This confirms the findings of the public survey that a variety of strategies are required to make sure that the public is aware of the Quick Clearance requirement and the fact that it is the law. These strategies are discussed in more detail in Section 5.0.

5.0 Outreach Strategies

This section provides information on the marketing and outreach strategies for Quick Clearance and the tactics and delivery mechanisms we will use to communicate with the public.

Our research indicates the message should be simple and incorporate three elements:

- It is a matter of safety;
- It is our law; and
- It will not impact the determination of fault for insurance purposes.

We propose developing an easily recognizable brand for Quick Clearance that is discussed in Section 5.1.

The research also indicates the individuals that are the least familiar with the law, and those who are least likely to follow it, are diverse. While there appear to be significant numbers of drivers across the State and across demographic groups who are not familiar with the law, those showing the lowest rates of awareness are older drivers, those with high school education or less, and those living in the more rural regions of Michigan. This requires the use of a broad range of delivery mechanisms. Since the budget for this activity is likely to be limited, options offered are designed to reach a large number of drivers cost-effectively.

Section 5.2 discusses the various delivery strategies, including dynamic message signs, radio and television public service announcements, newspaper articles and press releases, billboards, gas station "toppers," and display boards at special events. Flyers and brochures can be used to reach residents through license, registration, and insurance renewals. Flyers also can be distributed at other public sites such as City Halls, senior centers, and community centers. MDOT has been highly progressive in its use of social media, including its MIDrive web site, Twitter feed, and Facebook page. One of the key recommendations included is to leverage social media through a contest, which is described in Section 5.2.

5.1 Branding and Messaging

This section provides suggestions on possible taglines, character mascots, and ways to use innovative techniques in crowdsourcing and social media. These recommendations are influenced by the survey, other project outreach, and the literature review.

The tools also reflect the fact the law is fundamentally easy to understand, and requires little in explanation for a driver to understand what is expected of them. The promotional and branding tools, therefore, focus on getting a lot of attention for a brief time, rather than capturing a smaller audience for a longer period. A simple, catchy, and easy-to-remember tagline (i.e., "If You Can Steer It, Clear It") along with an eye-catching character or icon is how we propose to increase awareness and understanding. The use of this branding does not require a great deal of text or detailed explanation, and is similar to the highly successful safety belt "Click It or Ticket" campaign. They are simple messages that leave no doubt what the driver should do.

5.1.2 Taglines

If You Can Steer It, Clear It is a very effective tagline. It delivers a clear and concise message about the law and provides the motorist with almost all the information they need.

We recommend adding another element, *If You Can Steer It, Clear It. It's our law!* The use of "our law" rather than "the law" has been used by MDOT and MSP in safety belt campaigns. This subtle change is designed to help promote public ownership of highway safety along with the idea that we can all help to improve it.

Rresearch showed most survey respondents did not know that quick clearance was a law. We believe adding that to the tagline will not detract from its effectiveness and will improve compliance.

5.1.3 Character Mascots

Three different potential character mascots were developed to help highlight the Quick Clearance law. After an initial review, MDOT settled on the character Captain ClearIt, shown below in Figure 5.1 . Captain ClearIt provides a visual illustration of the concept as well as a name that can be easily remembered and ties directly to the wording in the law itself. The graphic can be tailored to the needs of MDOT or local law enforcement by putting the agency name on the cape.

Figure 5.1 Captain Clear-It



Age: 24

Hometown: Kalamazoo,

Michigan

Education: Civil Engineering – Michigan State University

Occupation: Crash Prevention

Specialist - MDOT

Hobbies: Preventing traffic backups, improving roadside safety, preventing automobile accidents

Favorite Quote: "If you can steer it, clear it! It's our law!"

5.2 Delivery Methods

Based on the research a number of "traditional" methods for reaching the public with the Quick Clearance methods were identified, including Dynamic Message Signs, radio spots, television spots, press releases and newspaper articles, flyers/brochures. Also included are newer techniques, including enhancement of social media presence and crowdsourcing through competitions. The combination of delivery methods discussed below will enable MDOT to reach the multiple demographic groups who are the target of this campaign.

5.2.1 Crowdsourcing through Competitions

There are many examples of successful awareness campaigns related to transportation, particularly in the safety area. However, many of the most successful outreach efforts rely on heavily funded ad campaigns. With modern technology, there are greater opportunities to cheaply generate content (videos, jingles, games, etc.) that are interesting, creative, and attention grabbing. If creative options are available, there is a possibility the content will "go viral" (be widely shared and viewed voluntarily over the Internet). Viral marketing is never a certainty for success, but it carries a significantly lower price tag.

One way to easily and inexpensively generate a wide variety of creative options is to host a competition. Competitions can generate attention in their initial publicity and at the selection announcement point, and often provide outstanding content. Companies such as Creation Hero (http://www.creationhero.com/) set up creative crowdsourcing competition frameworks for graphic design projects, among others.

We recommend MDOT launch a competition to promote the Quick Clearance Law. Any competition must include the following guidelines.

Objective

MDOT must clearly state what they are trying to accomplish with the competition.

Sample Objective Statement

The Michigan Department of Transportation (MDOT) wants to increase awareness about the new Michigan Quick Clearance Law, which makes it a requirement for drivers to move their vehicles out of the roadway if they are involved in a crash where there are no apparent injuries and the vehicles are moveable. MDOT is hosting this competition to give the creative citizens of Michigan the chance to help us share this message and keep our roadways safe.

Possible Formats

MDOT must clearly state what formats for the message are considered acceptable. It is important to strike a balance between being overly specific (which can stifle creativity) and being overly general (which can lead to unusable entries). We recommend that MDOT uses the prize structure to encourage the categories they are most interested in. For example, individual prizes could be awarded for the best video, best graphic design, best jingle, best interactive entry, and overall most creative. As an alternative, MDOT could choose one or two of those options to get a more focused competition.

Sample Format Statement

For the competition, MDOT is interested in the following formats for sharing the message of the Quick Clearance Law:

- Video A short video that explains the Quick Clearance Law, suitable for broad sharing on platforms such as YouTube and no longer than two minutes. The recommendation for a two-minute maximum video is based on a review of similar videos. This amount of time is adequate to explain the law, since it is not complicated. A video going much beyond this will start to lose the audience.
- **Jingle** A short tune that explains the Quick Clearance Law, suitable for radio ads or other audio platforms and between 5 and 30 seconds. This the normal range of time for radio or internet audio spots and commercials.

- **Game** An interactive video game that introduces players to the Quick Clearance Law, suitable for broad distribution over the Internet, can utilize formats such as Java or Flash.
- **Design** Any combination of still images, characters, or text that can help explain the Quick Clearance Law.
- **Something We Haven't Thought Of** If you can think of a better way to get the message out, tell us about it.

Recommended Content

MDOT must explain what the recommended content for submissions might include. This will give entrants an understanding of the core message and enable them to creatively adapt it without losing sight of the essential communication points.

Sample Content Recommendations

An effective entry will be broadly accessible, interesting, and educational. An understanding of the Quick Clearance Law is necessary to educate drivers. The important elements of the Quick Clearance Law include:

- It is a legal requirement for drivers to move their vehicles out of the roadway
 if they are involved in a crash where there are no apparent injuries and the
 vehicles are moveable.
- If someone is hurt, or the vehicles cannot be safely steered out of the roadway, drivers should contact the authorities and wait until help arrives.
- The motivation behind the Quick Clearance Law is primarily safety. There is less chance for other vehicles to be involved in "secondary crashes" when they come upon a vehicle blocking the road.
- A secondary motivation behind the Quick Clearance Law is to prevent traffic
 jams. When vehicles involved in a crash remain on the road, they slow down
 traffic unnecessarily.

Contest Rules

The contest rules need to establish the qualifications for entry, the way that the contest will be judged, the legal guidelines, and schedule. Establishing fair and comprehensive rules will ensure the contest is fair and equitable for participants and that the results of the contest are ultimately usable.

It will be necessary to consult with MDOT's legal department to ensure MDOT maintains the right to reproduce all entries. This would include issues over ownership rights in the submissions and the right to use likenesses (in the case of videos). The likely result would be an entry form that includes Contest Terms and Conditions for participation that participants would be required to read and provide their consent as they submit their entry.

Sample Contest Rules

The following rules and requirements apply to all entrants:

- Employees of MDOT and the family members of MDOT are prohibited from entry.
- Judging and the awarding of prizes is at the discretion of MDOT.
- MDOT will retain the rights to all entries and the likenesses contained therein.

Prizes

There are some options for the prizes to be offered. MDOT could offer a cash award, funded through MDOT or by attracting a sponsoring agency. Or MDOT could seek to reward through a cash-value equivalent prize, such as an educational stipend (targeting students) or some privilege (a ride in a State Patrol car or unique experience). MDOT will definitely want to generate an award and hold an award ceremony in order to increase publicity. For many potential participant pools, such as art and film school students, a high-profile award will be highly attractive. For the sample, flyer shown below in Figure 5.4, we have assumed MDOT or a sponsoring partner will award scholarship of \$1,000.

Sample Prize Language

The overall winner of the contest will receive an educational stipend of \$1,000.

Figure 5.2 Sample Contest Flyer

ATTENTION

THE MICHIGAN DEPARTMENT OF
TRANSPORTATION (MDOT) WANTS TO INCREASE
AWARENESS ABOUT THE NEW MICHIGAN QUICK
CLEARANCE LAW, WHICH MAKES IT A
REQUIREMENT FOR DRIVERS TO MOVE THEIR
VEHICLES OUT OF THE ROADWAY IF THEY ARE
INVOLVED IN A CRASH WITHOUT SERIOUS INJURY,
PROVIDED THEIR VEHICLES CAN BE STEERED
CLEAR, MDOT IS HOSTING THIS COMPETITION TO
GIVE THE CREATIVE CITIZENS OF MICHIGAN THE
CHANCE TO HELP US SHARE THIS MESSAGE AND
KEEP OUR ROADWAYS SAFE.

