TRAFFIC OCCUPANT PROTECTION STRATEGIES

INSTRUCTOR PACKAGE

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PURPOSE

More than 42,000 people die every year in motor vehicle crashes in the United States. A large number of those who are killed are not wearing seat belts. Additionally, there has been a substantial increase in the number of law enforcement officers killed in traffic related incidents. The need for a streamlined and job-relevant training curriculum was identified to support law enforcement efforts to increase seat belt use, provide meaningful and useful information on occupant protection systems, and encourage belt use among law enforcement professionals to reduce injuries and fatalities resulting from vehicle crashes.

To address the issue of non-use of occupant protection equipment and increase the use of seat belts by law enforcement, the need for appropriate and up to date training was identified. The education of law enforcement officers regarding the risks and hazards to the motoring public as well as the profession is a key element to creating understanding of the critical role the use of occupant protection equipment plays in reducing injuries and fatalities in vehicle crashes. As a result, this curriculum was developed to meet those educational needs.

TOPS is designed to provide the law enforcement officer and line supervisor with information that will assist them in identifying and addressing occupant protection issues they are likely to encounter in the performance of their duties.

METHODOLOGY

The revised Traffic Occupant Protection Strategies (TOPS) course has been condensed for basic instruction in a four-hour block of time using discussion and group activities, supported by multi-media materials. There are four (4) modules of instruction, each designed to be taught in 45-50 minutes with a 10-15 minute break between each module.

The curriculum can be enhanced with additional materials and/or activities of the instructor’s choosing to support local issues or concerns.
COURSE STRUCTURE

Module One- Introduction and Officer Risks

Module One provides the participants with an opportunity to introduce themselves, and outlines the objectives for the workshop. Module One also sets the direction and tone for the workshop, and creates buy-in from the participants by framing the issue of occupant protection, enforcement of occupant protection laws, and seat belt use by law enforcement.

Module One focuses on the nature and scope of the issues associated with vehicle occupants not using seat belts. The module also places an emphasis on the risks to law enforcement officers for being involved in a crash as a result of their greater exposure as compared to the general population and nature of their work.

Module One includes an interactive exercise in which the State statute(s) related to occupant protection are discussed to identify the requirements and/or limitations that exist in the law.

NOTE: The instructor is required to re-produce and distribute copies of the state statute to the participants for use in identifying issues associated with the law outlined in Slide 14.

NOTE: The instructor is expected to lead a discussion regarding the primary/secondary status of the state statute and innovative or effective techniques related to enforcement.

Module One includes the use of a brief video clip of a Colorado State Patrol trooper discussing his experience (Slide 15). This video clip is titled “NHTSA.AVI” on the DVD. To ensure the video runs properly, the “Cole2k Setup.exe” file will need to be loaded onto the instructor’s laptop prior to the class (The file is included on the DVD). Additionally, the instructor should ask the participants if they have any “survivor stories” of their own that may be shared with the class.

Module Two- Crash Dynamics

Module Two addresses the physics associated with vehicle crashes and how forces are exerted during the vehicle, human, and internal collisions that occur. Newton’s law of motion is addressed in rudimentary terms, as is the concept of restraining force (weight x speed = restraining force).

Module Two also covers the kinematics associated with various kinds of crashes, and includes crash test footage that can be played to reinforce the information being presented.

NOTE: The instructor is expected to reinforce the risks to the participants as discussed in Module One that result from their increased exposure.

NOTE: The instructor is expected to explain that some crashes are not survivable. Speed, weight, the nature of the crash, or other factors (e.g. not wearing a seat belt) may contribute to a crash being unsurvivable. However, belt use provides the greatest protection in mitigating risk, and seat belts should be used at all time.
Module Three- Occupant Protection Systems

Module Three provides the participants with basic information regarding the components of a seat belt, the types of child occupant protection devices and their appropriate use, and supplemental restraints systems (airbags).

The NHTSA “Four Steps” of child occupant protection are described in Module Three, which are intended to provide the participants with knowledge that will enable them to better evaluate the use of occupant protection devices they encounter in the field, and take appropriate corrective action.

Module Three includes a belt use exercise (Slides 23-25) in which the instructor is required to distribute copies of the images to the class and asks the participants to identify mis-use of the systems depicted. The instructor will then lead a discussion of what the class observes.

NOTE: The images are included in the instruction and course materials, ready for printing/copying.

Module Three includes a discussion of indicators of belt use, providing visual representations to illustrate the concepts. The importance of accurate reporting and collection of data is emphasized.

NOTE: Not all indicators of belt use are described, and the examples provided serve to stimulate discussion and examination at crash scenes the participants may encounter. The totality of the circumstances, on-scene results of an investigation, and evidence collected are to be considered in making enforcement decisions.

Module Four- Enforcement and Action Planning

Module Four ties together the information presented in Modules 1-3 with enforcement concepts and the value of community support and partnerships to emphasize the value of seat belt use.

Module Four includes discussions of the concepts of Targeted Enforcement (e.g. Click it Or Ticket campaigns), and Sustained Enforcement through High Visibility Enforcement (HVE) efforts.

An emphasis is placed on traffic enforcement as important to overall crime prevention, and the concept of traffic safety and enforcement as a “core value” of law enforcement operations.

NOTE: The instructor should lead a discussion of notable cases in which significant arrests were made based on traffic stops made for minor issues (e.g. Timothy McVeigh- OKC bombing suspect stopped for no license plate). Local issues or arrests of interest should be discussed to add impact and emphasis for the participants. (Slide 8)
Module Four includes an “Action Planning” exercise that requires the instructor to distribute a planning guide format (included with the course materials), organize the participants into groups, and have them develop specific action plans. The instructor then leads a discussion of the elements of the plans the groups develop.

A “Course Wrap Up” (Slide 17) is conducted to review the major issues that were discussed during the class. This is an opportunity to re-emphasize the value of seat belt use, and clarify any issues that may have arisen during the class.

NOTE: Instructors are strongly encouraged to have localized resource information available for distribution to the participants. Information may include, but not be limited to:

- State Highway Safety Office Address and Phone Number
- NHTSA Regional Office Address and Phone Number
- State/Local Law Enforcement Liaison contact information
- Locations or points of contact for Child Safety Seat Inspection Stations
- Points of Contact with local health departments
- Points of Contact with known community partners

Conclude the course with an evaluation to enable participants to provide feedback on course content, quality of instruction, or other issues of note.
COURSE MANAGEMENT GUIDELINES

The following guidelines are offered to ensure the successful delivery of the TOPS Curriculum.

Facility Considerations:

- Ensure that the training site has the correct name and information listed on the marquee or other signage that is appropriate to direct participants to the class.
- The training room should be set up, equipment checked, and any participant materials and name tents placed on the desk/tables prior to the arrival of participants.
- Set up a table in the back of the room for instructors to use.
- Set up chairs in the back of the room for guests.

Participant Considerations:

Communicate with the participants prior to the workshop to provide the following information:

- Date, time and location of the course.
- Appropriate dress.
- What participants should bring. Be sure to include a copy of the participant’s agency policy regarding seat belt enforcement, and any other statutes, regulations or policies that govern the application of occupant protection statutes.
- Greet participants as they enter the classroom.

Instructor Considerations:

- The TOPS curriculum and PowerPoint slides contain instructor notes. These instructor notes are designed to guide and ensure the success of the course delivery.
- The TOPS curriculum is designed to be delivered in four hours, to include breaks between the modules. Instructors must maintain time awareness during the workshop to keep the instruction on task, as well as adhere to the course and curriculum materials.
- Instructor introductions should include brief biographical background information.
- Prepare a participant roster and provide to the host/sponsoring agency.
- Prepare appropriate participant certifications in collaboration with the host/sponsoring agency.
- Distribute course evaluations to gather feedback on the course content as well as instructor performance for the course.
Appendix B

RESOURCES

Additional resource information is available online and through your State Law Enforcement Liaison (LEL) to assist in the preparation of this course.


A wide variety of information is available on the NHTSA website that addresses occupant protection and provides links to statistical databases.

FARS (Fatality Analysis Reporting System)- http://www-fars.nhtsa.dot.gov/Main/index.aspx

The FARS database provides a wide range of fatal crash data, including occupant protection related information that can be accessed for individual states.

