

THE UNIVERSITY OF CALIFORNIA  
CORE PLUS™



DRIVER SAFETY  
TRAINING PROGRAM

DEVELOPED BY THE  
DRIVER AND VEHICLE SAFETY WORKGROUP  
OF THE  
UC RISK MANAGEMENT LEADERSHIP COUNCIL





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# PROGRAM OVERVIEW





## THE UNIVERSITY OF CALIFORNIA CORE PLUS™ DRIVER SAFETY TRAINING PROGRAM

### MISSION:

To make sure that every person who drives in support of University of California research, teaching and public service is able to do so safely.

### GOALS:

- Prevent injury and loss of life
- Reduce fuel and maintenance costs; property and liability losses and operational disruptions,
- Raise the driving skill level of UC drivers above that of the general population
- Provide a solid foundation of knowledge about advanced driving safety principles
- Verify by direct observation that identified categories of drivers are actually able to apply driving safety principles in typical driving situations
- Provide regular, ongoing training to maintain and enhance the skill levels of UC drivers
- Provide appropriate collision prevention training when analysis of a driving problem identifies a deficiency in knowledge or skill

### PROGRAM OVERVIEW:

The UC CORE PLUS™ Driver Safety Training Program is based on the view that an effective driver training program has as its foundation sound principles of operational and defensive driving that are applicable in virtually all driving situations – which are then sharply focused on the particular type(s) of driving the trainee is most likely to perform. While the methods and delivery systems employed to communicate these principles may vary from location to location, the content is universally applicable across the UC System. For most drivers, this means they will eventually complete the CORE TRAINING and *at least one PLUS TRAINING MODULE*.

The UC CORE and CORE PLUS™ recommended curricula encompass three distinct mandatory areas (plus a fourth elective area):

1. Vehicle Inspections
2. Defensive Driving
3. Collisions, Breakdowns and Other Mishaps
4. Behind-the-Wheel Evaluation (elective)

### THE CORE TRAINING:

The CORE TRAINING material constitutes the foundation upon which all subsequent training is built. Each PLUS MODULE then applies these same general principles to the specific characteristics, challenges and operational realities of each separate category of vehicles and usage. Every person who drives while performing UC business or otherwise operates a university vehicle should eventually complete the CORE TRAINING and the appropriate PLUS MODULE(s) for every category of vehicle they drive.

*Vehicle Inspections*, the first CORE area, is intended to reduce the likelihood that mechanical failure will contribute to a collision or other mishap. Additionally, training drivers to detect emerging problems before they cause a breakdown can help reduce both maintenance costs and the subsequent indirect consequences of unanticipated vehicle failures.

*Defensive Driving*, the second CORE area, is the heart of CORE PLUS™ collision prevention. Defensive driver training will teach the driver's role and responsibilities, as well as basic safety concepts, including visual scanning, space management, speed control and hazard perception.

In addition to collision prevention, the Defensive Driving area also introduces the concept of low-forces driving for reduced energy consumption and extended vehicle life. Finally, a review of basic vehicle mechanical systems provides a foundation for understanding crucial operational differences between different types of vehicles.



Defensive driving courses and training materials are widely available from multiple vendors, including the National Safety Council. While each UC location is free to select their own source of defensive driving content, a number of locations have reported considerable satisfaction with the Smith System™ and use this program's strategy in their approach to the Defensive Driving portion of CORE PLUS™. Locations needing to contract with outside vendors for driver training due to insufficient internal resources should discuss the entire Core Plus content with their vendors to determine what customization of "standard" commercial curricula may be possible in order to incorporate the expanded CORE PLUS™ material.

*Collisions, Breakdowns and Other Mishaps*, the third CORE area, provides essential information to prepare drivers to deal safely with unplanned events, to mitigate damage and to minimize the risk of further harm, regardless of setting or type of event. This area also introduces the key differences between preventable/nonpreventable and at-fault/not-at-fault findings of collision analyses.

