



# The Connected Responder: A Business Case and Plan for the Emergency Responder Community

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## Connected Responder Public Safety and Emergency Response Business Case

- Goals
  - Educate, Influence, and Inspire
- Objectives
  - Educate Emergency Responders as a Catalyst for Change and Innovation

# Practitioner's Orientation to Connected Responder Technologies

- Responders Collaborating with Technology Developers
- Prepare to Evolve




Crawl



Walk

Run

# Routinely Dangerous Operations



**1** tow truck driver  
is killed every six days.

**23** highway workers  
and  
  
 **1** law enforcement officer  
is killed every month.



**6** firefighters are  
killed every year.

**Move Over for Safety. Every Worker, Every Time.**

Graphic from the Ohio Department of Transportation reflecting national statistics on work zone fatalities

# Routinely Dangerous Operations

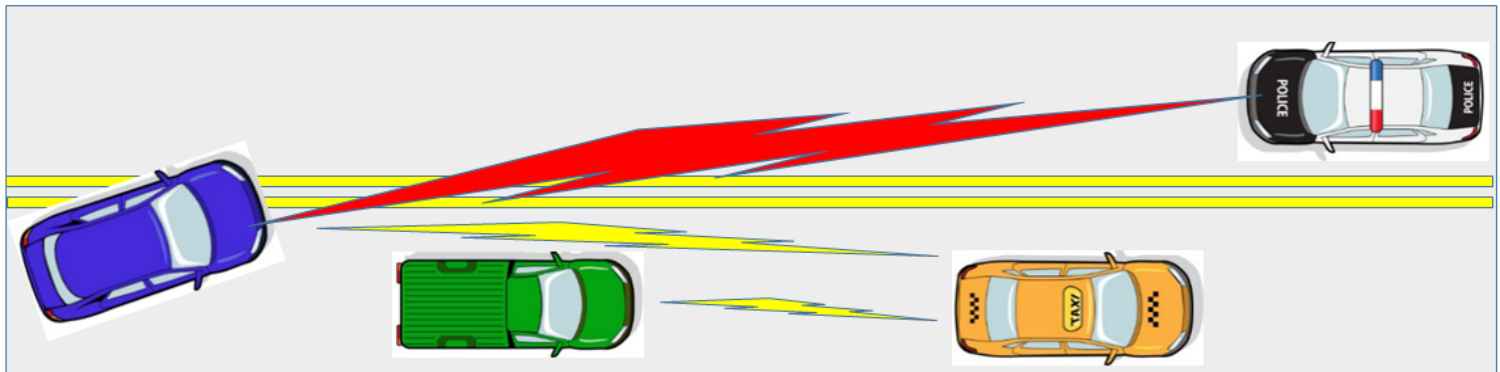
- **167** Law Enforcement Officers died in fatal vehicle accidents 2011-2015
- **4,500** vehicle traffic crashes involving ambulances each year
- **47,758** injuries and 579 deaths from work zone crashes in 2013
- **29,989** fatal crashes in 2014

**Onboard Unit (OBU)** – In-vehicle device transmits and receives Basic Safety Messages 10 times per second – determines if warning is necessary

**Basic Safety Message (BSM)** – Includes speed, location, and heading

## Connected Vehicles Vehicle to Vehicle (V2V) Communications

**Application Interface** – In-cockpit device which provides warning messages to drivers



OBU from taxi transmits BSM that cab is moving slowly. OBU from blue vehicle transmits BSM that it is changing heading, potentially encroaching into pathway of police vehicle. Application Interface in police vehicle warns that blue vehicle may be encroaching into lane, while application interface in blue vehicle warns that there is an approaching vehicle (police car)



# Key Business Case Drivers for Connected Responders

- Improve Responder and Public Safety
- Reduce Agency Costs (Direct and Indirect)
- Capitalize on Growing Commercial and Private CV Network
- Influence Positive Change for Profession and Public

**“NHTSA estimates that safety applications enabled by V2V and V2I could eliminate or mitigate the severity of up to 80 percent of non-impaired crashes, including crashes at intersections or while changing lanes”**

# Public Safety Strategic Plan Alignment

- Reduce incidents that result in injury, death, and property damage
- Provide timely, effective, and consistent emergency response
- Enhance traffic incident management procedures
- Increase the public's perception of safety

100 strategic  
plans reviewed

Law  
Enforcement,  
Fire, EMS,

State, local,  
university, and  
tribal agencies



# Public Safety Strategic Plan Alignment

- Enhance employee safety
- Manage agency resources effectively
- Improve the efficiency and effectiveness of service delivery by expanding the use of technology

100 strategic  
plans reviewed

Law  
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# Call to Action

- Opportunities for application are limitless
- Become involved in the development of the technologies and associated standards and specifications
- Become a business driver for the vehicle manufacturers to adopt more quickly
- Become early adopters

ITS



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Promoting Technology for Public Safety

Thank You