Instructors and Training Managers are encouraged to refer to the Training Management Handbook available from the National Traffic Safety Academy at:

TSI, National Traffic Safety Division
RTI-70
6500 South MacArthur Blvd., BMB Room 144
Oklahoma City, OK 73169
405-954-3112
Appendix C

Glossary of Terms

**Child Seat** (Child Restraint, Child Restraint Systems) – A crash tested device or system that is specially designed to provide infant or child crash protection. General term for systems include child safety seats, boosters, vests, or car beds that meet the standards of FMVSS 213.

**Earned Media** – Advertising for a mobilization or organized effort. It can be on television, radio or print news which is not purchased with funds. This would include, but not be limited to news conferences, school assemblies, and rides with officers on patrol. Any media coverage of any event in which the designated effort is mentioned or referred to by law enforcement or the reporter.

**Four Step Process** – NHTSA process for continuity of use of appropriate restraint systems from infancy through childhood and beyond. The steps include rear facing seats, forward facing seats, boosters, and seat belts.

**LATCH** – Lower Anchors and Tethers for CHildren- Later model vehicles are equipped with integrated LATCH points for securing child safety systems.

**Mobilizations** – Refers to organized efforts initiated by city, county, state, or federal agencies in which the maximum available law enforcement personnel from multiple jurisdictions patrol targeted areas. This is accomplished to enforce a specific set of violations over a specific time period. The public is informed of this effort before, during, and after the event through the media to attempt to increase compliance with the law.

**NHTSA** – National Highway Traffic Safety Administration. An element of the United States Department of Transportation, NHTSA is responsible for vehicle safety with an emphasis on saving lives and preventing injuries through a reduction in vehicle crashes.

**Occupant Protection** – Broad term that may be used to describe the concepts, equipment, and strategies associated with enhancing the safety of vehicle drivers and occupants through the use of seat belts, child safety seats, and supplemental restraint systems.

**Paid Media** – Advertising for a mobilization or organized effort. It can be on television, radio or print news which is purchased with funds from the agency or any other source such as a grant.

**Seat Belt** (Safety Belt) – The webbing, anchor, and buckle system that restrains an occupant in a vehicle.
**Sustained Enforcement** – An adopted philosophy by a law enforcement agency to insure patrol officers keep enforcement of a designated violation as a priority over a long period of time.
OVERVIEW
MODULE 1 INTRODUCTION

Upon successfully completing this session, the participants will be able to:

• State the goals and objectives of the course;
• Outline the major course content;
• Identify general driving risks;
• Describe the special driving conditions that law enforcement officers face; and
• State the effects of unbelted crashes.

CONTENT SEGMENTS

A. Introduction
B. Housekeeping Announcements
C. Course Overview
D. Special Driving Risks for Law Enforcement
E. Consequences
Welcome to Traffic Occupant Protection Strategies.

Instructor Note: The instructor(s) should briefly introduce themselves to the participants. Then have the participants introduce themselves to the rest of the class. The instructor should also ask WHY the participant is in the class. Responses regarding what the participants expect to learn should be recorded on the board or flip chart for reference at the end of the class.

A. Introductions

- Instructors
- Participants
B. Housekeeping Announcements

- Cell phones
- Facilities
- Breaks
- Smoking area
- Lunch (if appropriate)

C. Course Overview

This is a program put together for law enforcement by law enforcement to increase your understanding of how we as law enforcement officers can save lives and prevent needless injury by simply doing our job: enforcing traffic safety laws.

Working to increase traffic safety in your community – whether it’s citing a violator or educating a group of high school students – may not be the most glamorous or high-profile part of your daily patrol routine. However, enforcing occupant protection laws has more life-saving potential than anything else you can do as a law enforcement officer.

More than 40,000 people die each year due to motor vehicle collisions. We as law enforcement have the potential to save 15,000 lives per year. Maybe even our own.

Instructor Note: Introduce the broad concepts to be addressed during the class.
Today we will discuss the toll of traffic crashes on our community, State, and Nation. We will talk about why we – as law enforcement officers – are at a far greater risk to be involved in a crash than the general motoring public. We will cover some of those added risks we face as law enforcement and what we can do to reduce those risks.

We will discover what happens to a vehicle and its occupants during a crash and discuss what to look for when investigating a crash to determine if seat belts were in use. We will also look at occupant protection systems and how they work. The State’s seat belt and child restraint laws will be examined in depth, including a discussion about how the safety of our community relies on our consistent and aggressive enforcement of those laws. You will also be provided with resources and potential safety partners to increase the effectiveness of your traffic safety programs. Finally we will discuss how you can make a difference by reducing injuries and saving lives.

Course Goal: This course is dedicated to saving lives and reducing injuries through enhanced occupant protection strategies by educating line-level officers and supervisors. Successful completion will enable participants to effectively identify and act on real world situations they are likely to encounter during routine patrols or high-visibility enforcement periods, crackdowns, and mobilizations. The course will encourage the use of seat belts by law enforcement officers and emphasize the importance of enforcement.
D. Special Driving Risks for Law Enforcement

Slide 5: Officer Risk

Instructor Note: Pose this question to the participants: What presents a greater risk to the public and law enforcement officers – crime or traffic crashes?

Slide 6: Crime/Crash Clock

Instructor Note: Point out the disparity in the frequency of injuries and deaths resulting from criminal acts, as compared to traffic crashes.

Instructor Note: The crash statistics are from the National Center for Statistics & Analysis, National Highway Traffic Safety Administration, 2005. (The crime statistics are from the Federal Bureau of Investigation, 2005.)

Instructor Note: You may want to put in your own specific examples for social math.

Each year, more Americans are killed and injured in traffic crashes than are murdered or assaulted.

Someone dies in a vehicle crash every 12 minutes; a murder is committed every 31 minutes.
Someone is injured in a vehicle crash every 12 seconds; an aggravated assault takes place every 37 seconds.

Traffic crashes cost society over $150.5 billion a year.

Another example:

Over 6,000 people have been killed in the last several years as a result of the war and terrorists attacks in the United States. You hear about these issues on the news daily. Tragically, over 40,000 people die in traffic-related crashes each year. Yet we don’t always wear our seat belts or wear them properly.

Crime – rather than traffic safety – is the issue that stirs people’s emotions.

Slide 7: Crash Likelihood

Instructor Note: Use the included information to illustrate the level of exposure faced by officers as compared to the general public. This will lead into additional discussion regarding why law enforcement is overrepresented in the following slides.

General Public: One crash every 131,000 miles driven.
Law Enforcement: One crash every 28,000 miles driven.
Slide 8: General Public Risks

**Instructor Note:** These are generalized risk factors faced by all drivers, including the general public and law enforcement.

- Weather
- Roadway
- Traffic
- Time of Day

Slide 9: Law Enforcement

**Instructor Note:** Exposure time is the amount of time law enforcement officers spend working in their vehicles.

When driving, an officer has all the risks that the general public has and then some. Think of the conditions a “normal” driver faces.

**Instructor Note:** Ask some of these overhead questions. Write responses on flipchart.
• What weather conditions might a driver face?

**Instructor Note:** Possible answers
- Rain
- Wind
- Heat or cold
- Fog
- Ice
- Snow

• What road conditions might a driver face?

**Instructor Note:** Possible answers
- Potholes
- Road work crews and traffic barriers (jersey wall, cones)
- Debris

• What traffic conditions might a driver face?

**Instructor Note:** Possible answers
- Congestion
- Slow and inattentive drivers
- Slow vehicles (e.g., farm, construction)
- Speeders
- Impaired drivers
- Fatigued drivers
- Aggressive drivers
- Stress

• What time of day is more hazardous?

**Instructor Note:** Possible answers
- Rising or setting sun
- Dusk
- Night
- Bright sun
- Deep shadows
The law enforcement officer faces all these, but he or she often has to face them in the worst conditions. What are some of the things that make our driving conditions worse?

**Instructor Note:** Ask this question and write responses on flipchart.
Possible answers:
- High-speed situations
- Emergency situations
- Driving against traffic
- Driving when the roads are closed to everyone else
- Fatigue
- Having to look around 360 degrees all the time
- Distracted by radios and other drivers
- A target when making a stop
- Poorly maintained vehicles (sometimes)
- Exposure Time

**Instructor Note:** Need updated stats for Nation on total officer crashes and injuries; hand this info out or use stats for your State.

Law enforcement officers drive more miles, more often, and in worse conditions than do people in most other professions. Given the adverse conditions under which we drive, we need all the help we can get.

