

Crash BASIC Countermeasures

B1 – Promoting Defensive Driving

This countermeasure is designed to assist the motor carrier in preventing crashes by trying to anticipate hazardous situations and adjusting driver behavior to compensate. For additional information, see the Unsafe Driving BASIC Safety Management Cycle.

The defensive driver tries to recognize potentially hazardous situations sufficiently in advance to allow time to maneuver past them safely. The defensive driver assumes that other drivers may make mistakes and is on guard in the event that an error is made. The defensive driver searches ahead of what is immediately in front to have advance warning of approaching hazards.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Establish a policy requiring that all drivers be trained in defensive driving techniques, and create a company-wide expectation for safe driving performance. Develop a crash review program. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of drivers in relation to how they should be driving to be defensive drivers. Identify, clearly define, and document roles and responsibilities of supervisors for evaluating drivers' defensive driving habits by periodically riding along with them. 	<ul style="list-style-type: none"> Review Moving Violations Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers in defensive driving techniques and safe driving behavior. Communicate to drivers that common situations, such as crossing intersections, entering expressways, and stopping, can be hazardous. Clearly train and communicate FMCSA's definition for an accident to drivers (Part 390.5) 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' compliance with defensive driving policies by having an evaluator periodically ride along with them. Evaluate personnel who are monitoring drivers' defensive driving performance by making sure they are applying performance standards fairly, consistently, and equitably. Document and monitor all defensive driving training needs and training received. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage defensive driving behavior. Consider providing feedback to drivers as soon as the company is aware that an employee is not fulfilling his/her responsibilities.

Driver Safety Improvement Practices

- Learn to recognize driving situations that can be hazardous.
- Assume other drivers will make errors.
- Adjust speed, position, direction, and attention to be able to maneuver safely if a hazard develops.
- Scan far enough ahead to be able to react safely to approaching situations.
- Scan frequently to the side and rear for passing or approaching vehicles.
- Scan thoroughly before changing speed or direction.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.1 – Requirements and penalties; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 391.11(b)(3) – Can, by reason of experience, training, or both, safely operate the type of commercial motor vehicle that he/she drives; Part 392 – Driving of commercial motor vehicles; Part 390.5 – Definitions

Crash BASIC Countermeasures

B2 – Preventing Right-of-Way Crashes

This countermeasure is designed to assist the motor carrier in preventing crashes by drivers giving “right-of-way” until it is apparent that right-of-way is being given by the other driver. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

Generally the driver who arrives last gives right-of-way to those who are already there. You give right-of-way when entering traffic. You give right-of-way when turning left in front of approaching traffic. You give right-of-way when changing lanes. You move into your intended path or direction only after you are assured that you will not conflict with other traffic.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Consider establishing a policy requiring that all drivers be trained in right-of-way situations. Develop a crash review program for classifying and defining preventable and nonpreventable crashes. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of supervisors for evaluating drivers’ behavior in right-of-way situations by periodically riding along with them. 	<ul style="list-style-type: none"> Review Moving Violations Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers’ safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Define the meaning of right-of-way to drivers, and train drivers in right-of-way situations. Communicate to drivers how crashes are classified as preventable and nonpreventable. 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers’ compliance with right-of-way policies by having an evaluator periodically ride along with them. Evaluate personnel who are monitoring drivers’ right-of-way performance by making sure they are applying performance standards fairly, consistently, and equitably. Document and monitor all right-of-way training needs and training received. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices

- Do not force other drivers to take emergency evasive action because of your improper maneuver into their path.
- Assume other drivers will not see you and avoid you when you maneuver into their path.
- Move into your intended path or direction only after you are assured that there is proper clearance to do so.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles;

Crash BASIC Countermeasures

B3 – Preventing Start-up/Back-up Crashes

This countermeasure is designed to assist the motor carrier in preventing start-up/back-up crashes by anticipating the hazards involved and knowing how to control them safely. For additional information, see the Unsafe Driving BASIC Safety Management Cycle.