*Behind-the-Wheel Self-Evaluation* is the final and elective part of the CORE TRAINING, which every participant should be encouraged to complete. Each participant will have an opportunity for structured practice in applying their CORE TRAINING knowledge to the actual practice of driving a vehicle and to prepare themselves for the instructor-led behind-the-wheel coaching and evaluation component of the subsequent CORE PLUS™ MODULES

A detailed description of recommended course content for the CORE TRAINING appears in Appendix A

## The CORE PLUS™ MODULES

Each CORE PLUS™ MODULE follows the same general format as the CORE TRAINING:

- Vehicle checkout and inspection
- Defensive driving
- Collisions, breakdowns and other mishaps

While CORE TRAINING material is generally not repeated in the PLUS MODULES, key principles introduced in the CORE TRAINING are applied to the particular types of vehicles and driving situations for which each PLUS MODULE is designed. Most importantly, each PLUS MODULE includes an observed behind-the-wheel, vehicle-specific skill practice and demonstration component to ensure that graduates are actually able to meet UC performance standards. Detailed descriptions of course content for the initial CORE PLUS™ MODULES appear in Appendix B.

The following categories of vehicles and usage have been initially identified as warranting individual PLUS TRAINING MODULES:

- Bus/Shuttle Operations
- Emergency Vehicle Operations
- Low-Speed Vehicle Operations
- Off-Road Vehicle Operations
- Passenger Automobile Operations
- Passenger Van Operations
- Service Vehicle Operations
- Specialized Vehicle Operations
- Trailer Operations
- Van Pool Operations

Characteristics of the above classifications are summarized in the table on the next page.



UC CORE PLUS™ TRAINING MODULES			
CATEGORY	INCLUDES	CHARACTERISTICS	TYPICAL RISKS
<b>Bus/Shuttle Operations</b>	Full-size buses and various transit buses and shuttle vans usually operated on a continuous basis	Continuous passenger transportation by professional drivers with commercial licenses	Constant starts and stops, loading/ unloading, distractions, seriously extended stopping distance, impaired visibility at side and back, multiple potential litigants onboard, schedule demands
<b>Emergency Vehicle Operations</b>	Police, fire and ambulance vehicles in emergency operation only	Depending on branch of emergency service, may include cars, vans, light trucks and heavy trucks	Hazards of emergency (Code 3) operation including intersection collisions, loss of control and unsafe acts of other drivers
<b>Low-Speed Vehicle Operations</b>	Low-speed electric- and gas-powered vehicles, including NEVs (such as GEM, Taylor Dunn, Columbia, Miles, etc.)	Low-speed vehicles routinely used for service and deliveries on paths and service roads; some may operate on public streets	Reduced visibility to other vehicles, rollover hazard, pedestrian mishaps due to quiet operation and surprises, roll-away and joyride thefts due to failure to secure vehicle properly while parked
<b>Off-Road Vehicle Operations</b>	Vehicles and equipment with incidental road travel (such as ATVs, tractors, backhoes, forklifts, etc.)	Operation at and between job sites by assigned equipment operators	Impaired visibility, awkward driving positions, inconsistent seat belt use, rollover/ejection hazard, unstable at road speeds, proximity to pedestrians at job sites, high noise levels
<b>Passenger Automobile Operations</b>	Passenger cars, including sport utility vehicles, operated by employees (including student-employees) and others on behalf of the university	Includes personally owned, department-owned, fleet, and rental cars used for business purposes	Distractions from passengers, operation with unfamiliar vehicle and/or unfamiliar surroundings, drivers who may be young and/or inexperienced, fatigue on long trips
<b>Passenger Van Operations</b>	Passenger vans operated by nonprofessional drivers on an occasional basis	Fleet, department-owned or commercially rented vans driven by nonprofessional drivers	Unfamiliarity with vehicle, extended stopping distance, impaired visibility, fatigue on long trips, inconsistent seat-belt use, rollover/ejection hazard
<b>Service Vehicle Operations</b>	Pickup trucks, cargo vans, flat-bed trucks, utility trucks, mail trucks	Work trucks used for deliveries or to transport tools or goods to job sites	May include frequent starts/stops, visibility may be impaired, external equipment needs to be properly secured, vehicles may be older, drivers often alone (backing hazard and potential seat belt compliance issues)
<b>Specialized Vehicle Operations</b>	Trash trucks, dump trucks, bucket trucks, straight trucks, street sweepers, tow trucks and nonemergency operation of fire trucks	Often large, with specialized equipment for specific tasks – may require commercial license	May include frequent starts/stops, potentially heavy payloads, extended stopping distance, impaired visibility, routine operations with light clearances
<b>Trailer Operations</b>	All trailers, such as those used for bikes, heavy equipment and boats, as well as towable equipment, such as mixers, chippers and portable climbing walls	Local and long-distance, low-speed and highway speed, with and without trailer brakes	Connection failures, extended stopping, jackknife risk with sudden braking/evasive maneuvers, engine/brake overheating risk, loading/unloading hazards
<b>Van Pool Operations</b>	Passenger vans operated by nonprofessional drivers who drive vans regularly	Voluntary commuter transport by volunteer drivers making one round trip/day	Some loading/unloading, distractions, impaired visibility at side and back, inconsistent seatbelt use, rollover/ ejection hazard