**Slide 10: Police Cars Crash Too**

**Instructor Note:** Follow up the discussion regarding exposure to crashes and hazards using the images to illustrate the potential for injury or death in traffic crashes.
Seat belts don’t save all lives. Some crashes just aren’t survivable.

• High-speed crashes

• Head-on crashes with a heavier vehicle

We still need to drive safely and defensively. However, seat belts and child safety seats have to be used to be effective. More than half of the passenger vehicle occupants killed in traffic crashes were not buckled.

Instructor Note: Look at your local data for specific numbers. These numbers can be found at www.nhtsa.gov (link to NCSA).

Slide 11: Another Tool on Your Belt

Instructor Note: Reinforce the fact that the protection offered by seat belts is the best option law enforcement has to prevent injuries and deaths in crashes, and remind the class that their exposure is greater than the general public.

• So why not use the protection offered by a seat belt?
  ○ It’s there
  ○ It’s available
  ○ It works
Slide 12: Excuses and information

Instructor Note: Ask students: What excuses have you heard and what excuses have you used to not wear your belt? Examples may include family, friends, or traffic stops. Record the responses on the board or on a flip chart.

• Why don’t we use our seat belts? What are some of the myths about seat belt use?

Instructor Note: Possible answers:
I’m in and out of my patrol car too often
I feel safer without the belt
It gets my uniform dirty
Nothing will happen to me
I don’t want to be trapped in a burning or submerged car
I don’t need to wear a belt when I’m slowly patrolling the streets at night
It catches on my badge/weapon/clip-on mike
The belt keeps me from getting my weapon out
I don’t have to drive very fast
I have to drive so fast it wouldn’t really matter
I don’t have to drive very far

• Do we set the example for our community when it comes to seat belt use?

• How do you enforce laws that you don’t follow?

Instructor Note: Possible answer – I am the law.
Slide 13: Why should I wear my seat belt?

**Instructor Note:** Assists to keep you in place to maintain control of your vehicle to avoid a crash or react to hazards. Is there an agency policy? If so, discuss.

Statutory requirement – is there a legal requirement for you to wear your seat belt?

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Slide 14: State Statutes

**Instructor Note:** Instructor needs to have copies of the current State laws in all these categories for distribution to the participants. (Copy and provide to participants.)

Group activity: Discuss statutory requirements and limitations.

If your State is a primary/secondary State, have officers bring innovative techniques to enforce your State’s current law.

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Slide 15: Survivor Stories

**Instructor Note:** If you identify someone in the class who has been saved by the belt, ask them if they would share their story with the class. Participants should also be encouraged to discuss crash scenes they’ve responded to where they have directly observed the benefits of using seat belts, or the consequences of not wearing a belt. **Play Colorado trooper video.**
Slide 16: Module Wrap-Up

**Instructor Note:** Remind the participants of the impact of crashes as compared to the frequency of crime. Remind the participants that they are subject to increased and more varied risk factors than the general public. Close by reminding/encouraging participants to use their seat belts every time they get behind the wheel.

Slide 17: End of Module One

**End of Module One**

*Questions?*
MODULE 2   CRASH DYNAMICS

Upon successfully completing this session, the participants will be able to:

• Relate Newton’s Law of Motion to occupant injury in a motor vehicle crash;
• Describe the three collisions in a crash;
• List four types of crashes;
• Describe what happens to unrestrained occupants during the four types of crashes;
• Describe five ways restraints prevent or minimize injury;
• Discuss why some crashes are unsurvivable; and
• Discuss replacement of occupant protection systems after a crash.

CONTENT SEGMENTS

A. Newton’s Law of Motion
B. Collisions in a Crash
C. Forces in a Crash & How Restraints Prevent Injury
D. Types of Crashes
E. Survivability
Instructor Note: Preparatory discussion regarding the physics associated with crashes. Remind the participants that Newton’s Law of Motion is established science, and that they have, or will encounter situations where this law of physics will be in evidence.

A. Newton’s Law of Motion

An object in motion remains in motion at the original speed until acted on by an outside force.

Sir Isaac Newton’s theory studying gravitation and motion: An object in motion continues to remain in motion at the original speed until acted on by an outside force.

In other words, an object keeps moving in the direction it was headed until it is stopped by something.

• For a vehicle, that thing may be the brakes or another vehicle or a tree.
• For the occupant of that vehicle, it could be the windshield or a seat belt or child restraint system.

Note: In a motor vehicle crash, occupants will hit something. To a degree, one can choose what will be hit (e.g., steering wheel, dashboard, windshield, pavement, seat belt.)

B. Collisions in a Crash

Slide 3: Collisions in a Crash

Instructor Note: Preparatory discussion with the participants to demonstrate that there are three collisions that occur in every crash. This relates back to Newton’s Law of Motion. As an example, the vehicle crash may be over, but internal organs remain in motion and can often result in injuries or death depending on the forces placed on them.

The three kinds of collisions which happen in a crash:

Instructor Note: Explain each collision in each phase, give examples of each phase.

Vehicle: the vehicle hits an object, such as a tree or another vehicle.

Human: the people in the vehicle hit the inside of the vehicle and each other. This can hurt people badly. But if they wear seat belts, they are more likely to avoid serious injuries. Instead, they may only be bruised from where they hit the seat belt.

Internal: organs inside a person’s body may hit other organs, bones, or even the inside of the skull. The person may look fine but the liver, heart, or other organs may be torn, bruised, or bleeding inside. This is the most serious type.

C. Forces in a Crash and How Restraints Prevent Injury

In any crash, even a small one, the people in the vehicle can be badly hurt. Most of us don’t know how much force there is in a moving vehicle. Consider this: a car going 40 mph would hit a tree with the same force as hitting the ground after falling off a 50-foot cliff. A person inside that car would hit the windshield with the same force as hitting the ground after falling off a five-story building.
A variety of factors affect the amount of force involved in a crash. It is important for parents to understand that the forces involved in a crash can kill or cause serious injuries to their child. One way to help the public understand crash forces is by explaining that the force needed to restrain an occupant can be roughly estimated by taking the weight of the occupant times the pre-crash vehicle speed.

- **For Example:** A 10 pound infant in a motor vehicle moving at 30 mph could require at least 300 pounds of force to restrain the infant.

Instructor Note: This is a simple description of the force needed to restrain an occupant.

Slide 4: Crash Forces

**Instructor Note:** Describe the simple formula to identify restraining force needed to hold a small child or infant. Example could be the restraining force necessary to hold onto a 12-pound bowling ball in a crash at 40 mph (480 pounds).

Use this approximation when explaining to parents how much force is needed to hold on to their children, or hold on to the person sitting next to you if they are not restrained.

**WEIGHT X SPEED = RESTRAINING FORCE**
D. Types of Crashes

Slide 5: Types of Crashes

Instructor Note: The following slides will discuss each type of crash in greater detail.

Four types of crashes:

1. Frontal
2. Lateral (side impact)
3. Rear-end
4. Rollover
What Happens to Occupants in the Four Types of Crashes?

Slides 6 - 8: Frontal Crashes

**Frontal Crashes**

- Most frequent type, but not always the most severe
- Common injuries to unrestrained occupants:
  - Fractures of the skull, spine, and ribs
  - Cuts and bruises to the head and face
  - Injuries to larynx, liver, and spleen

**Instructor Note:** Slide 7 is a video clip.

Frontal impacts result in forces coming together at the forward portion of the vehicle. Typically result in passengers initially being thrown forward.

**Frontal Crash:** The most frequent but not necessarily the most severe in causing fatalities.

- Common injuries to unrestrained occupants:
  - Fractures of the skull, spine, and ribs
  - Cuts and bruises to the head and face
  - Injuries to larynx, liver, and spleen
**Instructor Note:** Lateral impact can result in substantial penetration of the passenger compartment, and can represent a greater danger due to lack of space available for crush offered by frontal or rear-end crashes.

**Lateral Crash (Side Impact):** Frontal impacts are the most frequent, but side impacts are typically the most deadly.

- There is less space between the striking vehicle and the occupants of the struck vehicle than in a frontal crash.

- As a result, side impact crashes are a more dangerous type of crash for the occupants sitting on the same side as the impact.

- Typically the most deadly type of crash due to less crush space.

- Minor differences in number of fatalities between left and right side.

- Common injuries include:
  - Chest and pelvic injuries
  - Facial and skull fractures
Instructor Note: A common form of collision, rear-end crashes often involve a frontal collision with at least one other vehicle. Occupants in vehicles struck from behind typically move forward as a result of the collision.