- For the competition, MDOT is interested in the following formats for sharing the message of the Quick Clearance Law:

 •<u>Video</u> A short video that explains the Quick Clearance Law, suitable for broad sharing on platforms such as YouTube and no longer than two minutes
- Iningle A short tune that explains the Quick Clearance Law, suitable for radio ads or other audio platforms and between five and
- thirty seconds
 •<u>Game</u> An interactive video game that introduces players to the Quick Clearance Law, suitable for broad distribution over the internet, can utilize formats such as Java or Flash
- •<u>Design</u> Any combination of still images, characters, or text that can help explain the Quick Clearance Law
 •<u>Something We Haven't Thought Of</u> If you can think of a better way to get the message out, tell us about it.

An effective entry will be broadly accessible, interesting, and educational. An understanding of the Quick Clearance Law is necessary to educate drivers. The important elements of the Quick Clearance Law include:

- •It is a legal requirement for drivers to move their vehicles out of the
- It is a legal requirement for drivers to move their vehicles out of the roadway if they are involved in a crash without serious injury, provided their vehicles can be steered clear.
 If someone is hurt, or the vehicles cannot be safely steered out of the roadway, drivers should contact the authorities and wait in their vehicles until help arrives.
 The motivation behind the Quick Clearance Law is primarily safety. There is less chance for other vehicles to be involved in "secondary crashes" when they come upon a vehicle blocking the road.
 A secondary motivation behind the Quick Clearance Law is to prevent traffic jams. When vehicles involved in a crash remain on the road, they slow down traffic.

FOR MORE INFORMATION VISIT WWW.BLANK.COM

- 1) MDOT employees and their families are prohibited from entry
- 2) Judging and the awarding of prizes is at the discretion of **MDOT**
- 3) MDOT will retain the rights to all entries and the likenesses contained therein

The overall winner of the contest will receive an educational stipend of \$1,000.

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5.2.2 Social Media Opportunities and Guidelines

Social media can be another effective tool for increasing public awareness of a particular idea or message. Social media applications provide an interactive method of communication with a target audience and allow for quick dissemination of information. Social media sites are also among the most trafficked sites on the Internet. Facebook, for example, is the most trafficked site on the Internet reaching 52 percent of all Internet users¹ and 50.5 percent of the population of Michigan.² The extensive reach of social networking site accounts for the increase in use by both businesses and government agencies as a method for communicating with the public.

While a social media presence provides a method for reaching and engaging a large audience at very minimal cost, it is important to note this presence can have a minor or even a negative effect if it is not managed properly. The key to using social media effectively is defining a set of goals and developing a strategy for reaching those goals before becoming active in the social media world. Having a social media policy in place is another important element of success. The development and implementation of a social media policy will provide guidelines for employee use and also help protect the agency from potential legal ramifications.

In order for a social media presence to be successful it must be active and engaging. The type of content to be posted and the frequency with which it will be posted is something that needs to be considered. Effective social media use relies on ensuring content does not become "stale." This requires engaging the target audience, and their "networks," with an appropriate balance of self-promotion and content that would interest them. Content should be in the form of multiple media types. Audiences can share graphics and other visually appealing content which extends the reach of the social media effort. It is important to monitor effectiveness and adjust the approach as necessary. Social media is ever-changing and, in order to be effective, the approach to engaging the audience must be adaptable as information is gathered on what is working and what is not. Combining a social media presence with previously identified concepts such as crowdsourcing and character branding can further increase the effectiveness of this approach.

In this situation, we recommend MDOT take one of two approaches to the development of a social media presence. Both would use current popular sites including Facebook, Twitter, and Instagram, but it is important that new sites be incorporated as they gain audience. The first approach would be a short-term, narrowly focused approach centered exclusively on the Quick Clearance law.

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¹ Ad Planner Top 1000 Sites- June 2011 (https://www.google.com/adplanner/#listdetails?id=607600).

² http://www.socialbakers.com/.

This approach would require a smaller agency commitment and consume less staff resources over time. Efforts under this approach would focus more on self-promotion tactics to strategically promote awareness of the law with little concern for the building of a "network." The overall effectiveness of this approach is likely to be less than other approaches as the interactions are less about engaging people in an interactive manner and more about ensuring information is out there to be viewed.

The second possible approach is to begin the development of a broader social media presence with the Quick Clearance Legislation as a component of the effort as opposed to being the sole focus. This approach would focus on building a "network" within the target audience by releasing a more balanced mix of selfpromotional and generally interesting content. The development and promotion of contests or other activities via social media to engage the audience is recommended. The primary concern of this effort would be to interact with the public and expand the network of the Department's social media presence while promoting Quick Clearance Legislation awareness. Once a network has been developed, it can be maintained and used a resource for outreach related to both existing and future safety-related initiatives. This network, for example, could be used to drive the public to the MIDrive web site. The upside of this approach is the development of a greater set of resources and the creation of a new avenue for the Department to interact with the public and a myriad of issues. The downside of this approach is that it requires a greater Departmental commitment, would require a greater number of resources, and would be more challenging to maintain over time.

5.2.3 Dynamic Message Signs

Dynamic Message Signs have been used since the passage of the Quick Clearance law to remind motorists. The public survey conducted for this project indicated a very high market penetration for DMS in all regions of the State. A large majority of survey respondents indicated they had seen travel times, construction information, alternate route information, and incident information on the DMS. When asked about other messages, however, in an open-ended question, only amber alerts, seat belt messages, and drunk driving warnings received more than a negligible percentage of the sample. The Quick Clearance message is clearly better suited to full-sized, DMS rather than PCMBs. Many of the PCMBs are put in place to provide advanced warning of construction activity or closures. In these situations, it is important to maintain the primary messages and limit changes.

It is recommended that MDOT continue to use DMS to display the "Steer It Clear It" message on fixed signs and add "It's our law" to the message. Some states have initiated the message with "Fender Bender?" or "Crash?" to provide context for the message. Some of MDOT's new signs are full matrix and will have the ability to display graphics as well as text messages. This would provide an opportunity to incorporate the mascot character shown in Section 5.1.3 into the

sign. This would help improve the recognition of the message and tie it to other means of message delivery.

A regular schedule should be developed with the State's three Traffic Operations Centers for displaying this message. It is understood more urgent messages, including those warning of incidents and upcoming construction closures, would have priority.

5.2.4 Radio and Television Spots

Radio spots are an effective way to reach a wide audience, particularly in dispersed, rural portions of the State. MDOT recently produced radio spots using a mascot character called "Median Man" in order to explain the introduction of new cable guardrail system along the State's highways. MDOT worked with the Michigan Association of Broadcasters http://www.michmab.com/ and the Roadway Safety Foundation http://www.roadwaysafety.org/median-man-introduced-to-michigan-motorists/ to distribute the spots. Focus should be on stations that are popular during "drive time" peak hour periods. Sample radio spot scripts are included below in Figure 5.3.

MDOT may consider using television public service announcements working through cable providers and focusing on some of the more rural regions where knowledge of the law appears to be more limited. A video developed as part of the proposed YouTube contest may be usable as the basis for a television spot. A sample script for a television spot is provided below in Figure 5.4.

Figure 5.3 Sample Radio Spots

Radio Spot: 30 seconds

Narrator

There is a new law in Michigan. If you can steer it - clear it.

That means if you are involved a car crash where no one is injured and the vehicle can still be driven – the law requires you to move it to a safe place out of traffic.

The reasons for the law are pretty clear. Leaving our vehicles in the roadway can cause secondary crashes and congestion. It also creates problems for first responders who may not be able to get to where they need to go quickly.

So remember if you can steer it - clear it! It's our law.

Radio Spot: 60 Seconds

Captain ClearIt

Hi folks, I'm Captain ClearIt and I have an important message that will help all drivers in Michigan. If you can steer it – clear it.

Other Voice

What does that mean?

Captain ClearIt

If you are involved in a car crash where no one is injured, and you can still drive your car – then you need to move it out of the roadway.

Other Voice

I can't do that! The police won't give me a report which means my insurance company won't pay. That's going to cost me big time!

Captain ClearIt

Not true – it is now the law in Michigan. The police and insurance companies are very smart people. They are trained to find out what happened in a crash. What's more important is safety. We want to prevent secondary crashes, and make sure our first responders can get through.

Other Voice

Well that makes sense. It also will cut down on congestion. Just yesterday, I was stuck in traffic for an...(voice fades out).

Captain ClearIt

Remember. If you can steer it – clear it. It's our law! This message brought to you by the Michigan Department of Transportation and the Michigan State Police.

Figure 5.4 Sample Television Spot

Video	Narration		
Shot of a person walking down the median of a freeway	Narrator What would you do if your car was involved in crash No one was injured and you could still drive the vehicle?		
	Would you leave it where it is until a police officer came to investigate?		
	The answer is No! Let's hear from our expert - Captain ClearIt		
Shot of cartoon character	<u>Captain ClearIt</u>		
with a fender bender crash in the background	If you can steer it – clear it! That's our law now in Michigan.		
Shot of a rear end crash	<u>Narrator</u>		
when someone is not paying attention to the crash up ahead	Leaving your vehicle in the roadway when it can be moved is not only illegal – it is a safety hazard. It can cause secondary crashes and lead to fatalities and injuries.		
Shot of an ambulance	It creates difficulties for first responders,		
Shot of a the crowded	and can cause congestion.		
freeway	Moving your car does not affect any decision by the police on who is at fault. They can find out what caused the crash. The safety of the traveling public and first responders is the highest priority.		
Shot of a safe place along the freeway	Find a safe place to move your vehicle and wait there for police to arrive.		
Superimpose Captain	Captain ClearIt		
ClearIt	Remember "if you can steer it, clear it" – it's our law!		
Fade to blank slide with	<u>Narrator</u>		
sponsor name and logo	This message brought to you by the Michigan Department of Transportation and the Michigan State Police.		