Additional PLUS MODULES may be developed by any location to address other vehicle types (e.g., agricultural equipment). Likewise, subject-specific TARGET MODULES addressing individual topics, such as backing or stationary object collisions, may be developed in response to trends in loss experience data.

**DRIVER TRAINING NEEDS:** The CORE PLUS™ Program is intended to address the full spectrum of driver training needs across the university. As new needs are identified, CORE PLUS™ will evolve to meet those needs. At the present time, three distinct driver training needs are recognized:

1. Initial training for current employees and future hires/rehires
2. Periodic general refresher/update training for all drivers
3. Subject-specific retraining for drivers with identified gaps in knowledge or skill.

CORE PLUS™ will first focus on initial driver training. Development of additional tracks for routine refresher training and subject-specific retraining will follow.

Since all drivers cannot be trained simultaneously, it is logical to first train those most at risk. The degree of risk for each driver is primarily determined by two factors: exposure and driving performance.

*Exposure* is measured by either amount of driving time (e.g., hours per month) or number of miles driven in a defined period of time.

*Driving Performance* is shaped by attitude, knowledge, skills, age and experience. Other significant factors include vehicle type and operating condition, road and environmental conditions, distractions and the driver's degree of familiarity with the geographical area and roadways.

Here is an example of a four-category system for classifying drivers by *exposure*, using hours driven per month:

- Occupational Driver (drives daily, or more than 25 hours per month)
- Frequent Driver (drives from 10 to 25 hours per month)
- Semi-Frequent Driver (drives from 5 to 10 hours a month)
- Occasional Driver (drives less than 5 hours per month)

Alternately, here is an example of a three-category system for classifying drivers by evaluating their *performance*, using such factors as collision/citation history, observed/reported skill problems, prior training, long-distance driving, youth, inexperience with vehicle type, etc.:

- High risk
- Moderate risk
- Low risk

Eventually, all UC drivers should receive initial and ongoing training appropriate to their duties and level of risk. During the implementation phase across the system, resources should be deployed towards those identified as being at greatest risk. Individual locations' loss experience data will also be critical in prioritizing which driver groups receive the initial focus.