**Rear-End Crashes:** Rear-end crashes usually occur when both vehicles are moving forward or when the front vehicle is stopped and account for 3.5 percent of fatalities.

- Usually less severe.
- Common injuries include:
  - Cervical fractures
  - Stretching/tearing of neck ligaments and tendons (whiplash)
  - Properly set head restraint can decrease risk of injury

**Slide 13: Rollover Crashes**

Instructor Note: Rollover and vaulting crashes can result in ejection (due to lack of belt use), increased exposure to injury due to rotation(s) of the vehicle.
Rollover Crashes: A rollover crash involves the vehicle rolling over onto its side or top (upside down), one time or many times.

- Often cause of ejection
- Rollovers = side to side and vaults
- Severity of injury depends upon number of rotations, etc.
- Often cause ejection
- Ejected occupants are four times more likely to be killed

Two dangerous crash events can occur in almost any crash or chain of crash events.

Rotations or “spins”

- In a rotation, unrestrained occupants are more likely to be injured as they impact with the vehicle’s interior repeatedly, and are much more likely to be ejected from the vehicle than restrained occupants.

Ejection

- Ejected occupants are four times more likely to be killed as those who remain inside. They are 14 times more likely to receive cervical spine injuries.

Occupants in non-collisions

- People can get hurt when their vehicles swerve, skid, or stop suddenly, especially if they are unbelted.
E. Survivability

Slide 14: Survivability

**Instructor Note:** 37,000 fatal crashes (20,000 were unrestrained). Focus on and illustrate the high level of non-belt use in fatal crashes. Reinforce the importance of belt use not only by the general public to prevent injury or death but the same is true for law enforcement officers who have a greater risk of exposure to be involved in a crash.

The use of a seat belt increases chances of reduced injuries or death; however it must be pointed out to the participants that **not all crashes are survivable.**

Some crashes are so violent that even properly restrained occupants are injured or killed.

- If the occupant compartment is crushed, restraints may be unable to prevent injury or death.
- A variety of factors determine injury outcome.
- Seat belts and child restraint systems are designed to protect against the type of crash forces most likely to occur.

Slide 15: Module Wrap-Up

**Instructor Note:** Reinforce the importance of law enforcement use of seat belts, remind participants that their risk/exposure of being involved in a crash is greater than the general public, and using a seat belt is their best method to reduce or avoid injury.
End of Module Two

Questions?
OCCUPANT PROTECTION SYSTEMS
MODULE 3 OCCUPANT PROTECTION SYSTEMS

Upon successfully completing this session, the participants will be able to:

- Identify the different components of a restraint system;
- Describe the components of seat belts and their proper use;
- Describe Supplemental Restraint Systems;
- Identify the Four Step Process defined by NHTSA;
- Determine errors in the use of occupant protection systems;
- Explain the potential for injury presented by occupant protection systems, including use, non-use and incorrect use;
- Describe Crash Investigation Techniques; and
- Describe why reporting occupant protection usage is important.

CONTENT SEGMENTS

A. System Components

B. How Restraints Prevent Injury

C. Parts of a Seat Belt

D. Supplemental Restraint Systems (SRS) and Their Function

E. Child Restraint Systems

F. Occupant Protection Systems after a Crash

G. Documenting Occupant Protection Usage
Instructor Note: Instructor may, at their own discretion, use visual aids from actual vehicles.

Instructor Note: Describe the evolution of traffic safety initiatives and equipment. Examples include the formation of NHTSA (National Highway Traffic Safety Administration) in 1966, mandated seat belts, child seat requirements, air bags (SRS), etc.
A. **System Components**

- Seat Belts
- Supplemental Restraint Systems (Air Bags)
- Child Restraints

B. **How Restraints Prevent Injury**

In the same way body armor assists in dispersing energy; seat belts perform the same function in a crash. The seat belt also keeps the officer/deputy/trooper in the correct driving position during high-speed or pursuit driving.

- Prevent Ejection
  - People thrown from a vehicle are four times more likely to be killed than those who remain inside.
  - Ejected occupants are also 14 times more likely to sustain cervical spine injury than those who remain within the vehicle.
• Contact the Body at the Strongest Parts of Its Structure
  ○ For an adult, these parts are the hips and shoulders.

• Spread Forces Over a Wide Area of the Body Putting Less Stress on Any One Part
  ○ A lap and shoulder belt spreads the force across a large area of the body.
  ○ Body armor assists with spreading crash forces.

• Allow the Body to Slowly Ride Down the Crash
  ○ A quick change in speed is what causes injury.
  ○ Seat belts are designed to help slow down the body in a crash.

• Protect the Head and Spinal Cord
  ○ A shoulder belt helps to keep the head and upper body away from the hard interior surfaces of the vehicle. Correct fit is very important.

Instructor Note: If you do not know the answer to any questions that may be asked, refer participants to the resource section at the end of this manual.

C. Parts of a Seat Belt

Slide 5: Parts of a Seat Belt

Instructor Note: The information is provided to the class to understand that there are components of a seat belt that serve different purposes. Not all components are the same (e.g., retractors), but the parts indicated are present in all/most modern seat belt systems.
Webbing: The fabric of the belt, which secures the occupant to the vehicle during a crash and extends the time that the deceleration forces are experienced by the occupant, allowing the occupant to “ride down” the crash.

Anchor points: Where the belt is attached to the vehicle frame or to the seat itself.

Latch plate: The metal “tongue” attached to one side of the webbing.

Buckle: the receptacle that comes out from the “bight” in the back of the seat, a slot in the seat cushion, or from the side. The latch plate inserts into the buckle.

Retractor: During a crash or rapid deceleration, the seat belt retractor "locks" the seat belt webbing and holds the occupant in place. The retractor is typically mounted above and behind the occupant on the body structure of the vehicle, or in the seat.

Proper Use of a Seat Belt

The slide depicts the correct use of a standard seat belt (lap/shoulder belt). The photograph shows the proper placement of a seat belt. The belt goes across the strongest part of the body. Across the hips and shoulders. (Remember, belts to bones.)
Maintain good posture. The lap belt should fit snug and low over the upper thighs. If it rides up on the abdomen, it could cause serious injuries in a crash. Children should sit straight against the seat back. Shoulder belts should fit snugly across the chest.

D. Supplemental Restraint Systems (SRS) and Their Function

Slide 7: SRS at a Glance

Instructor Note: SRS are required in vehicles manufactured after 1998. Older vehicles do not have to be retro-fitted.

Basic SRS information included on the slide. Common term used is Air Bag.

Supplemental restraint system to seat belt. Seat belts should be used in conjunction with air bags.

Air bags are required in vehicles manufactured after 1998 for cars, and 1999 for trucks.

Air bags can be located in as many as 10 locations in a vehicle.
Slide 8: Supplemental Restraint Systems

**Instructor Note:** Supplemental Restraint Systems (SRS) support seat belts, and do not replace their use. Commonly described as “air bags.”

Slide depicts basic types of SRS commonly in use today.

Slides 9 - 10: Air Bags
The Police Vehicle and Its Equipment

Slides 11 - 12: Keep Your Office Safe

Instructor Note: Explain to students that your cruiser is your office. Anything that is installed or placed in your vehicle could become a projectile object in a crash.

Officers should be reminded of the hazards that exist in their patrol vehicles. Ask class to cite examples of items that can result in injuries due to their placement, size, and weight. Keep in mind unsecured items, such as flashlights, briefcases, ticket books, etc.

Depiction of common equipment mounted in a police cruiser. A police vehicle contains a lot of equipment that is not found in a passenger vehicle.

- Computer
- Radios
- Spotlights
- Shotgun
- Protective cages
- Radar
- Briefcase
- Unbelted partner

Loose equipment must be secured so that it can’t become a “missile” flying around the car in a crash or a sudden stop. Sometimes this equipment disrupts the functioning of the vehicle’s safety features. For example, air bag deployment.
Instructor Note: Ways to get around the air bag deployment area and equipment installation issues are to:

1) consider bucket seats that will provide extra space for equipment;

2) ask manufacturers to produce smaller equipment; and

3) consider asking the manufacturer for a greater variety of installation devices and mounting configurations.

An example of what can happen in an equipped cruiser.

Instructor Note: In West Virginia, two officers were clearing a call. They had determined that the “man with a gun” call was unfounded and they were leaving a multi-level parking facility. Neither officer had buckled up.

The driver ran into a steel support pole at the exit of the garage. He was going 9 mph.