During a typical start-up/back-up situation, a vehicle has been parked for a long enough time to allow pedestrians and other vehicles to approach and rest within a few feet of the parked vehicle. Starting up forward or backward, or steering left or right from a stopped position, can create an unexpected hazard for both the driver and bystanders.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring drivers to take time to walk around their vehicle and check for people, vehicles, or other objects. Establish a policy requiring drivers to check for proper mirror adjustments; broken mirrors; proper tail-light, brake-light, and turn-signal functions; and horn and back-up-warning-signal functions. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of drivers to walk around their vehicle and check for hazards. Identify, clearly define, and document roles and responsibilities of all drivers to properly check mirrors, tail lights, brake lights, turn signals, and horns. 	<ul style="list-style-type: none"> Ensure that all drivers are able to perform a check for proper mirror adjustments; broken mirrors; proper tail-light, brake-light, and turn-signal functions; and horn and back-up-warning-signal functions.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Communicate to drivers different types of hazards (pedestrians, other vehicles, etc.) that may arise during start-up/back-up. Train drivers to start up/back up slowly or to wait for hazards to safely move away. Utilize the horn in congested areas when it is allowed. (Some jurisdictions have no-horn-blowing ordinances.) 	<ul style="list-style-type: none"> Monitor, track, and evaluate drivers' compliance with company policies, federal regulations, and local laws and ordinances. 	<ul style="list-style-type: none"> Consider requiring drivers to make a walkaround. Consider providing feedback to drivers who are not fulfilling their roles and responsibilities.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Walk around vehicle, looking for different types of hazards, to ensure you have safe clearance for start-up/back-up each time the vehicle is stopped. Check blind spots on right/left and in front/behind. After the walkaround check, do not delay in moving the vehicle. Do not allow time for another hazard to approach. Check mirrors frequently for proper adjustment. Start up slowly to allow other vehicles and pedestrians, who may unexpectedly approach, to move away safely. Tap horn in congested areas, or recruit a person to assist with signaling for safe operation.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles;

Crash BASIC Countermeasures

B4 – Preventing Rollover Crashes

This countermeasure is designed to assist the motor carrier in preventing rollover crashes by promoting a clear understanding of how and why rollovers occur and how to judge safe speed when approaching and negotiating curves. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

Commercial motor vehicles will roll over when negotiating a curve at an excessive speed. Automobiles can lose traction and slide out of a curve instead of rolling over. Top-heavy vehicles are more likely to roll over than to slide out when negotiating a curve at excessive speeds.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring drivers to receive training related to speeding and rollovers. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of drivers related to compliance with company policies, local driving laws, and ordinances. 	<ul style="list-style-type: none"> Review Moving Violation Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.
Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Communicate to drivers that the posted advisory speed on curves generally applies only to automobiles and not to commercial vehicles, and that negotiating a curve at high speeds can result in a rollover. Train drivers on what conditions increase the probability of rollovers. 	<ul style="list-style-type: none"> Periodically review each driver's MVR. Evaluate personnel who are monitoring drivers' safe driving performance by making sure they are applying performance standards fairly, consistently, and equitably. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior.

Driver Safety Improvement Practices

- Ensure that loads are secured to prevent moving from side to side. (Part 392.9)
- Remember that top-heavy cargo will cause commercial vehicles to roll over on curves at speeds lower than those at which vehicles loaded with flat, compact cargo will roll over.
- Reduce speed before entering curve. If you enter curves too fast, you may not have enough time to slow down before rolling over.
- Speeds maintained according to curve advisory may not be slow enough to prevent rollover of commercial vehicles.
- Since trailers usually begin to roll first, you may not know you are rolling over until it is too late. Slow down before you get into the curve.
- Stay off the shoulder on curves. Your right or left side wheels may drop or sink down into a shoulder and increase your chance of rollover.
- Slow down substantially for unfamiliar curves.
- Lubricate the fifth wheel adequately.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties;
 Part 383.111 – Required knowledge; Part 383.113 – Required skills;
 Part 392 – Driving of commercial motor vehicles;