5.2.5 Newspaper Articles/Press Releases

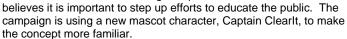
Local daily and weekly newspapers no longer dominate the market, but are still read by a large portion of the driving public. Newspapers in smaller urban and rural areas are generally amenable to printing press releases and articles provided by public agencies. MDOT provided a press release in November 2010, shortly after the Quick Clearance law was passed. An updated draft press release/newspaper article is shown below in Figure 5.5 that updates the current press release using the results of the research conducted for this project. It is recommended the last paragraph be modular, and replaced in different locations with quotes from local law enforcement where possible. In other situations, an MSP quote can be used. MDOT's Public Information office should serve as the contact point to assure that the press release is up to date and distributed as widely as possible.

Figure 5.5 Draft Press Release/Newspaper Article

If You Can Steer It, Clear It - It's the Law

What would you do if you are involved in a fender bender on the highway, your vehicle is still operable and nobody appears to be injured? Would you leave your vehicle where it is until law enforcement arrives or would you move it to the side of the road? Many of Michigan's motorists were taught in their driver training days to leave their vehicles in place after a crash until the police arrived. Over the years, professional public safety and transportation officials have determined that this practice is not in the best interests of public safety and in fact poses a significant risk to those involved in the crash, motorists following behind, and first responders who arrive at the scene. In addition to safety hazards, vehicles needlessly left in the roadway cause congestion and backups, which in turn waste gasoline and increase auto emissions.

Not only is it a good idea to move your vehicle if it is drivable and there are no injuries; it is the law. The Michigan Department of Transportation (MDOT), in collaboration with the Michigan State Police (MSP), have intensified their campaign to encourage drivers to obey the 2010 Quick Clearance law with the slogan, "If You Can Steer it - Clear it! It's our law!" Recent research conducted by MDOT showed that while most motorists behave in accordance with the law, many still do not. In addition, the majority of Michigan drivers are still not aware that Quick Clearance is a legal requirement. As a result, MDOT



"We hope everyone will remember this slogan and help us create a safe traveling environment," said State Transportation Director Kirk T. Steudle. "Drivers involved in a crash are required to safely remove vehicles from the main traveled portion of the roadway if there are no serious injuries and the vehicle still operates."

Sec. 618a. (1) of Public Act 10 of 2010 (HB 5140) states: "Unless the operator of a motor vehicle involved in an crash knows or reasonably should know that serious impairment of a bodily function or death has resulted from the crash, the operator or any other occupant of the motor vehicle who possesses a valid driver license shall remove the motor vehicle from the main traveled portion of the roadway into a safe refuge

on the shoulder, emergency lane, or median or to a place otherwise removed from the roadway..." The entire Public Act can be read online at: www.legislature.mi.gov/documents/2009-2010/publicact/pdf/2010-PA-0010.pdf.

"While the intent of the law is to improve traffic flow and reduce the likelihood of secondary crashes, it's important to remember that the law only requires a vehicle to be moved from the traveled portion of the roadway if it is operable and can be done in a safe manner," said MSP Director Col. Kriste Kibbey Etue; "This action protects not only those involved in the crash from more serious injury, but also other motorists and emergency response personnel."

A person who violates this law is responsible for a civil infraction.

5.2.6 Flyers/Brochures and Displays

Flyers and brochures provide an effective, low-cost method of distributing information and informing the public that quick clearance is the law. These tools should provide a brief basic description of the law and its requirements, along with two or three points about the importance and the benefits of the law. A number of opportunities exist to distribute brochures and flyers to motorists, including the following:

- Secretary of State offices for in person license renewal and registration and those sent via the mail.
- Auto insurance renewals by working with both the Michigan Office of Financial and Insurance Regulation http://www.michigan.gov/lara/0,4601,7-154-35299_10555--,00.html and the Insurance Institute of Michigan http://www.iiminfo.org/ABOUTIIM/tabid/1685/Default.aspx.
- MDOT facilities, including rest areas and park-and-ride lots as well as through Freeway Service Patrols in Southeast Michigan.
- Gas stations with the support of the Michigan Petroleum Association and Michigan Association of Convenience Stores (http://www.mpamacs.org/).
 The brochures could be reinforced by gas pump "toppers" that are visible to anyone pumping gas.
- Tow operators through the Michigan Towing Association and agencies that have towing contracts.
- Local agencies such as County Road Commissions and law enforcement and through public offices, including County, City, and Township Offices.
- Special events, including State Fair, County Fairs, festivals, pregame tailgating at major sporting events. Large displays also can be effective at some of these events.

One method of increasing distribution of the flyer and brochure and reducing their cost is to solicit a sponsor for the brochure. Insurance companies would be a logical target for this but other businesses may be interested as well. A draft flyer is shown below in Figure 5.6, which uses one of the mascot characters. A color brochure has been submitted under separate cover as Appendix C. If the flyer and/or brochure were sponsored, the sponsor would provide their logo but MDOT should encourage use of the graphic to maintain consistency.

Figure 5.6 Draft Brochure/Flyer



"If you can steer it, clear it - It's our law!"

Michigan Law 257.618a passed in 2010 requires you to move your vehicle from the main traveled portion of the roadway into a safe refuge such as the shoulder, emergency lane, or median after a crash if the vehicle can be moved and there are no apparent injuries. Violation of this law is a civil infraction.

Why?

According to Michigan Crash Facts, there were over 230,000 vehicle crashes in Michigan in 2011 that did not involve injuries or fatalities.

Once you are in a crash, the odds increase greatly that you can be involved in a subsequent collision if you don't move your car off the roadway.

Leaving your car in the roadway creates a danger for you and others involved in the crash. It also endangers first responders who come to the scene and motorists traveling behind you.

When crashes are not moved off the roadway in a timely manner, traffic congestion can be the result. This congestion can be prevented and doing so not only improves safety but reduces the amount of fuel wasted by idling vehicles and improves air quality.

Won't it cause a problem with the police and insurance companies if I move the vehicle?

Not only is it ok to move the vehicle if you can drive it and there are no injuries, it is required by law.

The law clearly states that the fact that the driver has moved the vehicle in accordance with the law is not evidence of fault in the crash. Police and insurance company personnel are well-trained to analyze crashes and determine the cause. The safety of the traveling public and first responders is the highest priority, that's why "if you can steer it, clear it" is our law.



5.2.7 Training Tool

Task 3 of this project, Stakeholder Outreach, identified a need for brief and to the point training for dispatcher and law enforcement personnel. High turnover in these positions also requires materials that are readily available and can be used to quickly inform or remind new employees of the law.

A slightly different version of the brochure can be used as a training tool. The "public" version shown above would remain, since it would help law enforcement and dispatch answer questions from the public. The back would include a copy of the law itself and a reminder to inquire about:

- Injuries;
- The status of the vehicles; and
- A reminder to move the vehicles if the law applies.

While this is generally common practice, stakeholder input indicated this reminder would be helpful. The training tool would be supplemented by a dispatcher script, to be circulated primarily through the Michigan State Police 9-1-1 Committee, and other organizations that work with dispatch personnel. The script shown below is an example of a training tool that can be used to remind 9-1-1 dispatchers of their role in implementing the Quick Clearance Law.

Sample Dispatcher Script

911 Operator: 9-1-1, What is your emergency?

Caller: I was in a car accident. 911 Operator: Where are you?

Caller: On I-94.

911 Operator: Where on I-94? Caller: Just past the airport.

911 Operator: Which direction are you going?

Caller: Toward Ann Arbor.

911 Operator: How many vehicles are involved?

Caller: Two.

911 Operator: Is anyone injured? Caller: No, I don't think so.

911 Operator: Is your vehicle in the road or off to the side?

Caller: In the right lane.

911 Operator: Are you in your vehicle? Caller: No I'm on the side of the road. 911 Operator: Can you drive your vehicle?

Caller: Yes, I think so.

911 Operator: Please move your vehicle immediately as far off the roadway

as possible and stay in your vehicle. A police officer is on the way.

The need to incorporate Quick Clearance into driver education also was noted. Some stakeholders were concerned driver education classes may not be providing this information since there are numerous other, more high-profile safety messages required such as seat belts, impaired driving, cell phone usage, and texting. The driver education industry is highly fragmented into many small businesses scattered throughout the State. The training brochure can serve as both a good guide for driving instructors as well as a handout for the students. MDOT can work through both the Secretary of State's office and the Michigan Safety Driver and Traffic Education Association (MDTSEA) http://www.adtsea.org/michigan/ to develop a distribution channel.

5.2.8 Summary of Marketing/Outreach Strategies

Research conducted for this project indicated while most Michigan motorists comply with the Quick Clearance law, most are not aware of the law and roughly one in eight respondents reported they were likely to leave their cars in place in situations which require Quick Clearance. This still represents a significant safety hazard and is a percentage that MDOT, first responder agencies and local transportation agencies throughout the State would like to reduce.

Surveys and stakeholder outreach indicated a range of marketing strategies are needed using both newer methods related to social media and more traditional media such as radio, television, and newspapers. A common theme, or branding, is essential to tie these efforts together and improve public recognition. The use of a "mascot character," Captain ClearIt, is proposed to brand this concept. Once a character has been proposed, it can be used either for the sole purpose of promoting Quick Clearance or could be incorporated into a broader range of safety-related educational initiatives.