The passenger was thrown into the window and struck the bridge of her nose on the in-car video camera mounted just to the right of the rear-view mirror. Her injury required reconstructive surgery. She is suing the video camera installer and the video camera manufacturer. Had she been wearing a seat belt she wouldn’t have been injured.

You might consider taking this information back to your vehicle maintenance representative. They may find it useful as they install equipment.

E. Child Restraint Systems

To properly enforce occupant protection laws, you must have some understanding of the systems – including child restraints – and how they work. Our discussion today will not qualify you as a Certified Child Passenger Safety (CPS) technician, but will give you basic information you can share with parents and caregivers. We’ll also provide contact information for someone locally who can provide technical education and answer your questions.
Child restraint systems work with a vehicle’s seat belt system or LATCH (Lower Anchors and Tethers for CHildren). They prevent ejection and contact with roads, trees, other vehicles, etc. They distribute forces to the strongest parts of the skeleton (the hips, back and shoulders) and spread crash forces over a broad area of the body, thereby reducing forces on any particular component. Child restraint systems provide a "ride-down" benefit. They protect the head, neck, and spinal cord by preventing contact with hard surfaces inside the vehicle, and with other occupants. Child restraint systems must be firmly attached to the vehicle and the child must be properly secured in the child restraint system. It is critical that the child safety seat be used correctly.

Because there are so many different child restraint/belt system configurations, it is critical that parents/caregivers read the manufacturer’s instructions and vehicle owner’s manual.

**Instructor Note:** The nomenclature for the four steps comes from NHTSA. These restraints are described in the following slides. No props are needed.
Types of Restraints for Children

Slide 14: Rear-Facing Seats

**Instructor Note:** Description is in concert with NHTSA’s Four-Step Process. The four steps defined by NHTSA are the standard for describing restraint systems. Remind the class that there can be different terminology for the same concepts. Reinforce the use of the NHTSA descriptions and definitions.

- Rear-Facing-Only Restraints
- Keep infants rear-facing at all times until at least one year and at least 20 pounds.

Slide 15: Proper Use of Rear-Facing Seats

Children are safest when properly restrained in the back seat. The harness chest clip should be correctly positioned at the child’s mid-chest or armpit level. This keeps the shoulder straps in the correct position. Harness straps should be snug and straight. Rear-facing harness straps should be positioned at, or slightly below, the child’s shoulders.
THE CORRECT ANGLE – Used with a detachable base, this rear-facing infant seat is positioned at approximately a 45-degree angle (check the manufacturer’s recommendation for the correct angle).

Slide 16: Forward-Facing Seats

**Instructor Note:** Description is in concert with NHTSA Four-Step Process.

**Forward-Facing Seats**

- When children outgrow rear-facing seats (minimum of one year and 20 pounds) they should ride in forward-facing child safety seats
- Maintain location of the forward-facing seat in the back seat of the vehicle
- Keep children in forward-facing seat until they reach the upper limits for height or weight of the seat

Slide 17: Correct Use of Forward-Facing Seats

**Correct Use of Forward-Facing Seats**

Harness straps on forward-facing restraints should be positioned at, or slightly above, the child’s shoulders. Harness straps should be snug and straight. Harness chest clip should be positioned at the child’s mid-chest or armpit area.
Instructor Note: Emphasize importance of boosters. The importance of boosters is often overlooked by officers on the road and should be reinforced as critical to keeping a child in the correct position in relation to the belt.

- Boosters (Belt Positioning Booster [BPB], Backless, High-Back)

Belt-Positioning Booster Seats

Raise them up. A booster seat is used to correctly position the child in a vehicle lap/shoulder belt. Booster seats correctly position the lap belt across the child’s upper thighs and the shoulder belt across the chest. High-back and no-back booster seats are for children who have outgrown child safety seats, and are not large enough for the vehicle belt system. Children should use a belt positioning booster seat until they are at least 8 years old or 4’9” tall. Always use the lap/shoulder belt combination with a belt-positioning booster. Never use a lap belt only.

A system may not fit properly on children who cannot sit all the way back against the vehicle seat with knees bent comfortably over the edge of the vehicle seat.

HS00184 R2/08 14
Slide 20: Seat Belts

Instructor Note: Description is in concert with NHTSA Four-Step Process.

Slide 21: Proper Use of Seat Belts

Instructor Note: Point out the position of the lap belt across the hips, the shoulder belt properly positioned; child is the appropriate size for the seat.
Slides 22: What do you see in the vehicle?

**Instructor Note:** Officers have a limited amount of time at roadside to evaluate occupant protection equipment use before determining what action to take. Understanding local or State statutes regarding child occupant protection requirements will assist with evaluating and taking appropriate corrective steps.

**Distribute handouts and discuss.** Emphasize that if officer is not a CPS technician, at a minimum, officer should have information such as local inspection stations, local technicians or Web sites that contain CPS information.

- Is there a baby or small child in the car?
- Is there a child restraint?
- Is there a child in the car seat?
- Is the seat facing forward or rearward?
- Is the seat in the recline or upright position?
- Can I see a child seat harness system?
- Can I see a retainer clip across the child’s chest?
- Can I see the seat belt? Is it securing the CSS?

Slide 23: Belt Use Exercise – What’s Wrong with this Picture?

**Instructor Note:** Distribute belt use photos to class. Have class participants take a few minutes to identify misuse. The instructor will lead a discussion on the misuse overhead and record list on board or flip chart.
Slide 24: Belt Use Exercise – Image 1

**Instructor Note:** Misuse: harness clip too low, should be placed at armpit level. Harness strap not correctly placed on shoulder. Both straps should be over the shoulders.

Slide 25: Belt Use Exercise – Image 2

**Instructor Note:** Misuse of Safety Belt – double buckling. Should always be: One safety belt per rider.

Slides 26: Belt Use Exercise – Image 3

**Instructor Note:** Misuse: lap belt too high on abdomen and shoulder belt improperly placed under the arm. Shoulder belt should rest on the shoulder and across the chest; lap belt should rest on the upper legs or hips.
Slide 27: Indicators of Belt Use in Crashes

**Instructor Note:** If you are unable to make a judgment on any injuries, make sure you consult an accident investigator within your agency. Follow departmental policies and State guidelines. Make EMS/Medical responders aware of any potential injuries.

Individual slides depict marks made from webbing, scratches inconsistent with normal use on latches, and distortion of webbing as a result of crash.

Slide 28: Indicators of Belt Use in Crashes

**Instructor Note:** Marks in the red box indicate friction between the belt and plastic component as a result of use/impact.

Slide 29: Indicators of Belt Use in Crashes

**Instructor Note:** The scratches in the red box indicate abnormal movement of the latch as a result of a crash.
Slide 30: Indicators of Belt Use in Crashes

**Instructor Note:** The stretched portion of the webbing on the belt indicates tension placed on it as a result of a crash.

Slide 31: Indicators of Belt Use - Injuries

**Instructor Note:** Injuries or the lack of injuries can be indicators of belt use. Officers should be judicious in assessing information at the scene and follow established departmental procedures when making enforcement decisions.

**F. Occupant Protection Systems After a Crash**

Slide 32: Occupant Protection Systems After a Crash

**Instructor Note:** Discuss the impact of physics on restraint devices (e.g., belt webbing, latch plates, buckles, etc.). Replacement is often indicated after a crash. Ensure manufacturer’s recommendations are followed.
Slide 33: Child Restraints After a Crash

Instructor Note: Remind participants that information on Child Restraint Systems can be found at [www.nhtsa.gov](http://www.nhtsa.gov).

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**G. Documenting Occupant Protection Usage**

Slide 34: Reporting

Instructor Note: Bullets one and two talk about crash investigation. Emphasize to students that knowledge of occupant protection systems use or non-use in a crash can be very useful evidence. Bullet three talks about collecting and acting on data.

Instructor Note: Stress the importance of accurate reporting of seat belt usage to eliminate false impressions of injuries sustained in motor vehicle crashes.

It is important to report seat belt usage on crash report forms for a variety of reasons – some of which are to get an accurate report for investigative purposes. If the vehicle was involved in a serious crash and the operator claimed he/she was seat belted, yet the evidence shows that there was a spider web crack in the windshield and the injuries were consistent with an unbelted driver. Accurate reporting will give a more consistent belt use.