Crash BASIC Countermeasures

B5 – Preventing Passing Crashes

This countermeasure is designed to assist the motor carrier in preventing crashes during passing by anticipating and knowing how to avoid hazards safely. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

Safe passing maneuvers require well-developed skills and judgment. Before performing a passing maneuver, check sight distance ahead, check mirrors for rear traffic, check for traffic passing you, and estimate speed and position of approaching vehicles. Estimating time and position involves accelerating, steering, and checking for traffic entering from side roads. The probability that the driver will make an error when maneuvering for a pass is high because the driver must perform several tasks in a short time unless the maneuver is done cautiously. Because it sometimes takes a long time before an opportunity to pass safely arises, some drivers take risks and assume other drivers will compensate for their own aggressiveness.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained to perform safe passing maneuvers. Develop a policy requiring qualified personnel to ride with drivers to assess driving habits. Develop a step-by-step procedure for safely completing a pass. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of senior managers for implementing safe passing training. Identify, clearly define, and document roles and responsibilities of personnel to ride with drivers to assess driving habits. 	<ul style="list-style-type: none"> Review Moving Violation Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to perform safe passing maneuvers. Communicate to drivers the step-by-step procedure for safely completing a pass. 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' safe passing maneuvers. Evaluate personnel who are monitoring drivers' safe driving performance by making sure they are applying performance standards fairly, consistently, and equitably. Periodically review each driver's MVR to ensure compliance. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Check for broken mirrors and loose mountings. Check tail-light, brake-light, and turn-signal function. Always signal your intention to pass. Prior to performing a pass, check to be certain no one is passing you. Assume the driver in front of you does not know you are passing. While you are passing, watch carefully for vehicles that may be entering the roadway from side roads or driveways. Assume vehicles approaching from the opposite direction will not see you or slow down for you to complete your passing maneuver. Watch out for vehicles passing other vehicles from the opposite direction. If the vehicle you are trying to pass speeds up, let it go. Do not get into a dangerous race. Do not take risks. If in doubt, don't pass.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles

Crash BASIC Countermeasures

B6 – Preventing Left and Right Turning Crashes

This countermeasure is designed to assist the motor carrier in preventing turning crashes by anticipating the hazards involved and knowing how to avoid them safely. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

Making left or right turns with long vehicles creates problems that automobile drivers do not have. Blind spots make it difficult to see other vehicles. Vehicle length forces drivers to make wide turns, encroaching upon adjacent lanes of traffic. Improper tracking of vehicles makes it difficult for the driver to judge position. Turning takes longer to complete, thus increasing exposure time to hazards. Drivers should recognize the hazards created while turning and follow proper procedures to minimize them.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained to perform safe turning procedures. Develop a policy requiring qualified personnel to ride with drivers to assess driving habits. Develop a step-by-step procedure for safely completing a turn. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of senior managers for implementing safe turning training. Identify, clearly define, and document roles and responsibilities of personnel to ride with drivers to assess driving habits. 	<ul style="list-style-type: none"> Review Moving Violation Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to perform safe turning procedures. Communicate to drivers the step-by-step procedure for safely completing a turn. Attach "Wide Right Turn" decal on rear of vehicles. Train drivers to examine routes to minimize travel and turning at difficult or hazardous intersections. 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' safe turning procedures. Evaluate personnel who are monitoring drivers' safe driving performance by making sure they are applying performance standards fairly, consistently, and equitably. Periodically review each driver's MVR to ensure compliance. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Check for broken mirrors and loose mountings. Check tail-light, brake-light, and turn-signal function. Always signal your intention to turn. When making a right turn: <ul style="list-style-type: none"> Move to the right lane well in advance of intersection, and position to make a safe turn. Keep rear of vehicle to the right, blocking vehicles from passing on the right. If encroaching upon other lanes, wait for other vehicles to clear, then turn slowly. Be careful that improper tracking does not cause the vehicle or trailer to ride up onto curb or strike stationary objects. When making a left turn: <ul style="list-style-type: none"> Turn signal on, and watch for drivers who may misinterpret this signal as an intention to turn somewhere before your intended turning point. Do not start turning until there is enough time for the rear of vehicle to clear the intersection without forcing opposing drivers to slow down or swerve. Do not assume opposing drivers will see you. Be careful that improper tracking does not cause the vehicle or trailer to interfere with pedestrians and other vehicles.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles;