Trade agencies such as the Michigan Insurance Institute and the Michigan Towing Association also can help distribute materials on a continual basis. Interagency cooperation is important as well, with both the Secretary of State's office and local transportation and public safety agencies actively supporting and participating in the project.

6.0 Incident Management Database

6.1 Introduction

MDOT currently uses a Microsoft Access Database to summarize major incidents on a statewide basis. A review of sample data from 2008 through 2012 shows that incident descriptions, incident start times, notification information, lane-closure information, and location data are generally complete and consistent between most incidents. Gaps in the data appeared in closure times and duration, weather conditions, and roadway surface conditions. Given the wide range of agencies servicing these incidents and the great variation in their available resources, it is not surprising that such gaps would exist. Incident duration is an important measure, however, in evaluating the impacts of quick clearance and other incident management programs. Improving the data on incident duration could help to achieve at least three key objectives of MDOT:

- Developing a baseline for performance measurement of incident management activities;
- Providing better information for incident management reviews by correlating incident duration with type of incident and roadway characteristics; and
- Developing a dataset that can be used for general research purposes by MDOT, universities, and others – for example correlating the statewide NavTeq travel-time database with the incident data.

This section is an assessment of the Incident Management Database (IM DB) with two main focus areas. First, MDOT is in the process of implementing Advanced Traffic Management System (ATMS) software that will be used in the three Traffic Operation Centers (TOC) that will cover the entire state. These are the Southeast Michigan Traffic Operations Center (SEMTOC) in Detroit, Western Michigan Traffic Management Center (WMTOC) in Grand Rapids and the Statewide Traffic Operations Center (STOC) in Lansing. The ATMS will provide improved incident management reporting capabilities compared with the TMC operators' current systems. This assessment will provide recommendations for how the ATMS can feed data directly to the Incident Management Database and what changes to the database will be needed to do so.

Secondly, while it is possible that an ATMS archive database could eventually replace the IM DB, MDOT's current plans to are to continue using the database for summaries of major incidents and/or for research purposes. This assessment will identify both short-term and long-term improvements to the database. This will include enhancements to the quality and completeness of the data as well as organizational and reporting improvements to the database itself.

6.2 CURRENT PARADIGM

Currently, the MDOT Statewide Incident Management Office aggregates crash data from across the state from a variety of sources, including:

- Incident management logs from MDOT Transportation Service Centers (TSC) and regions;
- Form 1506 (notification of traffic/roadway incident or major event) submittals;
- Statewide law enforcement UD-10 Traffic Crash Reports;
- Direct observations;
- Media reporting; and
- TOCs (SEMTOC, WMTOC and STOC).

Given the variety of sources, data does not always come in the same formats, with the same data included. Data fields are not always consistent and the level of completeness of certain data is not uniform. For instance, the emphasis of a police crash report is different from media reporting and they will likely emphasize different aspects of the events on which they report. As a result, it can be a challenge to combine everything into a single database.

At the TOCs, each of the three locations had their own incident recording tools, typically a Microsoft Access database. There was some consistency between the TOCs, but it was not 100 percent. As of 2012, the statewide ATMS is being rolled out in phases to the TOCs. This software has the added benefit of managing devices (dynamic message signs, cameras, detectors, etc.) and automating incident response and alerting. As a result, this new software will standardize the data captured for incidents and simplify the task of aggregating incident information for the IM DB. This standardization will take place over time.

The main purpose of the IM DB currently is to support semiannual Transportation System Performance Measures reports (see Figure 6.2 for the incident management portion of one of these reports). Within that report, the key measure reported is the number and percentage of incidents of varying durations: <30 minutes, 30<x <120 minutes, and <120 minutes. The target is for no more than 25 percent of all incidents to be longer than 120 minutes. These data are tracked monthly to show trends over time.

6.3 Initial Database Observations

As a first step, we made some initial observations of the IM DB, looking to see what data was being captured, i.e., the data fields in the database and what information each contains. In this section, we will describe those observations that are most relevant to this analysis.

We were provided a sample of the DB that covers the period between January 1, 2008, and August 31, 2012. During this period, 12,273 incidents were recorded, which equates to about 220 per month. These are broken down by TSC according to Table 6.1.

Table 6.1 Incidents by Transportation Service Centers

TSC	Incidents	TSC	Incidents
Alpena	9	Macomb	395
Bay City	300	Macomb/ St Claire	3
Brighton	405	Macomb/St Clair	23
Cadillac	36	Macomb/St Claire	2
Cass City	23	Macomb/St. Clair	89
Coloma	185	Macomb/St.Clair	26
Crystal Falls	9	Marshall	131
Davison	186	Mocomb/St. Clair	11
Detroit	2742	Mount Pleasant	99
Detroit	19	Mt. Pleasant	8
Detroit/Taylor	1	Muskegon	71
Escanaba	30	Newberry	26
Gaylord	5	Oakland	1651
Grand Radpids	1	Oakland	16
Grand Rapids	1392	Port Huron	33
Grayling	65	St. Clair	31
Howard City	48	St. Claire	20
Ishpeming	36	Taylor	1785
Jackson	163	Taylor	12
Kalamazoo	279	Traverse City	32
Lansing	373	University	5
		(blank)	1497
		Grand Total	12,273

As one would expect, the more urban TSCs recorded more incidents than their more rural counterparts. Without a measure of state trunk-line miles or VMT by TSC coverage area, it is not possible to draw strong conclusions regarding accident rates or capture rates, but Metro Region TSCs stand out as reporting a significant number of incidents for its coverage area. It is only natural that different TSCs will report a different percentage of incidents that occur in their areas due

to staffing levels and other factors. As such, the data should be considered a sample of the incidents occurring during the subject timeframe.

6.3.1 Recommendation (Near Term): Impose Data Validation

Also, there are several instances where the TSC names are not consistent and misspellings occur. This is one example where limiting the selection set for data fields with a known and finite set of possible entries would improve the quality of the data and reduce the effort to clean it prior to producing reports.

Certain database fields have a known and finite set of possible values, such as "TSC." The database should require all entries to come from a list of the TSCs to reduce the effect of misspellings, mislabelings, etc., and reduce the amount of cleaning required of the data. This can be achieved in the database by adding "child" tables with the lists of possible values and enforcing consistency in the "parent" table using foreign keys.

Many fields allow freeform text that should be limited to integer or other fixed data types. Table 6.6 lists the fields in the IM DB with their data types and gives recommendations for how they should be changed. These either recommend a different data type (other than text, for instance) or whether they should be items selectable from a dropdown list. For the latter, as stated above, these should have "child" tables and foreign keys.

In addition to the issue of freeform text, "PR Number" and "PR Number Mile Point" allow freeform text and do not give provision for incidents affecting both directions of freeway. To address this, second pair of data fields should be added for "PR dir2" and "PR MP dir2", for instance. Currently, when an incident affects both directions, both PR numbers (PR is specific to a direction on divided highways) and PR Mile Points are included in the same field, e.g., "E: 742410, W:742501." This prevents sorting, filtering or locating on a map. By adding a second pair for fields for the opposite direction, bidirectional incidents can easily be identified by the presence of values in the "dir2" fields.

Another freeform text field is "Description of Incident." While this enables users to enter whatever descriptive information is desired, which is needed, a separate "Incident Type" field is needed that maps to ATMS to strengthen the linkage between these two databases.

Finally, the "Duration (Minutes)" field is not calculated from the "Start of Incident" and "End of Incident (All Lanes Open)" fields. It is consistent in the majority of records, but for some records the calculated incident duration is different from what is entered in the duration field. Consistency should be enforced.

6.3.2 Recommendation (Near Term): Limit the Number of Data Fields to What Is Most Important and Reliable

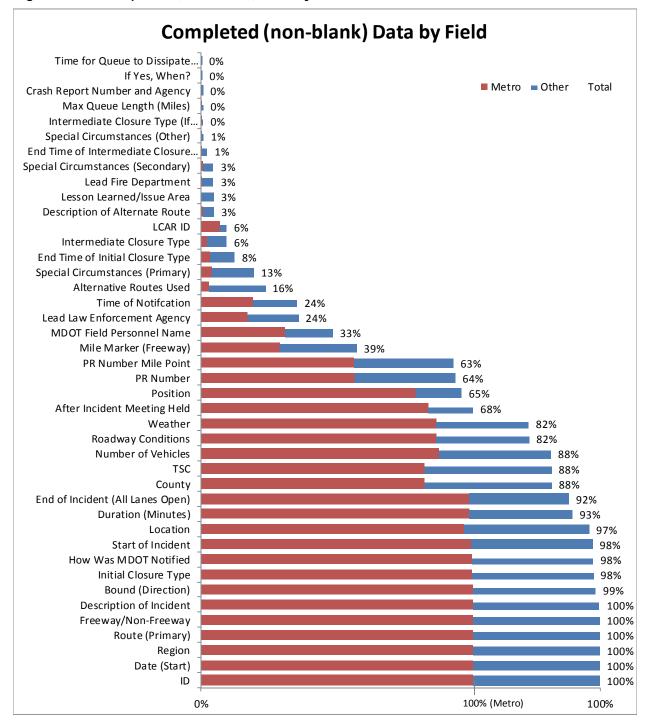
Figure 6.1 shows the data fields in the IM DB for which data is entered and the frequency with which they are filled in in the data set. In addition, the frequency of reporting for incidents from the Metro Region are shown separately (in red) since they represent such a significant portion of the data set and their incident management scope is so much broader than the rest of the state, with the possible exception of Grand Rapids. Grand Rapids also has a TOC though it is not staffed 24/7 and covers a comparatively smaller and less congested area.