Instructor Note: Ask why it is important to identify seat belt usage. Have a 10-15 minute discussion and write responses on flipchart.
Slide 35: Module Wrap-Up

Instructor Note: During the module wrap-up, remind the participants that in addition to children, their correct use of seat belts can prevent injury in a crash.

Module Wrap-Up
• The proper kind of restraint is critical
• The proper use of the restraint is critical
• The ability to identify improper use is important to taking appropriate action
• Indicators of belt/restraint use can assist you

Slide 36: End of Module Three

End of Module Three
Questions?
Appendix D

Traffic Occupant Protection Strategies- Belt Use Exercise

Course Participants: Take a few minutes to examine the photographs and identify examples of mis-use of occupant protection equipment. The instructor will then lead a discussion of what is observed or noted.

Image 1

Image 2

Image 3
Subchapter 7  
— Mandatory Seat Belt Use

27-37-704. [Repealed.]
27-37-706. Penalties — Court costs.

As used in this subchapter:
(1) “Motor vehicle” means any motor vehicle, except a school bus, church bus, and other public conveyance, which is required by federal law or regulation to be equipped with a passenger restraint system; and
(2) “Seat belt” means any passenger restraint system as defined by the Department of Arkansas State Police, except that, until such time as the Arkansas State Police has promulgated regulations defining “seat belt”, the term means any passenger restraint system which meets the federal requirements contained in 49 C.F.R. § 571.208.


(a) Each driver and front seat passenger in any motor vehicle operated on a street or highway in this state shall wear a properly adjusted and fastened seat belt properly secured to the vehicle.
(b) This subchapter shall not apply to the following:
(1) Passenger automobiles manufactured before July 1, 1968, and all other motor vehicles manufactured before January 1, 1972;
(2) Passengers and drivers with a physical disability that contraindicates the use of a seat belt, and which condition is certified by a physician who states the nature of the disability as well as the reason the use of a seat belt is inappropriate;
(3) Children who require protection and are properly restrained under The Child Passenger Protection Act, § 27-34-101 et seq.; and
(4) Drivers who are rural letter carriers of the United States Postal Service while performing their duties as rural letter carriers.
(c) Except as provided in subdivision (b)(4), each driver or passenger who is seated in a wheelchair in a motor vehicle shall:
(1) Wear a properly adjusted and fastened seat belt properly secured to the wheelchair; and
(2) Have the wheelchair properly secured in the motor vehicle.

(a) (1) The failure of an occupant to wear a properly adjusted and fastened seat belt shall not be admissible into evidence in a civil action.
(2) Provided, that evidence of such failure may be admitted in a civil action as to the causal relationship between noncompliance and the injuries alleged, if the following conditions have been satisfied:
(A) The plaintiff has filed a products liability claim other than a claim related to an alleged failure of a seat belt;
(B) The defendant alleging noncompliance with this subchapter shall raise this defense in its answer or timely amendment thereto in accordance with the rules of civil procedure; and
(C) Each defendant seeking to offer evidence alleging noncompliance has the burden of proving:
(i) Noncompliance;
(ii) That compliance would have reduced injuries; and
(iii) The extent of the reduction of such injuries.
(b) (1) Upon request of any party, the trial judge shall hold a hearing out of the presence of the jury as to the admissibility of such evidence in accordance with the provisions of this section and the rules of evidence.
(2) The finding of the trial judge shall not constitute a finding of fact, and the finding shall be limited to the issue of admissibility of such evidence.


27-37-704. [Repealed.]

(a) When a motor vehicle operator is stopped by a law enforcement officer and the law enforcement officer notes that the provisions of this subchapter have not been violated, any fine levied for a moving traffic violation against the motor vehicle operator as a result of being stopped shall be reduced by ten dollars ($10.00) as an incentive to comply with this subchapter.
(b) Subsection (a) of this section shall not apply to fines levied for traffic offenses classified as misdemeanors.


27-37-706. Penalties — Court costs.
(a) Any person who violates this subchapter shall be subject to a fine not to exceed twenty-five dollars ($25.00).
(b) When a person is convicted, pleads guilty, pleads nolo contendere, or forfeits bond for violation of this subchapter, no court costs pursuant to § 16-10-305 or other costs or fees shall be assessed.

The Office of Driver Services shall not:
(1) Include in the traffic violation report of any person any conviction arising out of a violation of this subchapter;
(2) Use or accumulate a violation of this subchapter to suspend or revoke the driver's license of any person as an habitual violator of traffic laws; or
(3) Use a violation of this subchapter in any other way under the administrative authority of the office to suspend or revoke a driver's license.

Chapter 34
Child Passenger Protection Act

27-34-101. Title.
This chapter shall be known as the “Child Passenger Protection Act”.


27-34-102. Legislative intent.
It is the legislative intent that all state, university, county, and local law enforcement agencies, as well as all physicians and hospitals, in recognition of the problems, including death and serious injury, associated with unrestrained children in motor vehicles, conduct a continuing safety and public awareness campaign so as to encourage and promote the use of child passenger safety seats.


27-34-103. Penalty.
(a) Any person who violates this chapter shall, upon conviction, be fined not less than twenty-five dollars ($25.00) nor more than one hundred dollars ($100).
(b) In determining the amount of fine to be assessed under this section, any court hearing the matter shall consider whether, if the offense is for failure to secure the child in a child passenger safety seat properly secured to the vehicle, the child was restrained by some alternative means such as seat safety belts properly secured to the vehicle.
(c) Upon satisfactory proof being presented to the court that the defendant has acquired, purchased, or rented an approved child passenger safety seat as described in § 27-34-104, the court shall assess no more than the minimum fine allowed.


27-34-104. Requirements.
(a) Every driver who transports a child under fifteen (15) years of age in a passenger automobile, van, or pickup truck, other than one (1) operated for hire, which is registered in this or any other state, shall provide while the motor vehicle is in motion and operated on a public
road, street, or highway of this state for the protection of the child by properly placing, 
maintaining, and securing the child in a child passenger restraint system properly secured to the 
vehicle and meeting applicable federal motor vehicle safety standards in effect on January 1, 
1995.

(b) A child who is less than six (6) years of age and who weighs less than sixty pounds (60 
lbs.) shall be restrained in a child passenger safety seat properly secured to the vehicle.

(c) If a child is at least six (6) years of age or at least sixty pounds (60 lbs.) in weight, a 
safety belt properly secured to the vehicle shall be sufficient to meet the requirements of this 
section.

470, § 1; 2003, No. 1776, § 3.

27-34-105. Exceptions to provisions.
The provisions of this chapter shall not apply when any one (1) of the following conditions 
exists:

(1) The motor vehicle is being used as an ambulance or other emergency vehicle;

(2) When an emergency exists that threatens:

(A) The life of any person operating a motor vehicle to whom this section 
otherwise would apply; or

(B) The life of any child who otherwise would be required to be restrained under 
this chapter; or

(3) If any child who would otherwise be required to be restrained under this chapter is 
physically unable because of medical reasons to use a child passenger safety seat system or seat 
safety belt and the medical reasons are certified by a physician who states the nature of such 
medical conditions as well as the reason the use of a child passenger safety seat system or seat 
safety belt is inappropriate.

308, § 5.

27-34-106. Effect of noncompliance.

(a) The failure to provide or use a child passenger safety seat shall not be considered, under 
any circumstances, as evidence of comparative or contributory negligence, nor shall failure be 
admissible as evidence in the trial of any civil action with regard to negligence.

(b) Neither shall the failure to provide or use a child passenger safety seat be considered, 
under any circumstances, as evidence in any prosecution for negligent homicide.


(a) (1) A special fund is created which shall be known as the “Arkansas Child Passenger 
Protection Fund”.

(2) The Arkansas Child Passenger Protection Fund shall consist of:

(A) Seventy-five percent (75%) of all fines that are collected for violations of this 
chapter, which shall be remitted by the tenth day of each month to the Administration of Justice
Fund Section of the Office of Administrative Services of the Department of Finance and Administration on a form provided by that office, to be deposited into the Arkansas Child Passenger Protection Fund; and

(B) Other moneys that may be appropriated, allocated, or donated for the purpose of being placed in the Arkansas Child Passenger Protection Fund.

(b) (1) The Arkansas Highway Safety Program shall earmark at least fifty percent (50%) of the annual expenditures from the Arkansas Child Passenger Protection Fund for the purchase of child passenger safety seats.

(2) If annual funds generated by the fund support the expenditure and if the needs of the program justify the expenditure, the program shall maintain an annual expenditure of at least one hundred thousand dollars ($100,000) for child passenger safety seats.

