

Vehicle Marking and Technology for Increased Highway Visibility

A Reference Guide for Decision-Makers

(Does Not Include Fire Service Structural Firefighting Apparatus)

This Guide is produced by the Cumberland Valley Volunteer Firemen's Association Emergency Responder Safety Institute with support of the Federal Emergency Management Agency United States Fire Administration and the US Department of Justice National Institute of Justice.

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INTRODUCTION

This resource guide serves to provide visual examples of various high-visibility marking schemes that have been applied to the rear and sides of a wide variety of vehicles; automobiles, pickup trucks, utility truck vehicles, SUVs, vans, box-type trucks, and even larger-size service vehicles. These service-oriented vehicles may be found positioned anywhere within the right-of-way of a freeway, highway, roadway, street, bridge, tunnel, etc during the course of their operator's normal work activity.

The intent of increased vehicle visibility markings and emergency lighting packages is to make the vehicles more visible and identifiable to the approaching motorist sooner, when the motorist is further away from the marked vehicle. Increased visibility, yielding increased awareness of the presence of the vehicle and quicker recognition of the vehicle will potentially reduce the likelihood of collisions between these vehicles.





Rear-end collisions with stopped service and responder vehicles may be able to be reduced or eliminated with improved high-visibility markings, making them more readily identifiable to motorists approaching from behind these vehicles.



Personnel utilizing the vehicles featured in this document include law enforcement officers, road service patrols, tow and recovery operators, and transportation department authorities among others. The contents of this guide have been specifically designed to not include fire department structural firefighting apparatus markings. Since 2009, new fire service vehicles must have at least 50% of the rear vertical surfaces covered with the now familiar 6-inch wide chevron pattern striping.





National Fire Protection Association Standard 1901 requires that chevron striping be applied to at least 50% of the rear vertical surfaces of all new fire apparatus. Ambulances are required to have the chevron pattern also applied since the adoption of NFPA 1917 Standard for Automotive Ambulances, 2013 Edition.



This resource guide visually displays examples of the application of various chevron patterns, creative use of reflective decal markings, new arrangements of warning lights, and other innovative designs; all with the intent of increasing the visibility of the vehicle to motorists approaching from behind or to the side of the vehicle. Each type of vehicle, as determined by vehicle purpose or size, is organized into its own individual chapter within this resource guide. Various examples of each type of vehicle are shown in each chapter and are from a variety of different agencies operating these vehicles.

Throughout each chapter of this document, vehicles utilized by various agencies in England, Germany, The Netherlands, and Sweden have been included. These images were obtained during a federally-funded research program and are included to demonstrate additional alternative choices for the marking of vehicles in the United States.



- CHAPTER 01: PASSENGER VEHICLE (i.e. Sedan, Station Wagon)
- CHAPTER 02: PICKUP TRUCK
- CHAPTER 03: UTILITY VEHICLE
- CHAPTER 04: SPORT UTILITY VEHICLE(SUV)
- CHAPTER 05: VAN
- CHAPTER 06: BOX-TRUCK and/or TRAILER VEHICLE
- CHAPTER 07: TOW/RECOVERY VEHICLE
- CHAPTER 08: LARGE SIZE VEHICLE
- CHAPTER 09: MOTORCYCLE, MISCELLANEOUS



Chapter 1

Passenger Vehicles





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Chapter 2

Pickup Truck Vehicles





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Chapter 3

Utility-Type Vehicles





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Chapter 4

Sport Utility Vehicles (SUVs)





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Van Vehicles









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Chapter 6

Box-Type Vehicles





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Chapter 7

Tow & Recovery Vehicles





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Chapter 8

Large-Size Vehicles





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Chapter 9

Motorcycles





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