Crash BASIC Countermeasures

B7 – Preventing Intersection Crossing Crashes

This countermeasure is designed to assist the motor carrier in preventing intersection crashes by anticipating the hazards involved and knowing how to avoid them safely. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

Crossing intersections with long vehicles presents problems that automobile drivers do not have. Commercial vehicles and buses take much more time to cross and clear intersecting roads than do automobiles, because of length and slow acceleration. At night, the sides of long vehicles or trailers may not be conspicuous to approaching drivers. Drivers of large vehicles must recognize these difficulties and take special care when crossing intersections, particularly uncontrolled intersections.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained to perform safe procedures when crossing intersections. Develop a policy requiring qualified personnel to ride with drivers to assess driving habits. Develop a step-by-step procedure for approaching, entering, and traversing intersections. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of senior managers for implementing training regarding safe procedures when crossing intersections. Identify, clearly define, and document roles and responsibilities of personnel to ride with drivers to assess driving habits. 	<ul style="list-style-type: none"> Review Moving Violation Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to perform safe procedures when crossing intersections. Communicate to drivers the step-by-step procedure for safely crossing an intersection. 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' safe-road-crossing procedures. Evaluate personnel who are monitoring drivers' safe driving performance by making sure they are applying performance standards fairly, consistently, and equitably. Periodically review each driver's MVR to ensure compliance. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Make sure that side-marker lights on tractors, trailers, and buses are operational. Keep the sides of vehicles clean. Add reflectors and/or reflective tape on sides of vehicles. Approach intersection assuming that cross-traffic may not obey traffic controls, and anticipate the need for avoidance. When crossing an uncontrolled intersection, allow enough time to clear entire road with rear of vehicle without interfering with cross-traffic. Do not count on cross-traffic slowing down to let you pass; they may not see you. Crossing uncontrolled intersections at night with large vehicles is especially hazardous. Although approaching drivers may see your headlights from the side, they may not realize that you have a long trailer following. Be very careful with dark-colored, unloaded, flatbed trailers.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles;

Crash BASIC Countermeasures

B8 – Preventing Lane Use and Change Crashes

This countermeasure is designed to assist the motor carrier in preventing crashes during lane use and lane changing by recognizing the potential hazards and knowing how to control them safely. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

Lane-use and lane-changing crashes primarily result from following too closely or being inattentive to traffic conditions ahead. In either case, defensive driving is the most effective countermeasure. The existence of blind spots around large vehicles is the major contributing factor to lane-change crashes, resulting in sideswipes and rear-end collisions.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained to perform safe lane usage and lane changing. Develop a policy requiring qualified personnel to ride with drivers to assess driving habits. Develop a step-by-step procedure for safely completing a lane change. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of senior managers for implementing safe-lane-change training. Identify, clearly define, and document roles and responsibilities of personnel to ride with drivers to assess driving habits. 	<ul style="list-style-type: none"> Review Moving Violation Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to perform safe-lane-usage and lane-changing procedures. Communicate to drivers the step-by-step procedure for safely completing a lane change. Reinforce to drivers that most lane-use and lane-changing crashes result from following too closely. 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' safe-lane-usage and lane-changing procedures. Evaluate personnel who are monitoring drivers' safe driving performance by making sure they are applying performance standards fairly, consistently, and equitably. Periodically review each driver's MVR to ensure compliance. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Check for broken mirrors and loose mountings. Clean mirrors and check adjustment frequently. Check that brake lights and turn signals are functioning properly. Check brake performance. The most important rule in lane usage is to maintain a safe following distance. Use any method you feel comfortable with. Just try to ensure that if the driver in front of you slams on the brakes, you can avoid a collision, stay in your lane, and not be hit by the vehicle following you, all at the same time. Try to scan ahead of what is immediately in front of you. If you see trouble ahead, flash your brake lights to alert drivers following you. If you cannot see ahead of the vehicle you are following, increase your following distance. Other drivers may swerve into the next lane to avoid a slow or stopped vehicle and leave you exposed to rear-end collision. The existence of blind spots to the right of large vehicles is well known. However, automobile drivers may not know that you cannot see them as they pass you on the right. Scan to the right thoroughly before steering into the next lane. Give right-of-way; do not take it.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles;