(3) The child passenger safety seats purchased by the program shall be loaned or rented to hospitals or other groups or individuals, who may lend or rent the child passenger safety seats to others for the purpose of transporting children.

(c) After the expenditures described in subsection (b) of this section, the program shall earmark the balance of moneys in the fund:

(1) To conduct continuing education and public awareness concerning child passenger safety;

(2) To encourage and promote proper use of child safety seats and safety belts; and

(3) For highway safety planning and administration.


(a) A town or city that collects fines pursuant to this subchapter shall retain twenty-five percent (25%) of the fines collected and deposit them into a fund called the Public Safety Fund, to be used solely for the promotion of public safety.

(b) A district court that is funded solely by the county and collects fines pursuant to this chapter shall retain twenty-five percent (25%) of the fines collected and deposit them into the fund, to be used solely for the promotion of public safety.

ENFORCEMENT AND ACTION PLANNING
MODULE 4  ENFORCEMENT AND ACTION PLANNING

Upon successfully completing this session, the participants will be able to:

- Explain the importance of an agency policy;
- Identify applicable State and local occupant protection laws;
- Describe targeted enforcement;
- Identify high-risk groups;
- Describe sustained enforcement;
- Identify additional benefits of occupant protection enforcement activities; and
- Cite high-profile arrests resulting from traffic enforcement activity.

CONTENT SEGMENTS

A. The Facts
B. What Works and Different Enforcement Methods
C. Results of Looking Beyond the Ticket
D. Developing Community Partnerships
E. Taking Action
A. The Facts

Instructor Note: Slide depicts data reflecting belt use or non-use in fatal crashes based on age group. Point out the variance in the data in cases where the restraint was not used. Emphasis should be drawn to the age groups for 13- to 54-year-olds, which are overrepresented as populations not using restraints in fatal crashes. The age groups and percentages are highlighted in red.
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<th>Restraint Not Used</th>
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**Crashes Kill Disproportionately**

- Males are twice as likely as females to be killed in crashes.
- For males turning 16 years old, the odds of being killed in a crash multiply by 7 times.
- For young women turning 16, the chances go up 5 times.
- Why are these young people so terribly at risk?
- They are risk takers, and they fail to buckle up.
- “It will never happen to me.”
- So, we must target this group with education and high-visibility enforcement.
B. What Works and Different Enforcement Methods

Slide 3: What works?

Instructor Note: High-Visibility Enforcement (HVE) is an important component to increase the use of belts. The risk of enforcement, backed up by highly visible efforts and supported through national campaigns, like Click It or Ticket have been shown to change driver behavior.

High-Visibility Enforcement – The public understands that not buckling up will result in a citation.

Slide 4: Targeted Enforcement

Instructor Note: Remind the participants that definitions of paid and earned media can be found in the glossary. Evaluation periods are a component of mobilizations to measure the results of the HVE efforts.

- Targeted Enforcement Periods
  - Highly effective when coupled with media campaign to increase the “perception of risk” from not buckling up.
Slide 5: Sustained Enforcement

Instructor Note: Discuss the value of sustained enforcement as creating the expectation of being held accountable by law enforcement. The optimal result is increased compliance and ultimately fewer citations issued.

- Sustained Enforcement
  - Most effective
  - Enforcement integrated into officer’s daily activities
  - Public understands and expects citations

- Defined periods of earned media, paid media, and intensive enforcement.

- Paid advertisement placement using Click It or Ticket or similar direct enforcement messages.

- Program evaluations involving before, during, and after observation surveys of belt use and surveys of public perceptions of the program.

Selective Enforcement – High seat belt use rates are directly related to vigorous enforcement of a comprehensive belt use law. A Selective Traffic Enforcement Program (sTEP) can produce large gains in belt use over short periods of time. Continuing enforcement between periods of sTEP activity can maintain these gains.

- Highly visible response to problems in a specific area.

- Officers contact ALL violations, but concentrates on violations related to problem.

- Citizens relate police units to an area and make adjustments accordingly.

- Effect lasts after officer leave area.
Types of Aggressive High-Visibility Enforcement Checkpoints

- Checkpoints do work for seat belts and child passenger safety.
- Evening checkpoints do gain more visibility.
- Evening checkpoints generate more attention to nighttime belt enforcement.

Types of Aggressive High-Visibility Enforcement

- Saturation Patrols
- Patrol vehicles deployed in limited areas
- Creates a public perception that enforcement is everywhere
- High visibility is the key
- Enforcement Zones
- Zone is conducted at a controlled location
- Seat belt enforcement zone signs are placed at location
- Officer assesses vehicle for violation as it stops or slows and officer takes appropriate enforcement action

Slide 6: Other Benefits?

Instructor Note: Solicit responses from the class and list student ideas on board or flip chart.
C. Results of Looking Beyond the Ticket

"Looking beyond the ticket" begins before the traffic stop. Believing in, understanding, and recognizing traffic efforts for their inherent value are essential. The following are key elements that can help in being successful.

• Changing the public's and law enforcement's perceptions about traffic enforcement through education, to foster support for traffic enforcement and "looking beyond the ticket" efforts.

• Using accurate statistics to identify traffic and criminal trends provides an effective and strategic management tool. Accurate record-keeping, data collection and analysis, evaluation, and community participation are crucial.

• Evaluating impact and results are vital steps in marketing proactive traffic enforcement and "looking beyond the ticket."

• Traffic law enforcement is universal to law enforcement; it is not a new science or high-tech.

• Traffic law enforcement is an effective tool to reduce criminal activity; it provides a visible deterrent.

• Patrol/traffic officers and deputy sheriffs are versatile and efficient generalists; they enforce traffic laws and apprehend criminals.

Referring to motor vehicle crashes as "accidents" contributes to the perception that they cannot be prevented; when, in fact, very few crashes occur because of uncontrollable circumstances. Proactive traffic enforcement efforts that remove impaired drivers from the road and enforce speed limits and rules of the road can prevent many crashes from occurring. These stops also provide an opportunity for law enforcement officers to reinforce the importance of seat belt and child seat use, which prevent injuries.
For example, the following statements have a positive effect on how the public, law enforcement officers, highway safety advocates, and governmental bodies may perceive traffic enforcement efforts:

- Motor vehicle crashes are not accidents – they are predictable and can be prevented.
- Traffic issues are just as important to the community as criminal issues.
- Traffic law enforcement is an important element of community policing.
- Traffic enforcement does not necessarily require "more" or "new" resources.

Slide 7: More Than Just Seat Belt Tickets

**Instructor Note:** The slide depicts 2007 Colorado *Click It or Ticket* results.

Proactive enforcement of traffic violations results in numerous criminal apprehensions. More significantly, the traffic stop is perceived by the officer and the community as positive. Even though a criminal apprehension may not result during most traffic stops, the officers and the community should not only view traffic enforcement as a safety benefit, but as another tool to be used in the War on Crime. Enlightened law enforcement officers know that traffic stops can prevent crash-related personal tragedies, and they value their efforts based on that knowledge.
Slide 8: Just a traffic stop?

**Instructor Note:** Apply the concept that traffic enforcement is law enforcement, and can often lead to interdiction of other criminal activity.

Slide 9: Enforcement

Traffic stops regularly result in criminal arrests, drug interdiction, and criminal investigations. Some traffic stops are world renowned. For example, the Oklahoma City bombing suspect, Timothy McVeigh, was apprehended by an Oklahoma State Trooper while making a "routine" traffic stop. Serial murderer Ted Bundy, who killed more than 22 women, and the Atlanta child killer, Wayne Williams, who killed 28, were also apprehended because of traffic stops. "Son of Sam," David Berkowitz, who killed 6 and wounded 7, was captured because of a parking ticket.
D. Developing Community Partnerships

Slide 11: Developing Community Partnerships

**Instructor Note:** Community support is critical to enforcement and education efforts. Ask class for suggestions on how different groups can support law enforcement efforts to reduce crashes, injuries, and fatalities. Ask class and/or instructor to identify available resources. Coordination of effort – working with schools, EMS, fire departments, hospitals, ER physicians, and other law enforcement agencies.

While not necessarily making national news, police officers and sheriff’s deputies make hundreds of traffic stops every day that result in criminal apprehensions, directly affecting the security and safety of communities across the country. There are many examples of the agencies and officers who make this a regular part of their job. 
(http://www.nhtsa.dot.gov/people/injury/enforce/Beyond/percept.htm)
Slide 12: Community Partnerships Can

**Instructor Note:** Discuss how the community can be engaged to support occupant protection issues. Ask participants to provide examples of community support they have received, or efforts to coordinate that have been successful.