It is evident that many of the data fields have highly complete data while others are incomplete. Some of the data fields, such as "Queue Length" and "Time for Queue to Dissipate", are sparsely entered. This is not necessarily a problem since this data may not be needed for current purposes or may not be relevant for all incidents. In fact, the most important data for Transportation System Performance Measures Reports (incident duration) has a high capture rate and it is likely due to the reporting requirement that this is indeed the case.

The fields more sparsely tracked are generally those that are not applicable to every incident, which is to be expected. However, there are fields that are widely applicable that are not routinely completed. These include PR and MP, fields which would enable plotting of incidents by location. The "Location" field is a more descriptive field and useful for extracts of the dataset, but not for an analysis of the data as a whole.

For research purposes, it is useful to capture as much information as possible. However, increasing the volume of information requested for each incident may make it more difficult (real or perceived difficulty) for TSCs to provide data. No TSCs were contacted as part of this analysis so we can't say for certain, but reducing the volume of information requested may increase capture rates for the data that is most important. In addition, fields such as queue length and dissipation rate would be difficult for anyone to accurately estimate so they should probably be discarded and any relevant information left to a general notes field.

Figure 6.1 Completed (Non-Blank) Data by Field



6.4 Performance Measures Recommendations

6.4.1 Recommendation (Medium Term): Further Analyze Incident Duration to Uncover Trends and Causal Factors.

In reviewing the database and the sample of data obtained, there appear to be additional opportunities for performance monitoring to identify trends and causal factors beyond the typical reports provided for this analysis. Some additional analyses are included later in this chapter. Reporting incident duration of all incidents in the state by month is instructive but it would also be useful to break it down according to various factors or attributes in order to determine root causes and ways to best improve performance. For example; showing duration by location, road type, event type, weather, or other attributes; could reveal patterns and trends that are very helpful to MDOT. Creating consistent bar charts or other graphics templates would help to visually identify trends. Creating map graphics templates to show incident attributes by location (e.g., TSC, region, roadway, etc.) would also be instructive.

Another consideration is that minor or intermediate incidents may present more opportunity for improvement than major incidents (those longer than 120 minutes). Quick clearance is an example of this. Tracking duration of incidents of different types, even more minor types, could show where the next initiative is. Further, while incidents of lesser duration are marked as "minor," there are other factors that contribute to severity such as the underlying traffic volumes and time of day at the location and time of the incident.

It is recommended that MDOT track incident duration over time by severity or type. Identify the types of incidents that turn into major, intermediate and minor incidents and see where opportunities lie to make improvements. As with the Quick Clearance initiative, the greatest potential for system improvement may not come from the most severe or most major incidents.

Finally, the effects of courtesy patrols on incident duration should be studied. Currently, only Metro Region has freeway courtesy patrols. It would be helpful to identify whether they have a measurable impact on incident duration.

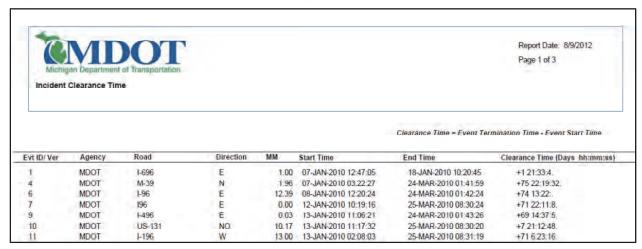
6.5 INTEGRATION OPPORTUNITIES WITH THE ADVANCED TRAFFIC MANAGEMENT SYSTEM

One of the primary sources of data for the IM DB is the Statewide Advanced Traffic Management System (ATMS) that is managing events where ITS is deployed throughout the State, primarily in urban areas. Therefore, nearly all events occurring on the major routes in the southern part of the State (the Grand Rapids-Lansing-Detroit corridor) will be recorded in the ATMS. This also is true to a more limited extent in the northern parts of the State where ITS has been deployed on the I-75 corridor in the Bay, North, and Superior Regions.

The STOC has responsibility for incident management for all parts of the State outside the Grand and Metro Regions. For those areas with ITS deployment, the IM DB will obtain data from the ATMS while for all other areas the IM DB will obtain its data through current means.

The ATMS calculates "Incident Clearance Time" as the difference between event start time and the event termination time. This is shown in the sample ATMS Incident Clearance Time Report in Figure 6.2.

Figure 6.2 Sample Advanced Traffic Management System Incident Clearance Time Report



The Start Time is the time at which the event was created in the ATMS, which is actually the time at which it was detected given some time would have elapsed between when it occurred and when it was detected. This is equivalent to incident "Clearance Time" as defined in the MDOT Transportation System Performance Measures Report"where clearance Time is defined as, 'The time between the first recordable awareness of an incident by a responsible agency and the first confirmation that all lanes are available for traffic flow.'"

The ATMS allows operators to enter a severity level, or impact, of an event as low, medium, or high. This is a useful tool and is operationally used to define an appropriate event response plan. For the Transportation System Performance Measures Report, incidents are categorized as minor, intermediate or major. These categories are assigned retrospectively based on the incident duration. As a result, there is no direct mapping between the two. However, it would be valuable for MDOT to evaluate incident durations based on operators' perceived severity. It would be expected that more severe incidents would have longer duration, but tracking duration over time for different severity incidents would be a useful performance measure. It may be the case that MDOT can identify opportunities for greater improvement in low- rather than high-severity incidents. Quick Clearance is a perfect example of an initiative for low-severity incidents that has great potential for system improvement.

6.5.1 Recommendation (Medium Term): Add a Field that Maps to Advanced Traffic Management System Event Type to Strengthen the Relationship Between the Two Databases.

Add an additional field for Incident Type that maps to the ATMS "Event Type" field to supplement "Incident Description." While it is important to provide a field for this type of freeform text, fields dedicated to event type and subtype that map to the ATMS would be a useful addition. The full list of event types and subtypes recognized by the ATMS is provided in Table 6.7. For the Incident Management Database, the majority of the ATMS Event Types don't apply as they include types for scheduled events, road work, maintenance, phone calls, and other things a TOC would be concerned with.

The most relevant event types for the Incident Management Database are listed in Table 6.2.

Table 6.2 Subset of Advanced Traffic Management System Event Types for Incidents

Disabled Vehicle	Abandoned Vehicle Driver Distress – Medical Flat Tire Mechanical Out of Gas Unknown Vehicle Fire
Incident	Crash Debris Incident Pothole Spill
Non-Roadway	Activity Fire Hazmat Other Non-Roadway

As stated previously, the majority of incidents on the more heavily traveled routes in the state will be managed by TOC operators using the ATMS software. This section provides information on the fields in the IM DB and the fields captured or calculable from other fields in the ATMS. In most cases, the information can be directly mapped from one database to the other, though there are cases where it is not. Tables 6.3-6.5 identify which the fields can be mapped between the ATMS and the IM DB.

Table 6.3 Fields that Map Directly, or Through Simple Calculation, from the Advanced Traffic Management System to the Incident Management Database

Incident Management Database Field	ATMS Field	Notes
ID	ID	Each database has a unique event ID.
Date (Start)	Start Date/Time	
Start of Incident	Start Date/Time	
How Was MDOT Notified	Event Source	
Duration (Minutes)	(Calculated)	Calculated from Start Time and End Time.
Route (Primary)	Road	
Bound (Direction)	Direction	
Freeway/Non-Freeway	Roadway Type	
Mile Marker (Freeway)	MM	
Region	Region	
Weather	Weather Conditions	
PR Number	PR	
PR Number Mile Point	MP	
Initial Closure Type	Lanes Blocked	
Number of Vehicles	Total Vehicles Involved	
Alternative Routes Used	Diversion (Y/N)	

Table 6.4 Fields in the Incident Management Database for which Information Can Be Obtained from the Advanced Traffic Management System but Not Through a Direct Mapping

Incident Management Database Field	ATMS Field	Notes
TSC	N/A	This could potentially be derived from other location data.
County	N/A	This could potentially be derived from other location data.
Location	N/A	This is a freeform text field. Location is captured in the ATMS by freeway, direction, MM, or PR/MP.
End Time of Initial Closure Type	(Derived from event timeline)	The ATMS records all changes to the event attributes, including changes in lane-blockage patterns. Initial, intermediate, etc., closure types can be derived from the timeline.
Intermediate Closure Type	(Derived from event timeline)	See above.
End Time of Intermediate Closure Type	(Derived from event timeline)	See above.

Incident Management Database Field	ATMS Field	Notes
Intermediate Closure Type (If Needed)	(Derived from event timeline)	See above.
End of Incident (All Lanes Open)	End Date/Time	See above.
Special Circumstances (Primary)	N/A	Common entries in the IM DB are "Commercial", "HAZMAT," and "Fatality." There is no direct mapping but HAZMAT is a Subtype and has a field for the type of HAZMAT; "Fatalities" and "Vehicle Type" are captured in the ATMS DB.
Special Circumstances (Secondary)	N/A	See above.
Special Circumstances (Other)	N/A	See above.
Description of Incident	N/A	This is a freeform text field that provides a good deal of descriptive information. This could best be captured by event attributes combined with Event Notes, which are freeform entries.
Lesson Learned/Issue Area	N/A	This could be captured in the Event Notes, but there is no dedicated field for lessons learned in the ATMS. It may be best obtained from after incident meeting reports.