Crash BASIC Countermeasures

B9 – Preventing Crashes Involving Parked Vehicles

This countermeasure is designed to assist the motor carrier in preventing crashes when the vehicle is parked by anticipating the hazards involved and knowing how to avoid them safely. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

Parking in, or partially in, a travel lane creates a hazard, especially at night. On congested metropolitan streets, drivers expect to see parked vehicles in their lane and are usually ready to react and avoid them. On the other hand, on rural and high-speed roads, drivers do not expect to see vehicles parked in their lane and may not be able to react quickly enough or be paying attention to avoid collision.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained to perform safe parking procedures and to set up emergency triangles. Develop a policy requiring qualified personnel to ride with drivers to assess driving habits. Develop a step-by-step procedure for safely completing a turn. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of senior managers for implementing safe parking training. Identify, clearly define, and document roles and responsibilities of personnel to ride with drivers to assess driving habits. 	<ul style="list-style-type: none"> Review Moving Violation Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to perform safe parking procedures. Communicate to drivers the step-by-step procedure for safely parking. Train drivers on how to set up and place triangles. 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' safe parking procedures. Evaluate personnel who are monitoring drivers' safe driving performance by making sure they are applying performance standards fairly, consistently, and equitably. Periodically review each driver's MVR to ensure compliance. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Keep vehicles clean, especially the rear of the vehicle. Ensure that tail light and flashers are functioning properly. Store emergency reflective triangles and/or flares in vehicle. Check the battery frequently. Always try to park your vehicle off the road altogether. Even leaving a small portion of the vehicle in the travel lane creates a serious hazard. If you pull off onto the shoulder, turn on your flashers, day or night. At night, drowsy drivers who see only tail lights on your vehicle may follow you onto the shoulder, thinking you are still moving. If a sudden breakdown or other emergency forces you to park in a travel lane, turn on your flashers immediately. Set up reflective triangles at the proper distances immediately. If you have a CB, call for help. This can be especially hazardous for both you and other drivers at night, so be extremely careful.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles; Part 392.22 – Emergency signals; stopped commercial motor vehicles;

Crash BASIC Countermeasures

B10 – Preventing Downgrade Crashes

This countermeasure is designed to assist the motor carrier in preventing loss-of-control crashes on downgrades by proper brake system maintenance and by developing the skills and knowledge needed to negotiate a downgrade safely. For more information, see the Vehicle Maintenance BASIC and Unsafe Driving BASIC Safety Management Cycles.

The main cause for loss of control on downgrades is brake failure. Brake failure is usually the result of the use of improper control techniques by the driver. The brake system may be damaged or maladjusted and may not have sufficient capacity for downgrade control. Primary countermeasures for preventing a runaway are adequate driver skills, frequent checks on brake operation, and adequate preventative maintenance.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained to properly control vehicles on downgrades and to inspect the condition of brake systems. Develop a policy requiring the maintenance crew to inspect and adjust brake systems frequently. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles of senior managers for implementing training regarding how to properly control vehicles on downgrades. Identify, clearly define, and document roles and responsibilities of drivers and maintenance crew in relation to brake systems inspection, repair, and maintenance. 	<ul style="list-style-type: none"> Check with previous employer(s) regarding drivers' safety performance. Check with previous employer(s) regarding mechanics'/technicians' quality of work, including whether the maintenance services were systematic and well documented. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to select proper gearing for downgrade descents. Train drivers to check the condition of braking systems. Train drivers on how to use brake application pressure gauges. Communicate to maintenance crew to inspect and adjust brake systems frequently. (Part 396) 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' ability to control vehicles on downgrades. Evaluate personnel who are monitoring fleet maintenance performance by making sure they are applying performance standards fairly, consistently, and equitably. Document and monitor all driver and maintenance crew training needs and training received. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices

