



BILLING CODE: 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day-20-20IP; Docket No. CDC-2020-0021]

Proposed Data Collection Submitted for Public Comment and Recommendations

AGENCY: Centers for Disease Control and Prevention (CDC),
Department of Health and Human Services (HHS)

ACTION: Notice with comment period

SUMMARY: The Centers for Disease Control and Prevention (CDC), as part of its continuing effort to reduce public burden and maximize the utility of government information, invites the general public and other Federal agencies the opportunity to comment on a proposed and/or continuing information collection, as required by the Paperwork Reduction Act of 1995. This notice invites comment on a proposed information collection project titled "Occupational Driver Safety at Intersections". The purpose of this data collection is to gather experimental information in the CDC Motor Vehicle Safety Research Laboratory

on the effects of occupation, vehicle type, vehicle approach speed, signal light logic, and emergency response status on emergency vehicle driver decision-making at intersections. The information will also be used to formulate science-based safety recognition training materials and an advanced driver assistant tool to enhance occupational driver (e.g., law enforcement officers and firefighters) safety at intersections.

DATES: CDC must receive written comments on or before [INSERT DATE 60 DAYS AFTER PUBLICATION DATE IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by Docket No. CDC-2020-0021 by any of the following methods:

- Federal eRulemaking Portal: Regulations.gov. Follow the instructions for submitting comments.
- Mail: Jeffrey M. Zirger, Information Collection Review Office, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., MS-D74, Atlanta, Georgia 30329.

Instructions: All submissions received must include the agency name and Docket Number. CDC will post, without change, all relevant comments to Regulations.gov.

Please note: Submit all comments through the Federal eRulemaking portal (regulations.gov) or by U.S. mail to the address listed above.

FOR FURTHER INFORMATION: To request more information on the proposed project or to obtain a copy of the information collection plan and instruments, contact Jeffrey M. Zirger, Information Collection Review Office, Centers for Disease Control and Prevention, 1600 Clifton Road, N.E., MS-D74, Atlanta, Georgia 30329; phone: 404-639-7570; E-mail: omb@cdc.gov.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501-3520), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. In addition, the PRA also requires Federal agencies to provide a 60-day notice in the Federal Register concerning each proposed collection of information, including each new proposed collection, each proposed extension of existing collection of information, and each reinstatement of previously approved information collection before submitting the collection to the OMB for approval. To comply with this requirement, we are

publishing this notice of a proposed data collection as described below.

The OMB is particularly interested in comments that will help:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
2. Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
3. Enhance the quality, utility, and clarity of the information to be collected; and
4. Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submissions of responses.
5. Assess information collection costs.

Proposed Project

Occupational Driver Safety at Intersections - New - National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC).

Background and Brief Description

The mission of the National Institute for Occupational Safety and Health (NIOSH) is to promote safety and health at work for all people through research and prevention. Nearly 40% of all traffic crashes occur at intersections. Erroneous decision-making while crossing a signalized intersection is a significant risk factor for drivers. Such decision-making is even more challenging for occupational drivers (e.g., police and fire truck drivers) due to their job demands, special vehicle characteristics, and frequency of crash risk exposure. NIOSH has initiated a laboratory simulation study on effects of occupation, vehicle type, vehicle approach speed, signal light logic, and emergency response status on emergency vehicle driver decision-making at intersections to advance the safety of approximately 900,000 law enforcement officers and 1,134,400 career and volunteer firefighters.

Study results will be used to develop science-based safety recognition training materials for emergency vehicle drivers and their employers to enhance driver safety at intersections. The

information also will be used to (1) determine the optimal time/distance to activate a traffic signal preemption system for emergency vehicles to obtain the right-of-way at intersections, and (2) conceptualize an advanced driver assistant system (ADAS) that provides signal light status and issues a preemptive warning when an emergency vehicle approaches an intersection at an unsafe speed limit based on the vehicle and environmental conditions. The system will assist occupational drivers in decision making while crossing a signalized intersection.

Thirty-two fire truck drivers, 32 law enforcement officers (LEOs), and 32 general passenger vehicle drivers will be recruited for the experiment. The driving task for fire truck drivers and LEOs will consist of responding to an emergency call and returning to the base station. The general passenger vehicle drivers serve as the baseline reference; they will drive a sedan, simulating normal daily driving conditions. LEOs will perform an additional driving task (off-duty condition) using a sedan (same weight and size as the LEO cruiser) on a separate visit for the experiment. The drivers' performance (e.g., perception and response time, stopping accuracy, and stress level) and safety outcomes (e.g., deceleration at intersection, clearance to intersection, red light running time, and red light running frequency) will be analyzed, based on vehicle locations, vehicle speeds, and drivers' heart rates.

A follow-up study will evaluate the effectiveness of a driver assistant tool (derived from the first experiment) on the drivers' decision-making and overall safety outcomes. The driver assistant tool would be (1) either an algorithm to activate a traffic signal preemption system at optimal time/distance for emergency vehicles to obtain the right-of-way at intersections or, (2) an advanced driver assistant system that provides signal light status and issues a preemptive warning when an emergency vehicle approaches an intersection at an unsafe speed limit. Half of the participants from the first experiment (i.e., 16 truck drivers, 16 LEOs, and 16 general passenger vehicle drivers) and 48 new participants (16 from each of the three groups) will be recruited. The design of this experiment in terms of nature of tasks and outcome measures will be the same as those for the first experiment.