Table 6.5 Fields in the Incident Management Database that Are Not Captured in the Advanced Traffic Management System

Incident Management Database Field	ATMS Field	Notes
Time of Notification	N/A	
Roadway Conditions	N/A	
Lead Law Enforcement Agency	N/A	
Lead Fire Department	N/A	
Max Queue Length (Miles)	N/A	
Time for Queue to Dissipate (Minutes)	N/A	
MDOT Field Personnel Name	N/A	
Position	N/A	
After Incident Meeting Held	N/A	
If Yes, When?	N/A	
Description of Alternate Route	N/A	
Crash Report Number and Agency	N/A	
LCAR ID	N/A	

6.6 LONGER-TERM RECOMMENDATIONS

6.6.1 Recommendation (Long Term): Seek to Automate the Process

MDOT is seeking to automate the process of populating the database from regional input, but to the extent that consistent processes are developed, the quality and completeness of the IM DB will improve. Further, as the ATMS becomes more widely adopted and it is used to manage events it should become the primary mechanism for incident data capture. The ATMS already includes opportunities for freeform text fields that can replace "Description" or other freeform fields commonly used in the IM DB. The ATMS will always be most heavily used for routes with ITS devices (cameras, dynamic message signs, etc.) as these are the focus areas of operators. Therefore, for the foreseeable future the IM DB will persist in a form similar to the way it is now. The medium-term recommendations are a bridge to migrate toward that convergence.

Ultimately, the research and documentation objectives for the database should be continually evaluated and the suitability of the DB should be continually re-evaluated. The performance measures tracked should continually improve in their insight and value to MDOT as an organization that seeks to continually improve its incident management and traffic operations. It is likely that measures to reduce the impact of minor incidents will bring MDOT the most return for its effort, such as Quick Clearance, in addition to identifying causal factors that can be addressed to prevent accidents in the first place.

6.7 INCIDENT PERFORMANCE MEASURES REPORTS FOR MDOT CONSIDERATION

Figures 6.3-6.5 and Tables 6.8 and 6.9 are additional reports included based on the sample of the IM DB received from MDOT. These include various charts and metrics that can be used to analyze trends, as well as map-based representations. These are intended to spur further development rather than to be finished products. Finally, Tables 6.8 and 6.9 are examples of additional reports that can be distributed to regions that both summarize incident activity and provide itemized details of each incident reported. These can both be modified to capture specific time periods, regions, TSCs, or other variations as desired. The SQL used to generate the reports is included with the tables as well.

Figure 6.3 Excerpt of Transportation System Performance Measures Report March 2012

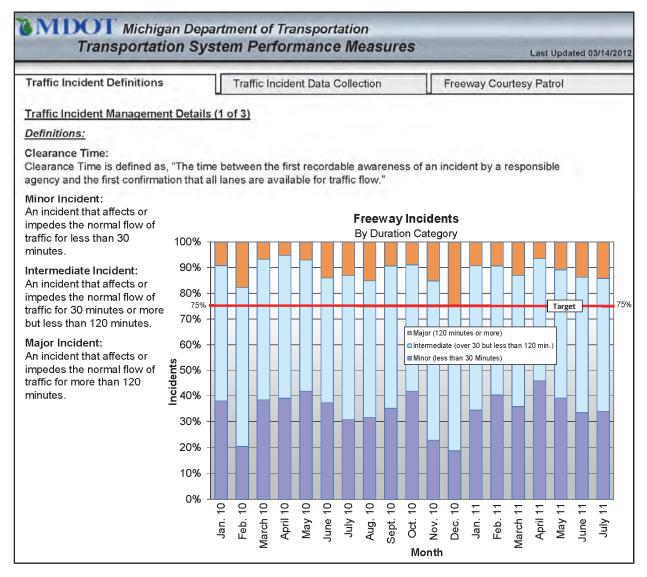


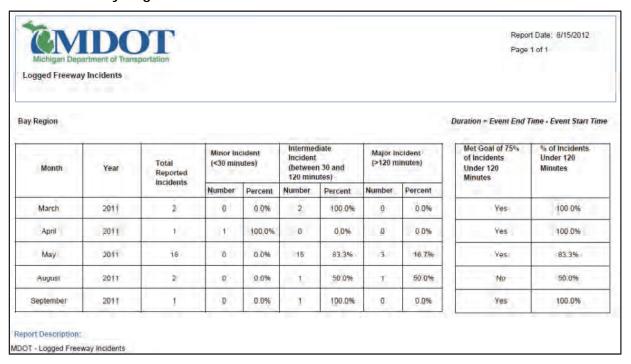
 Table 6.6
 Incident Management Database Fields and Recommendations

Name	Туре	Size	Recommendation
ID	Long Integer	4	
Date (Start)	Date/Time	8	
Start of Incident	Date/Time	8	
Time of Notification	Date/Time	8	
How Was MDOT Notified	Text	50	Dropdown
Duration (Minutes)	Text	50	Integer
Route (Primary)	Text	50	Dropdown
Bound (Direction)	Text	50	Dropdown
Freeway/Non-Freeway	Text	50	Dropdown
Location	Text	100	
Mile Marker (Freeway)	Text	50	Decimal
Region	Text	50	Dropdown
TSC	Text	50	Dropdown
County	Text	50	Dropdown
Weather	Text	50	Dropdown
PR Number	Text	50	Long Integer
PR Number Mile Point	Text	50	Decimal
Roadway Conditions	Text	50	Dropdown
nitial Closure Type	Text	50	Dropdown
End Time of Initial Closure Type	Text	50	Date/Time
ntermediate Closure Type	Text	50	Dropdown
End Time of Intermediate Closure Type	Text	50	Date/Time
ntermediate Closure Type (If Needed)	Text	50	Dropdown
End of Incident (All Lanes Open)	Text	50	Date/time
Special Circumstances (Primary)	Text	50	
Special Circumstances (Secondary)	Text	50	
Special Circumstances (Other)	Text	50	
Lead Law Enforcement Agency	Text	50	Dropdown
Lead Fire Department	Text	50	Dropdown
Number of Vehicles	Long Integer	4	Integer
Max Queue Length (Miles)	Text	50	Decimal
Fime for Queue to Dissipate (Minutes)	Date/Time	8	Integer
MDOT Field Personnel Name	Text	50	· ·
Position	Text	50	
After Incident Meeting Held	Text	50	Boolean
f Yes, When?	Date/Time	8	
Description of Incident	Text	225	
Lesson Learned/Issue Area	Text	200	
Alternative Routes Used	Text	100	Boolean
Description of Alternate Route	Text	100	

Table 6.7 All Advanced Traffic Management System Event Types

Event Types		Event Subtypes	
ITS Sys Maintenance	ATMS CCTV Check-in/Check-out DMS Device Communications	Hub/Tower Miscellaneous Other Maintenance Problem Notification Regional Communications	State Network VDS Video Wall Website
Other	Other Scheduled		
Roadwork	Bridge Work Construction Core Sampling Crossover Cable Guardrail/attenuator Intersection Lighting Crew	Litter Pickup Mowing Other Paint Work Patch/Joint Work Plowing/Salt Pothole Repair	Sewer Work Sign Work Snow Removal Soil Boring Sweeping Traffic Signal Utilities
Special Event	Air Show Arena Auto Show Car Cruise	Concert Festival Fireworks Other Event	Parade Stadium VIP/Dignitary Visit
Sporting Event	Auto Race Baseball Football	Golf Hockey	Race Sports Event
Weather Alert	Black Ice Drifting Snow Flooding Fog Freezing Rain Hail High Winds	Ice Other Weather Rain Sand on Pavement Severe Weather Snow Sun Glare	Thunderstorm Tornado Water on Pavement Wet Pavement White Out Condition Winter Storm
Air Quality Alert	Clean Air Action Day	Ozone Action Day	
Congestion	Congestion	Ramp Congestion	
DHS Alert	Border Alert Evacuation Area	Lockdown Area Restricted Access	Unspecified DHS
Disabled Vehicle	Abandoned Vehicle Driver Distress – Medical	Flat Tire Mechanical Out of Gas	Unknown Vehicle Fire
Incident	Crash Debris	Incident Pothole	Spill
Non Roadway	Activity Fire	Hazmat	Other Non-Roadway
Other Unscheduled	AMBER Alert	PSA	Unspecified Alert
Phone Call	City Contractor County MDOT Construction	MDOT ITS MDOT Maintenance MDOT Operations MDOT Project	Engineer Media Phone Call Public

Figure 6.4 Sample Incident Report from Advanced Traffic Management System for Bay Region



A series of analyses were conducted using the data from the IM DB. In this section, we present some of the analyses performed. A multitude of permutations on these graphs could be developed to draw conclusions to different questions.

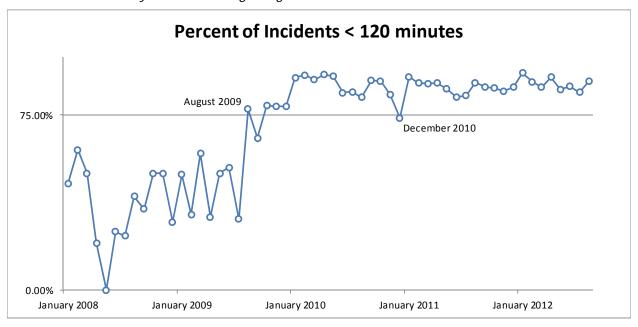
The first two graphs show a time series analysis of incident duration. The data in Table 6.8 was used to generate these graphs. The first graph shows that the percentage of incidents less than 120 minutes, one of the key performance measures tracked by MDOT, was consistently less than 75% through 2008 until August 2009 when that goal was achieved for the first time. With the exception of two months where the goal was not met, more than 75% of incidents have been cleared within 120 minutes every month since August 2009.