- Inspect and adjust brakes frequently, especially for vehicles used in mountainous terrain.
- Do not wait for slack adjuster stroke to exceed maximum permissible. Adjust to minimum acceptable stroke whenever convenient.
- Make every effort to replace aged brake lines and diaphragms before they fail.
- The gear to select for descending a grade should be no higher than that required for ascending the same grade. Some vehicles may require lower gears going down than going up. Know your vehicle.
- Do not use more than light (10 psi) brake pressure to retard speed. If speed cannot be controlled with light pressure, use a lower gear ratio.
- Do use hand lever to apply only trailer brakes. You could overheat trailer brakes and not have enough capacity in tractor to control speed adequately.
- Stop, put truck in proper gear, and check brake function before descending long, steep grades.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles; Part 396 – Inspection, repair and maintenance;

Crash BASIC Countermeasures

B11 – Preventing Weather-Related and Adverse Condition Crashes

This countermeasure is designed to assist the motor carrier in preventing crashes by developing the driver skills and judgment necessary to operate a vehicle safely during adverse traction and visibility conditions. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

Failure to adjust to adverse conditions is a major factor in crash causation. The adverse conditions most frequently encountered that cause reduced traction include rain, snow, ice, slush, and gravel. Reduced-visibility conditions include twilight, darkness, rain, snow, and fog. Drivers should not only develop the skills and judgment necessary to keep their own vehicle safely under control but should also try to anticipate and be prepared to compensate for errors that other drivers make during such poor driving conditions.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained to maneuver safely and judge speed on slippery surfaces. Establish procedures that outline how to schedule efficiently during times of inclement weather. Provide drivers with an option to practice vehicle handling on slippery surfaces on a safe off-road area. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles of senior managers for implementing training for drivers to maneuver safely in adverse conditions. Identify, clearly define, and document roles and responsibilities of drivers in relation to compliance with company policies. 	<ul style="list-style-type: none"> Review Moving Violation Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to maneuver safely and judge safe speeds on slippery surfaces. Train drivers on how to use tire chains. Train drivers on what causes, and how to prevent, jackknives. Ensure that dispatchers make allowances for adverse weather conditions. 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' ability to drive safely in adverse conditions and on slippery surfaces. Document and monitor all drivers' training needs and training received. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Check tire tread wear, tire pressure, windshield wiper and washer condition, mirror systems, headlight-beam aim, and proper functioning of lights and signals, including emergency flashers. Reduced-traction conditions: <ul style="list-style-type: none"> Increase following distances enough to avoid a rear-end collision if other driver brakes. Use moderation in judging speed. Maintain safe stopping distance and slow down. Apply brakes gently and steer without jerky movements. Beware when running on empty or bobtailing. Lightly loaded wheels lock up easily during braking, and this induces jackknifing. Beware of traveling too slowly on slick, banked curves. The vehicle can slide sideways. Reduced-visibility conditions: <ul style="list-style-type: none"> Use moderation in judging speed. Maintain safe stopping distance and slow down. Keep vehicle clean, especially headlights, windshield, and tail lights. Use emergency flashers in extreme conditions. Be prepared to get off road and wait for conditions to improve.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 392 – Driving of commercial motor vehicles; Part 392.14 – Reducing speeds under hazardous conditions;

Crash BASIC Countermeasures

B12 – Preventing Crashes in Emergency Situations

This countermeasure is designed to assist the motor carrier in preventing crashes during emergency situations by anticipating the hazards involved, knowing how to avoid them safely, and using available emergency equipment. For more information, see the Vehicle Maintenance BASIC and Unsafe Driving BASIC Safety Management Cycles.