There are many groups and individuals within every community who are directly impacted by fatal and injury crashes. More specifically, crashes where occupant protection was NOT used. If law enforcement is to truly have an impact, we must reach out to those affected.

**Instructor Note:** Question to class: “Why would it be important to involve different community groups in the overall strategy to improve the use of OP systems?”

Question to class: “In what ways can your agency benefit from forming these types of community partnerships?”

There are many ways in which to use the resources of these various groups. They include but are not limited to:

- **Community Support** – The more types of groups you can get involved, the more support you will have. This will have a “spill-over” effect which will in turn give your agency more support on all programs.

- **Message of Caring** – Your interaction with these groups will send a message that your agency cares about its citizens and the lives that can be saved, not just the revenue generated from citations.

- **Dissemination of Information** – Networks of people and groups can be utilized to help get different messages to the community.
Instructor Note: Question to class: “How can different groups assist with introduction of new laws?”

Question to class: “Why is this approach an effective strategy?”

• Legislative Efforts- The creation and passing of effective legislation has the potential to save thousands of people. One of the more effective ways to make that happen is to have local action groups, such as parents who have lost children in crashes, carry the message to the law makers.

Instructor Note: Ask students to brainstorm groups in their community.

There are many different types of community groups to form these valuable partnerships. Can you name some in your community?

Types of community partnerships:

1. Civic groups such as Kiwanis, Lions, and others
2. Foundations for safety
3. Local foundations
4. Parent groups
5. Other city, State, and local agencies to include law enforcement, transportation, fire, and health
6. Victim advocates
7. School groups such as SADD, Student Council, and others
8. Corporations/businesses
9. Faith-based groups
10. Seat belt survivors
E. Taking Action

Slide 13: Make a Plan

Instructor Note: Individual officers can commit to traffic safety issues. At the agency level, appropriate planning and involvement of stakeholders is critical to success and sustained efforts. By utilizing appropriate data and identifying and applying all of the resources in the community, the participants can positively impact belt use and overall traffic safety.

Slide 14: Planning Considerations

Instructor Note:

- **Data Driven Activity** refers to using State and local crash data and belt usage data to identify target areas.
- **Community Involvement** – utilize community partnerships to help support enforcement efforts.
- **Earned Media** – for example, press coverage.
- **Paid Media** – paid TV, radio, or print advertising.
- **Kick-Off Events** – ask students to brainstorm ways to use the media and/or cite examples in which local media was effective at impacting traffic safety or occupant protection issues in their community. This will include news conferences and community events.
Slide 15: Action Plan Exercise

**Instructor Note:** Hand out *Traffic Occupant Protection Strategies Action Plan* exercise worksheet and have the class members use all information presented to formulate an action plan on how to increase seat belt use in their community. Place participants in small groups, then record ideas from students’ action plans. Instructor – solicit information on enforcement plans and activities.

Slide 16: Why Enforce?

**Instructor Note:** Engage the participants in a general discussion regarding the value and impact of enforcement action. Discussion points will likely include department policy, local statutes and standards, and community expectations.
Slide 17: Course Wrap-Up

**Instructor Note:** Briefly cover the areas addressed in the class, reminding participants of key issues associated with each bullet:

**Bullet 1:** Law enforcement is at greater risk of being involved in a crash due to exposure/time on the road.

**Bullet 2:** Reinforce the value of seat belts to reduce injuries/deaths – remind the class that half the officers killed on duty were killed in traffic-related crashes.

**Bullet 3:** Briefly address the forces discussed in crash dynamics – remind the participants of Newton’s Law of Motion and restraining force needed in crashes.

**Bullet 4:** Remind the participants about seat belts, air bags, child restraints, and how they work together to protect drivers/passengers.

**Bullet 5:** Emphasize Enforcement as a strategy to gain compliance with belt use, and how the class worked on developing action plans.

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Slide 18: Questions?

**Instructor Note:** Distribute appropriate local evaluation forms, and ensure that signatures and information are collected to support education credit (if applicable).
**Instructor Note:** Thank the class for their participation, reinforce officer belt use, and remind them they can make a difference in their agency and community.

Provide course evaluation for feedback – to be completed before the participants leave the classroom.
Instructor Notes:

- Group participants together by agency. The instructor needs to be prepared to address situations if there is only one person from an agency.

- Have participants refer to the “Traffic Occupant Protection Strategy Action Plan” worksheet.

- Have participants answer all questions.

- Worksheet is designed to be completed within 10 minutes.

Discuss with the participants their responses to:

- Who, in your agency, will be responsible for implementing an occupant protection enforcement action plan?

- What are the costs associated with implementing an occupant protection enforcement action plan?

- What is the time line for implementation of these changes?

- What are the benefits to the agency?

- How will you measure your success?

Based on the answers given above, suggest changes to, or components to be included in your agency’s occupant protection enforcement policy. (Instructor – this is a key question. Discuss with class.)

Solicit responses from participants and record on a board or flip chart until there are no new action items offered. This will enhance the learning experience for each participant by providing additional action items for consideration.

Participants should be encouraged to discuss the “Traffic Occupant Protection Strategies Action Plan” worksheet with their appropriate supervisor(s) when they return to duty.
OCCUPANT PROTECTION ENFORCEMENT ACTION PLAN

Name_________________________________ Rank _____________________________

Date_______________________________ Agency_____________________________

Who, in your agency, will be responsible for implementing an occupant protection enforcement action plan?
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

What are the costs associated with implementing an occupant protection enforcement action plan?
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

What is the time line for implementation of these changes?
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

What are the benefits to the agency?
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

How will you measure your success?
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
Based on the answers given above, suggest three changes to or components to be included in your agency’s occupant protection enforcement policy.

1. ________________________________________________________________________
   ________________________________________________________________________

2. ________________________________________________________________________
   ________________________________________________________________________

3. ________________________________________________________________________
   ________________________________________________________________________
**COURSE ANALYSIS**  
**Traffic Occupant Protection Strategies**

Date: _________________________________ Please do not feel bound to limit your remarks to questions on this form. Your pertinent comments on any aspect of the course will be appreciated.

<table>
<thead>
<tr>
<th>RESPONSES (Check the response closest to your opinion)</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>N/A</th>
</tr>
</thead>
</table>
| 1. The following course objectives were accomplished:  
Identify general driving risks. |               |       |                           |          |                  |     |
| Describe the special driving conditions that law enforcement officers face. |               |       |                           |          |                  |     |
| Relate Newton’s Law of Motion to occupant injury in a motor vehicle crash. |               |       |                           |          |                  |     |
| Describe the three collisions in a crash. |               |       |                           |          |                  |     |
| List four types of crashes and their related injuries. |               |       |                           |          |                  |     |
| Describe five ways restraints prevent or minimize injury. |               |       |                           |          |                  |     |
| Discuss why some crashes are unsurvivable. |               |       |                           |          |                  |     |
| Discuss replacement of occupant protection systems after a crash. |               |       |                           |          |                  |     |
| Describe the components of seat belts and their proper use. |               |       |                           |          |                  |     |
| Describe Supplemental Restraint Systems. |               |       |                           |          |                  |     |
| Identify the Four Step Process defined by NHTSA. |               |       |                           |          |                  |     |
| Determine errors in the use of occupant protection systems. |               |       |                           |          |                  |     |
| What do I see, What do I do. |               |       |                           |          |                  |     |
| Describe Crash Investigation Techniques related to seat belt use. |               |       |                           |          |                  |     |
| Describe why reporting occupant protection usage is important. |               |       |                           |          |                  |     |
| Explain the importance of an agency policy. |               |       |                           |          |                  |     |
| Identify applicable state and local occupant protection laws. |               |       |                           |          |                  |     |
| Describe targeted and sustained enforcement. |               |       |                           |          |                  |     |
| Identify high-risk groups. |               |       |                           |          |                  |     |
5. What information would you add, delete, or change in emphasis on this course?

6. Other comments

7. Quality of Instruction:
Please rate the instructors on a scale of 1 to 5 where: 5=Excellent, 4=Very Good, 3=Good, 2=Fair, 1=Poor

2 4 3 2 1

8. Other Training Needs:
Please indicate below if there are any other areas of training you would like to see offered by your NHTSA Regional Office.