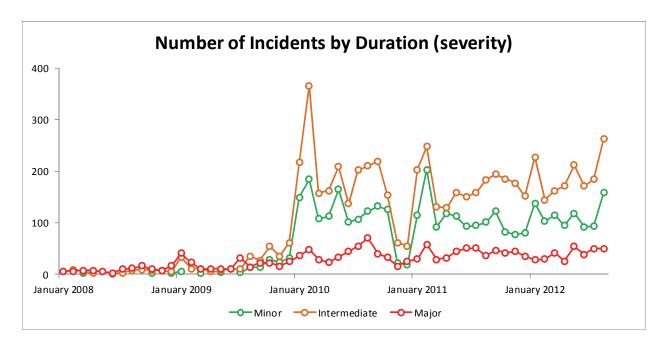
The next two graphs show a bit more information. The number of major incidents (>120 minutes) has held relatively steady over time. However, around August 2009 Metro began providing more data than previously. This led to an increase in the number of minor (less than 30 minutes) or intermediate (between 30 and 120 minutes) incidents, which has pushed the percentage of major incidents down. This is probably more representative of actual conditions since most incidents can be expected to come from the more heavily traveled and urbanized locations.

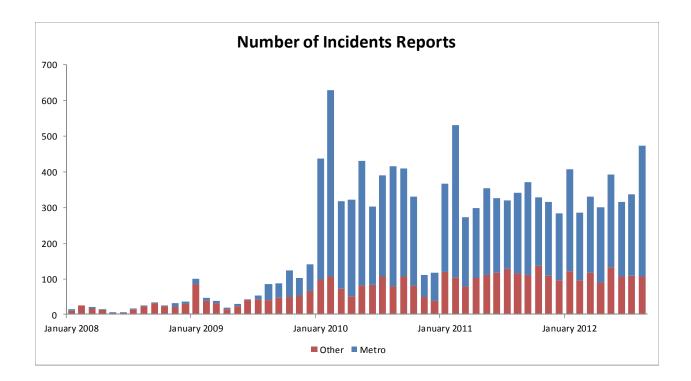
This time series analysis is useful to provide context to monthly reports. Performance is continually monitored and improvements (or degradations) over time are telling indicators of causal factors whether strategies or initiatives are working as intended.

Figure 6.5 Some Analysis of Incident Data

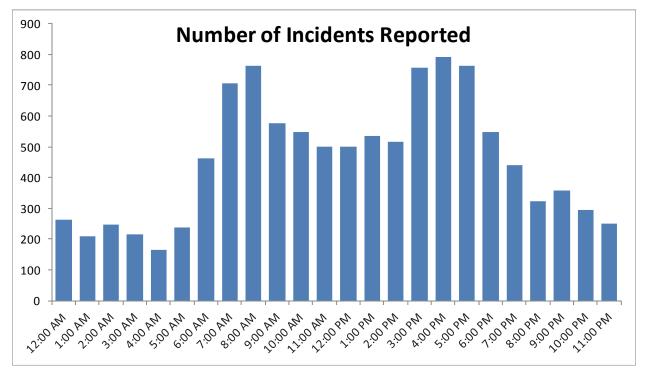
January 1, 2008, through August 31, 2012



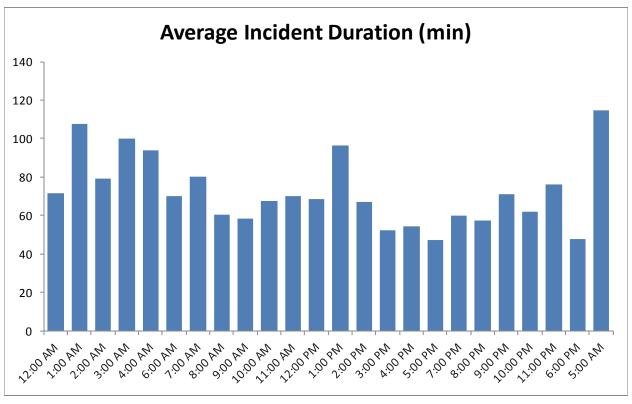




The number of incidents reported follows a traditional time of day traffic volume trend as shown below.

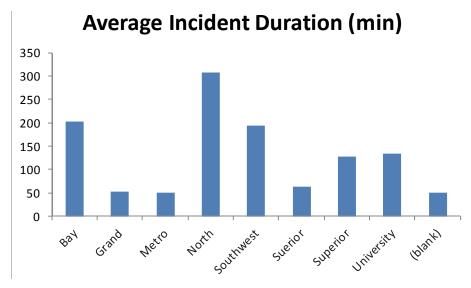


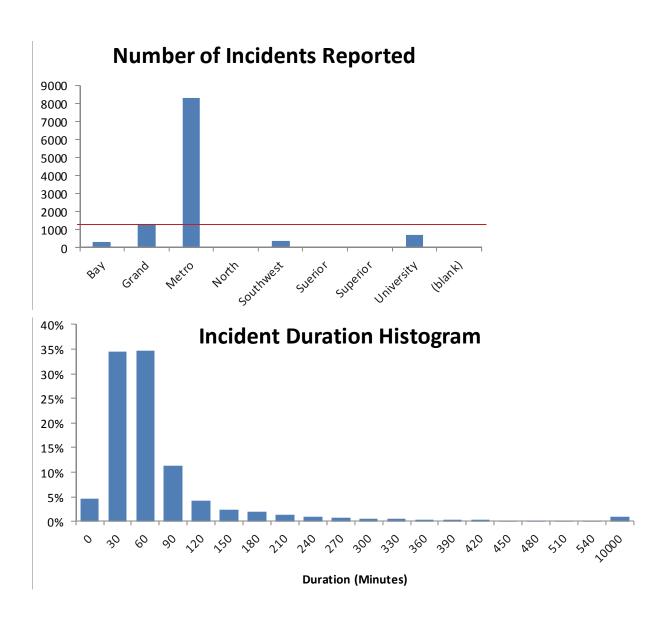
Incident duration by time of day shows very little trending, except that incidents during offpeak hours tend to be longer in duration.



Note: One record was discarded in the creation of this chart. A construction event had a duration of 12 days.

The previous observation of incident duration being longer during off-peak hours is somewhat related to the graph below. Incidents in more rural parts of the state tend to have longer durations. This could be due to them being higher speed incidents, the distance responders need to travel to the incidents.





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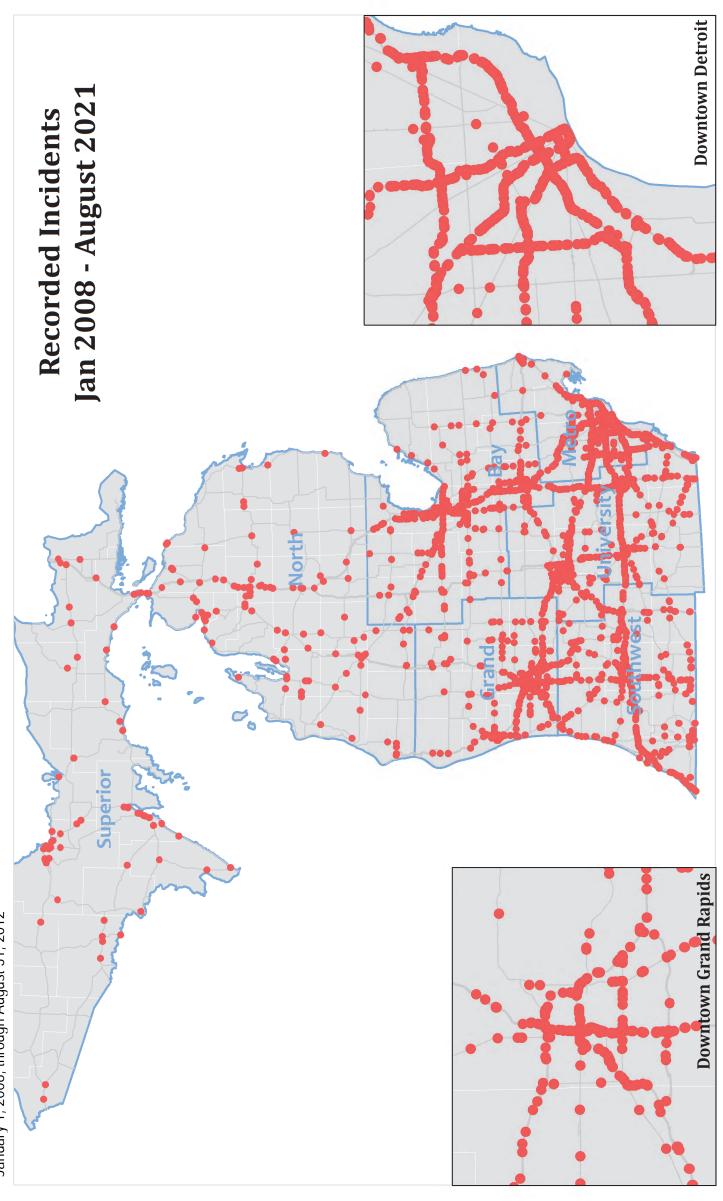


Figure 6.6 Incidents by Location from Sample of Incident Database January 1, 2008, through August 31, 2012

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Table 6.8 Sample Report from Incident Management Database