The two experiments will utilize 192 research participants. An additional six participants may be recruited to replace dropouts during the study due to simulator sickness. The data collection for the two experiments will take three years in total. Informed consent and the data collection are expected to take 3-3.5 hours (total) to complete for Experiment 1 and 4-4.5 hours for Experiment 2 for each participant. The total estimated annualized burden hours are 341. There are no costs to the respondents other than their time.

Estimated Annualized Burden Hours

Type of Respondents	Form Name	No. of Respondents	No. of Responses per Respondent	Avg. Burden per Response (in hrs.)	Total Burden (in hrs.)
Experiment 1: Law Enforcement Officers	Pre-Enrollment Confirmation Email	11	1	1/60	1
	Participation Data Collection Form	11	1	1/60	1
	Informed Consent form - including participant orientation	11	1	20/60	4
	Motion Sickness Screen Form	11	1	2/60	1
	Pre and post drive simulator sickness assessment x5 scenarios x3 conditions	11	1	1	11
	Sharpened Romberg Postural Stability Test x2 states x3 conditions	11	1	30/60	6
	Practice Roadmap - Driving practice in simulator x3 conditions	11	1	48/60	9

	Actual test - 120 minutes x3 conditions	11	1	360/60	66
Experiment 1: Firefighter	Pre- Enrollment Confirmation Email	11	1	1/60	1
	Participatio n Data Collection Form	11	1	1/60	1
	Informed Consent form - including participant orientation	11	1	20/60	4
	Motion Sickness Screen Form	11	1	2/60	1
	Pre and post drive simulator sickness assessment x5 scenarios x2 conditions	11	1	40/60	7
	Sharpened Romberg Postural Stability Test x2 states x2 conditions	11	1	20/60	4
	Practice Roadmap - Driving practice in simulator x2 conditions	11	1	36/60	7
	Actual test - 120 minutes x2 conditions	11	1	240/60	44
	Pre- Enrollment	11	1	1/60	1

Experiment 1: General civilian	Confirmation Email				
	Participatio n Data Collection Form	11	1	1/60	1
	Informed Consent form - including participant orientation	11	1	20/60	4
	Motion Sickness Screen Form	11	1	2/60	1
	Pre and post drive simulator sickness assessment x5 scenarios x1 condition	11	1	20/60	4
	Sharpened Romberg Postural Stability Test x2 states x1 condition	11	1	10/60	2
	Practice Roadmap - Driving practice in simulator x1 condition	11	1	16/60	3
	Actual test - 120 minutes x1 condition	11	1	120/60	22
	Pre- Enrollment Confirmation Email	11	1	1/60	1
	Participatio n Data Collection Form	11	1	1/60	1
Informed	11	1	20/60	4	

Experiment 2: Law Enforcement Officers	Consent form - including participant orientation				
	Motion Sickness Screen Form	11	1	2/60	1
	Pre and post drive simulator sickness assessment x5 scenarios x1 condition	11	1	20/60	4
	Sharpened Romberg Postural Stability Test x2 states x1 condition	11	1	10/60	2
	Acceptance of Advanced Driver Assistance System x1 condition	11	1	40/60	7
	Practice Roadmap - Driving practice in simulator x1 condition	11	1	16/60	3
	Actual test - 120 minutes x1 condition	11	1	120/60	22
	Pre- Enrollment Confirmation Email	11	1	1/60	1
	Participatio n Data Collection Form	11	1	1/60	1
Informed Consent form	11	1	20/60	4	

Experiment 2: Firefighter	- including participant orientation				
	Motion Sickness Screen Form	11	1	2/60	1
	Pre and post drive simulator sickness assessment x5 scenarios x1 condition	11	1	20/60	4
	Sharpened Romberg Postural Stability Test x2 states x1 condition	11	1	10/60	2
	Acceptance of Advanced Driver Assistance System x1 condition	11	1	40/60	7
	Practice Roadmap - Driving practice in simulator x1 condition	11	1	16/60	3
	Actual test - 120 minutes x1 condition	11	1	120/60	22
	Pre- Enrollment Confirmation Email	11	1	1/60	1
Participatio n Data Collection Form	11	1	1/60	1	
Informed Consent form - including	11	1	20/60	4	

Experiment 2: General civilian	participant orientation				
	Motion Sickness Screen Form	11	1	2/60	1
	Pre and post drive simulator sickness assessment x5 scenarios x1 condition	11	1	20/60	4
	Sharpened Romberg Postural Stability Test x2 states x1 condition	11	1	10/60	2
	Acceptance of Advanced Driver Assistance System x1 condition	11	1	40/60	7
	Practice Roadmap - Driving practice in simulator x1 condition	11	1	16/60	3
	Actual test - 120 minutes x1 condition	11	1	120/60	22
	Total				341

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