Emergency situations include stalling in a travel lane, stopping for a crash in your path, engine-compartment fire, wheel fire, burned-out light bulbs, and blown fuse in lighting circuit. Having emergency equipment available in your vehicle and knowing how to use it will greatly assist you in avoiding hazards that arise in emergency situations.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained regarding emergency equipment requirements and emergency procedures. Establish a policy requiring that all vehicles be equipped with emergency equipment (Part 393.95). 	<ul style="list-style-type: none"> Identify, clearly define, and document roles of senior managers for implementing training on how to execute emergency procedures and how to use emergency equipment. Identify, clearly define, and document roles and responsibilities of drivers in relation to compliance with company policies. 	<ul style="list-style-type: none"> Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to use and maintain required emergency equipment (reflective triangles, fire extinguisher, etc.) and on emergency procedures (what to do if their vehicle suddenly stalls on the roadway, etc.). 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' ability to handle emergency situations and equipment. Document and monitor all drivers' training needs and training received. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Ensure that the emergency flashers on the tractor and trailer function properly. Always have electrical fuses (if fuses are used), reflective triangles, and fire extinguisher in the vehicle. If you stall while driving, turn on emergency flashers immediately and try to coast off to shoulder if safe to do so. If you stall and stop on roadway, turn on emergency flashers immediately, then set up reflective triangles. Call for help if possible. If you stall at night, take extra care. Controlling and extinguishing fires safely requires special knowledge. If you do not know how to handle a fire emergency, you can easily exacerbate the situation and injure or kill yourself. Select a good reference on vehicle fire control and study it well. Since you will seldom encounter a fire, it is easy to forget what to do. Refresh your memory by reviewing procedures frequently.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.110 – General requirement for knowledge and skills; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles; Part 392.8 – Emergency equipment, inspection, and use; Part 392.22 – Emergency signals; stopped commercial motor vehicles; Part 392.24 – Emergency signals; flame-producing; Part 392.25 – Flame producing devices;

Crash BASIC Countermeasures

B13 – Preventing Crashes Involving Pedestrians

This countermeasure is designed to assist the motor carrier in preventing crashes involving pedestrians by anticipating hazards likely when maneuvering close to pedestrians and knowing how to handle such situations safely. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

Most pedestrian crashes occur when the pedestrian walks onto a roadway and into the path of an approaching vehicle. Pedestrians often misjudge the speed and proximity of a commercial motor vehicle. Some pedestrians assume that because they can see you, you can see them. These errors in judgment are why pedestrian crashes are prevalent. Drivers should try to anticipate pedestrian errors and be prepared to compensate.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained to maneuver safely near pedestrians. Develop a policy requiring qualified personnel to ride with drivers to assess driving habits. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of senior managers for implementing safe driving training around pedestrians. Identify, clearly define, and document roles and responsibilities of personnel to ride with drivers to assess driving habits. 	<ul style="list-style-type: none"> Review Moving Violation Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers' safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to maneuver safely around pedestrians. Communicate to drivers the step-by-step procedure for maneuvering safely around pedestrians. 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers' maneuvering near pedestrians. Evaluate personnel who are monitoring drivers' safe driving performance by making sure they are applying performance standards fairly, consistently, and equitably. Periodically review each driver's MVR to ensure compliance. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe driving behavior. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Check vehicle for broken mirrors and loose mountings. Install adequate indirect vision devices. Ensure that the horn is operating properly. When maneuvering near pedestrians, anticipate that they may do the unexpected. Adjust your driving to safely avoid a pedestrian who jumps out in front of you. It is difficult for pedestrians to correctly judge how fast you are approaching. If you are traveling faster than normal for an area, the pedestrian may make the judgment that there is time to cross when it really may not be the case. Pedestrians will often assume that you see them and that you will slow down for them to complete their crossing. Do not assume they will give you right-of-way until it is obvious they are waiting for you to pass. At night, pedestrians assume you can see them because they can see your headlights. Use extra care at night in pedestrian areas. Remember that improper trailer tracking on turns may cause your trailer to run onto the sidewalk. Turn widely enough to avoid this, and go very slowly. Pedestrians all too often walk or stand in the blind spots in front and to the right of your vehicle. Scan around the vehicle thoroughly when pedestrians are present.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties; Part 383.110 – General requirement for knowledge and skills; Part 383.111 – Required knowledge; Part 383.113 – Required skills; Part 392 – Driving of commercial motor vehicles;

