

# FEMA Vehicle Risk Management Study



FEMA



ARIZONA



## Emergency Service Vehicle Crashes



Emergency Vehicle Crashes And Struck By Incidents Are The 2nd Leading Cause of Death Among Firefighters

There Are Over 12,000 Emergency Vehicle Crashes and Over 900 Related Injuries in the Fire Service per year

**Chicago Fire Department Averages Over One Vehicle Incident Per Day**

## About the Study

### Preventing Firefighter Fatalities & Injuries



The Chicago Fire Department, in partnership with the University of Arizona, Northwestern and Johns Hopkins University, is undertaking a vehicle risk management study supported by FEMA to identify the causes of vehicle incidents (i.e. crashes and related injuries) in the fire service and to implement interventions and controls to reduce their frequency and severity.

The goal of this project is to improve the health and safety of all our firefighters and the general public.

## Using Vehicle Data Recorders

As part of this study, we will be collecting data from vehicle data recorders (VDR) installed on all new fire apparatuses and rigs since 2009 when the NFFPA recommended their use.

The data will be wirelessly transmitted from vehicles to an online server and shared with the universities and I.A.F.F. Local 2. Aggregated data without date/time will be shared with the rest of the department.



### Vehicle Movement

VDRs collect data on vehicle speed, acceleration (g-force), harsh braking, harsh cornering, master switch on/off and location



### Vehicle Maintenance

VDRs also transmit diagnostic and maintenance codes, to ensure timely repair and servicing of vehicles



### Safer Driving

Data will help us identify areas to improve safe driving and to educate drivers on safe vehicle operations



## Vehicles with VDRs

Beginning April 1st, 2015, we will pilot test the use of VDR tracking on eight department vehicles. The pilot test will last for 30-90 days at which point we will equip more department vehicles with tracking transmitters. The vehicles are:

B582/BAT	09:	2015	Ford Explorer Utility Interceptor
B583/BAT	23:	2015	Ford Explorer Utility Interceptor
C168/AMB	15:	2013	Ford E450 Type III Ambulance
C178/AMB	52:	2013	Ford E450 Type III Ambulance
E341/TRK	51:	2010	Spartan Gladiator Crew Cab Aerial
E343/TRK	42:	2011	Spartan Gladiator Crew Cab Aerial
D653/ENG	82:	2009	Spartan Crimson Gladiator Pumper
D650/ENG	122:	2009	Spartan Crimson Gladiator Pumper



Data collected in this study will NOT be used to impose discipline. The data and results from this study will be used to identify areas for improving policy, education and training. We have obtained Local 2 support and will involve the union in all decisions regarding the study.

## Contact

If you have any questions about the study, please contact the study team members:

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