Month	Year	Total Incidents	Total With Duration	Minor Number	Minor Percent	Intermediate Number	Intermediate Percent	Major Number	Major Percent	Percent <120	Met Goal?
January	2008	14	11			5	45.45%	9	54.55%	45.45%	No
February	2008	25	15			6	%00.09	9	40.00%	%00.09	No
March	2008	22	16	2	12.50%	9	37.50%	8	20.00%	20.00%	ON
April	2008	14	10			2	20.00%	8	80.008	20.00%	ON
May	2008	9	5					2	100.00%	%00.0	No
June	2008	7	4			1	25.00%	3	75.00%	25.00%	No
July	2008	17	13			3	23.08%	10	76.92%	23.08%	No
August	2008	26	20			8	40.00%	12	%00'09	40.00%	No
September	2008	34	26			6	34.62%	17	65.38%	34.62%	No
October	2008	25	20	2	10.00%	8	40.00%	10	20.00%	20.00%	No
November	2008	32	16			8	20.00%	8	20.00%	20.00%	No
December	2008	36	24	2	8.33%	5	20.83%	17	70.83%	29.17%	No
January	2009	66	81	9	7.41%	34	41.98%	41	20.62%	49.38%	ON
February	2009	47	34			11	32.35%	23	%59'.29	32.35%	ON
March	2009	38	24	3	12.50%	11	45.83%	10	41.67%	58.33%	ON
April	2009	20	16			2	31.25%	11	%51.89	31.25%	ON
May	2009	29	22	4	18.18%	7	31.82%	11	20.00%	20.00%	ON
June	2009	42	21			11	52.38%	10	47.62%	52.38%	ON
July	2009	54	46	4	8.70%	10	21.74%	32	%12.69	30.43%	ON
August	2009	58	62	13	20.97%	35	56.45%	14	22.58%	77.42%	SәҚ
September	2009	88	63	14	22.22%	27	42.86%	22	34.92%	%80'59	ON
October	2009	122	104	28	26.92%	54	51.92%	22	21.15%	78.85%	SӘД
November	2009	103	75	24	32.00%	35	46.67%	16	21.33%	78.67%	SәҚ
December	2009	140	117	31	26.50%	61	52.14%	25	21.37%	78.63%	Хes
January	2010	437	402	149	37.06%	217	53.98%	36	8.96.8	91.04%	Хes
February	2010	979	268	184	30.77%	396	61.20%	48	8:03%	91.97%	SӘД
March	2010	317	294	108	36.73%	157	53.40%	29	%98'6	90.14%	SәҚ
April	2010	322	298	113	37.92%	162	54.36%	23	7.72%	92.28%	SәҚ
May	2010	430	408	165	40.44%	209	51.23%	34	8.33%	91.67%	SәҚ
June	2010	303	282	101	35.82%	137	48.58%	44	15.60%	84.40%	Хes
July	2010	389	364	107	29.40%	202	55.49%	55	15.11%	84.89%	Yes
August	2010	415	402	122	30.35%	210	52.24%	70	17.41%	82 50%	20/

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Sentember	2010	408	301	132	33.76%	210	56.01%	V	10 23%	%LL 08	SOV
October	2010	328	313	126	40.26%	154	49.20%	33	10.54%	89.46%	Yes
November	2010	111	66	22	22.22%	61	61.62%	16	16.16%	83.84%	Yes
December	2010	116	66	18	18.18%	55	25.56%	26	26.26%	73.74%	No
January	2011	366	348	115	33.05%	203	58.33%	30	8.62%	91.38%	Yes
February	2011	531	509	203	39.88%	248	48.72%	58	11.39%	88.61%	Yes
April	2011	298	279	118	42.29%	129	46.24%	32	11.47%	88.53%	Yes
May	2011	354	315	113	35.87%	158	50.16%	44	13.97%	86.03%	Yes
June	2011	325	295	93	31.53%	151	51.19%	51	17.29%	82.71%	Yes
July	2011	320	304	95	31.25%	158	51.97%	51	16.78%	83.22%	Yes
August	2011	339	320	101	31.56%	183	57.19%	36	11.25%	88.75%	Yes
September	2011	371	363	122	33.61%	194	53.44%	47	12.95%	87.05%	Yes
October	2011	328	309	82	26.54%	185	29.87%	42	13.59%	86.41%	Yes
November	2011	315	299	78	26.09%	177	59.20%	44	14.72%	85.28%	Yes
December	2011	282	267	80	29.96%	152	26.93%	35	13.11%	%68'98	Yes
January	2012	406	393	138	35.11%	227	27.76%	28	7.12%	92.88%	Yes
February	2012	285	277	103	37.18%	144	51.99%	30	10.83%	89.17%	Yes
March	2012	329	319	115	36.05%	162	20.78%	42	13.17%	86.83%	Yes
April	2012	301	292	62	32.53%	171	28.56%	26	8.90%	91.10%	Yes
May	2012	392	384	118	30.73%	212	55.21%	54	14.06%	85.94%	Yes
June	2012	316	302	92	30.46%	171	56.62%	39	12.91%	84.09%	Yes
July	2012	337	327	93	28.44%	184	56.27%	20	15.29%	84.71%	Yes
August	2012	472	470	158	33.62%	262	55.74%	20	10.64%	86.36%	Yes

The following is the sequence of SQL queries used to generate the above report is as follows (note: this could be easily adapted to restrict by region or date range through adding constraints to the initial query):

1. qDurMY_1
2. qDurMYsev_2
3. qDurMYsev_2
4. qSumReport_4
5. qSumReport_5
6. qSumReport_5
6. qSumReport_6 Note:

1. qDurMY_1 SELECT (month([Date (Start)]) + year([Date (Start)])*100) AS YM, month([Date (Start)]) AS [Month], year([Date (Start)]) AS [Year], int([Duration (Minutes)]) AS Duration, Region FROM Log

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ORDER BY [Date (Start)];

2. qDurlMYsev_2

```
SELECT [qDurMYsev_2].YM, [qDurMYsev_2].Year, Sum([qDurMYsev_2].Numb) AS Total
                                                                                                                             SELECT YM, Year, count(*) AS Numb, 60 as Dura
FROM qDurMY_1 WHERE Duration >= 30 AND Duration <= 120
                                                                                                                                                                                                                             UNION SELECT YM, Year, count(*) AS Numb, 120 as Dura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GROUP BY [qDurMYsev_2].YM, [qDurMYsev_2].Year
                                                                                                                                                                                                                                                                                                                                                                                                                           FRANSFORM Sum([qDurMYsev_2].Numb) AS Tota
SELECT YM, Year, count(*) AS Numb, 30 as Dura
                                                                                                                                                                                                                                                               FROM qDurMY_1 WHERE Duration > 120
                                  FROM qDurMY_1 WHERE Duration < 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PIVOT [qDurMYsev_2].Dura;
                                                                                                                                                                                                                                                                                                                                                                                           3. qDurMY_Crosstab_3
                                                                                                                                                                                                                                                                                                                             ORDER BY YM, Dura;
                                                                                                                                                                                               GROUP BY YM, Year
                                                                                                                                                                                                                                                                                             GROUP BY YM, Year
                                                                  GROUP BY YM, Year
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FROM qDurMYsev_2
                                                                                                    NOINO
```

SELECT YM, MonthName (YM - Year*100) AS [Month], Year, Total, [30] AS MinorNum, format([30]/Total,"Percent") AS MinorPct, [60] AS Intermediate, format([60]/Total,"Percent") AS IntermediatePct, [120] AS Major, format([120]/Total,"Percent") AS MajorPct, format(1-[120]/Total,"Percent") AS Score, IIf(1-[120]/Total>0.75, "Yes", "No") AS MetGoal SELECT YM, count(Region) AS TotalIncidents FROM qDurMY_crosstab_3 ORDER BY YM, Year; 4. qSumReport_4 -. qTotIncMY

FROM qDurMY_1 ORDER BY YM; GROUP BY YM

FROM qSumReport_4 INNER JOIN qTotIncMY ON [qSumReport_4].YM=qTotIncMY.YM ORDER BY [qSumReport_4].YM; 5. qSumReport_5 SELECT *

SELECT Month, Year, [Total Incidents], Total AS [Total w/Duration], [Minor Number], [Minor Pct], [Intermediate Number], [Intermediate Pct], [Major Number], [Major Pct], [Pct<120] ORDER BY qSumReport_4.YM;.. FROM qSumReport_5 6. qSumReport_6 [MetGoal?]

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Modification of the Performance Report (removes some columns and adds others) Sample Report from Incident Management Database Table 6.9

Date (Start)	Start of Incident	Duration (Minutes)	Description of Incident	Route (Primary)	Region	County	Lead Law Enforcement Agency	Lead Law Enforcement Initial Closure Agency Type	Weather	Roadway Conditions
January 19, 2009	4:11:00 a.m.	55	Overturned salt truck.	1-275	Metro			One Direction Closed - All Lanes		
February 8, 2009			Multi car accident. Car slammed into concrete column of overpass. Two passengers ejected from car. No other information.	1-94	Metro				Unknown	Unknown
May 19, 2009	1:05:00 p.m.	9	Due to a log cabin getting stuck under bridge construction. Information from 1506 data.	1-75	North					
December 5, 2008		120	Only information was an accident.	U.S. 131	Southwest	Allegan		One Direction Closed - All Lanes	Unknown	Unknown
May 19, 2009	10:30:00 a.m.	09	Industrial fire at Sebright Products, Inc., manufacturer of trash and refuse equipment. Both directions of U.S. 131 between exits 59 and 61 were closed due to heavy noxious smoke.	U.S. 131	Southwest	Allegan	Allegan County SD	Total Road Closed	Clear	Dry
July 8, 2009	July 8, 2009 1:51:00 a.m.	366	Cattle hauler swerved for a deer, lost control, and rolled the truck. Nine out 350 cattle killed.	U.S. 131	Southwest	Allegan	Allegan SD	One Direction Closed - All Lanes	Clear	Dry
July 9, 2009	July 9, 2009 1:34:00 p.m.		Intermittent lane closures and traffic backups due to a local event.	U.S. 131	Southwest	Allegan			Clear	Dry

The SQL query used to generate the above report is as follows (note that it could easily be broken out by county or time period though a simple modification of the query): Note:

SELECT [Date (Start)], [Start of Incident], [Duration (Minutes)], [Description of Incident], [Route (Primary)], [Region], [County], [Lead Law Enforcement Agency], [Initial Closure Type], [Weather], [Roadway Conditions]

FROM Log
WHERE ([Date (Start)]) Between #9/1/2008# And #8/31/2009# AND [Freeway/Non-Freeway]="Freeway"
ORDER BY Region, County:.

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