Crash BASIC Countermeasures

B14 – Preventing Passenger Carrying Commercial Motor Vehicle Crashes and On-Board Injuries Caused by Passenger Behavior

This countermeasure is designed to assist the motor carrier in preventing crashes and on-board injuries caused by unsafe passenger behavior. For more information, see the Unsafe Driving BASIC Safety Management Cycle.

There are many ways that passengers distract the driver. Passengers can physically interfere and/or restrict the driver’s freedom to maneuver aggressively to avoid crashes. Passengers can injure themselves by not sitting properly in designated seating areas. The driver must manage the passengers to avoid problems.



Safety Management Process

Policies and Procedures	Roles and Responsibilities	Qualification and Hiring
<ul style="list-style-type: none"> Develop a policy requiring that all drivers be trained to manage passengers for safe transportation. Develop a policy requiring qualified personnel to ride with drivers to assess passenger management. Develop a policy requiring all vehicles to be compliant with applicable federal and state regulations regarding safe design and required equipment. 	<ul style="list-style-type: none"> Identify, clearly define, and document roles and responsibilities of senior managers for implementing training for managing passengers. Identify, clearly define, and document roles and responsibilities of personnel to ride with drivers to assess passenger management habits. Identify, clearly define, and document roles and responsibilities of drivers for making pre-trip announcements to passengers about maintaining safe conduct and the need to follow rules of conduct. 	<ul style="list-style-type: none"> Review Moving Violation Records (MVRs) for all prospective drivers as part of the hiring process. Check with previous employer(s) regarding drivers’ safety performance. Consider enhancing the recruitment process to identify and attract applicants who qualify under the FMCSRs by using outside sources: websites, insurance companies, industry groups, consultants, etc.

Training and Communication	Monitoring and Tracking	Meaningful Action
<ul style="list-style-type: none"> Train drivers on how to practice safe passenger management. Communicate to drivers the step-by-step procedure for safe passenger management. 	<ul style="list-style-type: none"> Monitor, track, and evaluate all drivers’ safe passenger management. Evaluate personnel who are monitoring drivers’ passenger management performance by making sure they are applying performance standards fairly, consistently, and equitably. Periodically review each driver’s MVR to ensure compliance. 	<ul style="list-style-type: none"> Consider utilizing incentives and/or recognition programs in order to reward and encourage safe passenger management habits. Consider providing feedback to drivers as soon as the company is aware that their knowledge in this area is deficient, and address with appropriate training.

Driver Safety Improvement Practices
<ul style="list-style-type: none"> Do not drive if your passengers are in an unstable position. You might feel restricted from braking or steering aggressively to avoid a crash. Do not drive if standing passengers are close to you, as they may fall over you unexpectedly, causing you to lose control. Do make announcements informing passengers of their responsibility to act safely. If passengers refuse to cooperate, stop the vehicle until you are satisfied that it is safe to continue driving.

REFERENCES: FMCSR Part 383 – Commercial driver's license standards; requirements and penalties;
 Part 392 – Driving of commercial motor vehicles;
 Part 392.60 – Unauthorized persons not to be transported;
 Part 392.62 – Prohibited practices for safe operation of buses; Part 392.63 – Prohibited practices for towing or pushing loaded buses; Part 392.64 – Riding within closed commercial motor vehicles without proper exits;
 Part 393.90 – Buses, standee line or bar;