

Request for Research Funding for FY 2024-2025

Project Number (Research Center Use Only): D5-25-01

Requesting Office	District Five	Priority	1 of 5 (projects may not have the same ranking – no ties)
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Proposed Title Strategies for increasing move-over compliance rates for maintenance operations

Justification The Move-Over law’s application to maintenance vehicles is not well known among the public. As a result, compliance with these laws is low for maintenance operations, posing significant dangers to the personnel and other road users. The current situation is characterized by a lack of awareness, inadequate enforcement, and minimal compliance, leading to preventable crashes and fatalities. The research will help in identifying and assessing strategies aimed at improving Move-Over Law compliance for maintenance vehicles and personnel. By evaluating these strategies, we can determine which ones are the most effective, cost-efficient, and suitable for Florida and circumstances. This research will also provide data-driven insights that can inform FDOT on where and when such strategies should be deployed. Improved compliance will benefit all road users by reducing the likelihood of crashes, traffic congestion, and potential injuries or fatalities resulting from non-compliance. It will create safer roadways for everyone.

Impact Increased compliance with the Move-Over Law offers numerous benefits, primarily centered on enhanced safety for maintenance workers, reduced crashes and fatalities, and improved operations during maintenance periods. Without research to understand and address compliance issues, maintenance workers and other personnel will continue to be at risk of injuries and fatalities due to non-compliance with Move-Over laws.

Affected Offices/ Districts Identify any office and names of office personnel that will need to be involved in the scoping or conduct of the research, will be affected by implementation of the results, or will need to participate in the implementation process—including OTIT, if enterprise data/network software application will be a deliverable, and district staff, as appropriate, e.g., through statewide meetings. **If the requesting office will not be the implementing office, please identify which office and names of specific personnel which will have to serve in that capacity—have they been involved?**

Existing Work

RIP Search Results:

1 of 1: Evaluation of Digital Alert Systems Associated to Emergency Response Vehicles and Compliance with Move Over Law. [Project]. Illinois Department of Transportation. Start date: 1 Mar. 2023. <https://trid.trb.org/view/2122583>

Existing Work Results:

1 of 8: Carrick, Grady; Srinivasan, Sivaramakrishnan. Characterizing Incident Responder Crashes Involving Move Over Law Violations. Transportation Research Record: Journal of the Transportation Research Board, Volume 2677, Issue 2, 2023, pp 741-752 <https://trid.trb.org/view/1997468>

2 of 8: American Drivers’ Self-Reported Perceptions and Attitudes Regarding Move Over Laws. AAA Foundation for Traffic Safety, 2021, 4p <https://trid.trb.org/view/1881687>

3 of 8: Savolainen, Peter T; Gates, Timothy J; Kassens-Noor, Eva; Megat-Johari, Megat-Usamah; Megat-Johari, Nusayba; Decaminada, Travis; Cai, Meng. Effectiveness of Crash Fact/Safety Message Signs on Dynamic Message Signs. Michigan State University, East Lansing; Michigan Department of Transportation; Federal Highway Administration; U.S. Department of Transportation, 2021, 119p <https://trid.trb.org/view/1891477>

4 of 8: Dunphy, Donald W. Work zones and the Move Over law. FLEETSolutions, 2015, pages 14-16 <https://trid.trb.org/view/1387957>

5 of 8: Impact of Work Zone Warning Light Configurations on Driver Behavior. Minnesota Department of Transportation, 2013, 17p <https://trid.trb.org/view/1326379>

6 of 8: Fischer, Jacob; Krzmarzick, Adam; Menon, Arvind; Shankwitz, Craig. Performance Analysis of Squad Car Lighting, Retro-reflective Markings, and Paint Treatments to Improve Safety at Roadside Traffic Stops. University of Minnesota, Twin Cities; Intelligent Transportation Systems Institute; Research and Innovative Technology Administration, 2012, 35p <https://trid.trb.org/view/1146853>

	<p>7 of 8: Carrick, Grady; Washburn, Scott. The Move Over Law: Effect of Emergency Vehicle Lighting on Driver Compliance on Florida Freeways. Transportation Research Record: Journal of the Transportation Research Board, Issue 2281, 2012, pp 1–7 https://trid.trb.org/view/1130676</p> <p>8 of 8: Highway Worker Safety: State Move Over Laws. CTC & Associates LLC; California Department of Transportation, 2011, 10p https://trid.trb.org/view/1344328</p>		
Keywords Used In Existing Work Search (Cannot leave blank)	"Move-over", Move Over", "Move Over Law", "Roadside Safety"		
Related Contracts (Give contract numbers)			
Funding Request	\$200,000	Anticipated Duration	1 year
Project Manager	Scott Kirts	Contracting Method	Direct Contract with Embry Riddle
Equipment	N/A		
Urgency	<p>Score 1-5 1= highest, most immediate need</p> <p>1</p>	<p>Between January 1, 2020, and June 30, 2022, Florida witnessed a concerning total of 5,258 accidents occurring within work zones or other maintenance areas. This equates to an alarming daily average of almost six incidents within these specified zones, resulting in 134 fatalities and 491 serious injuries. Despite concerted efforts to educate the public about the Move-Over law requirements, there remains a notable lack of understanding regarding the law's application to maintenance areas, work zones, and other non-emergency responder vehicles. It is evident that significant steps have been taken to disseminate information about the Move-Over law; however, its nuanced relevance to maintenance areas and work zones has not been fully comprehended. Improving awareness and compliance with the Move-Over Law specifically for maintenance and work zone areas, as well as non-emergency responder vehicles, holds the potential to mitigate the occurrence of such crashes in the future.</p>	
Implementability	<p>Score 1-5 1=greatest likelihood of and proximity to implementing results</p> <p>1</p>	<ul style="list-style-type: none"> - No New Legislation Needed: Streamlined integration process as existing regulations align with research findings. - Existing FDOT Resources: Utilization of FDOT's robust infrastructure minimizes the need for external support, ensuring efficient implementation. - Few Foreseeable Barriers: Cooperative research with FDOT protocols aligns with existing regulations, reducing potential barriers to implementation. - Straightforward Strategies: Proposed strategies are straightforward, eliminating the need for multiple phases and supporting a swift transition from research to practical application. 	
<p>Project Benefits (Succinct, complete explanation)</p> <ul style="list-style-type: none"> - Reduced Accidents and Injuries: The project aims to decrease the likelihood of crashes, fatalities, and serious injuries within specified zones, contributing to overall road safety. - Cost-Efficient Solutions: The proposed strategies and technologies aim to be cost-effective, providing practical and sustainable solutions without significant financial burdens. - Streamlined Implementation: With minimal anticipated barriers and a lack of the need for multiple phases, the implementation process is expected to be straightforward and efficient. 			

Project Benefits (Select all that apply and explain)	Quantifiable Benefits (units, dollars, etc...if applicable)	Methodology or Data Sources Used to Determine Quantifiable Benefits. If not applicable, please give justification of project benefits
○ Materials Enhancement	N/A	
○ Financial Impact	N/A	
○ Time Savings	N/A	
○ Lives Saved/Injuries Prevented	Over 2100 crashes, 54 fatalities, and 195 injuries annually	Crash statistics were taken from 2.5 year of SSOGIS data, filtered for Crash Category 01 Workzones, which encompasses CONST/MNT/UTLTY.
○ Other (Explain)	N/A	

*Comments should explain and support urgency, financial benefit, and implementability scores