**DELIVERY METHODS:** A number of delivery methods can be used to deliver the CORE PLUS™ content, and these are expected to vary, at least initially, from location to location. Printed handouts (brochures/pamphlets), instructor-led face-to-face classes, computer or Web-based courses, and in-vehicle observation and skill practice all have pros and cons. One approach would be to develop a computer-based, system-wide CORE PLUS™ driver training series to which location-specific information and enhancements could easily be appended, ideally using the UC Learning Management System as the delivery platform. In the coming months, the Driving and Vehicle Safety Workgroup of the Risk Management Leadership Council, with the assistance with other interested parties, will continue to develop driver training recommendations for the University of California.





# APPENDIX A

## THE CORE TRAINING





## THE UNIVERSITY OF CALIFORNIA CORE PLUS™ DRIVER SAFETY TRAINING PROGRAM

### The CORE TRAINING

**Intended for:** All persons who operate any vehicle on UC business or otherwise drive UC-owned vehicles – faculty, staff, students, volunteers and others.

**Application:** All existing drivers and all subsequent new drivers, including rehires and transfers.

**Implementation:** Initially, it will target *Occupational* and other *High Risk* drivers – then others according to locally determined implementation schedules. Goal is initial training of all new hires within 30 days of their being hired.

**Delivery Format(s):** Driver safety pamphlet, instructor-led classroom sessions, Web-based interactive course, behind-the-wheel evaluation and/or self-assessment.

**Enhancements:** Certificate of Completion; Job Aid reminder card/decals of key principles; “UC Core Plus™ Safe Driver” pin; plus other incentives/rewards.

**Refresher Content and Frequency:** Three-year cycle recommended. Content to be recommended system-wide and customized locally. CORE refresher content may be integrated with PLUS MODULE refresher content.

**Subject-Specific Training:** Individually tailored training sessions based on identified individual training needs – may also be assigned to attend a vehicle-specific PLUS class and/or behind-the-wheel training.

### Content:

#### Introduction to the CORE PLUS™ Driver Safety Training Program

##### Why train experienced drivers?

- Most adults have not had any driver training since high school
- “It’s what you learn after you know it all that counts!”
- Differences between driving for pleasure and driving for work
- Increase knowledge of defensive driving techniques
- Upgrade everyday driving skills

#### Likelihood of harm to self or others

- National and UC statistics/profile
- Prevalence of backing and fixed-object collisions
- Workers’ Comp, GL and property losses
- Direct and indirect costs of vehicle collisions and failures

#### The CORE PLUS™ Program Explained

- The CORE TRAINING
- The PLUS MODULES
- Behind-the-wheel practice/evaluation or self-assessment for targeted driver groups

#### Vehicle Inspections

##### Why vehicle inspections

- Safety
- Legal requirements
- Prevention of breakdowns/mechanical failures
- Liability/personal responsibility

#### Types of Inspections

- Pre-trip
- Checklist
- What not to check

#### Enroute/Midshift

- Tires
- Fluids



Glass  
Lights  
Load

#### Post-trip

Checklist  
What not to check

#### Inspection Areas

Engine  
Exterior  
Interior

#### Reporting Procedures

Commercial vehicle requirements  
Problems needing resolution before further operation  
Problems needing resolution at end of task  
Problems noted for next regular service

#### Sample Inspection Forms for Various Applications

*See Appendix C*

## Introduction to Driving Defensively

#### Low-forces driving explained

Reducing “G” forces – acceleration, deceleration, and cornering  
Benefits of low-forces driving  
Self  
Others  
Vehicle

#### Differences between vehicles

Visibility  
Handling  
Stopping distances – including anti-lock brakes  
Clearances  
Parking  
Cargo vs. passengers

#### Driver's role and responsibilities

Professionalism-- a professional driver:  
Is courteous  
Is reliable  
Shows commitment to safety  
Follows preventative maintenance  
Is knowledgeable of departmental safe driving rules  
Rested and ready to drive  
Self-awareness/choosing how to respond  
Image and road courtesy  
Aggressive driving/road rage  
Multitasking/self-distraction/unsafe behaviors  
Seat belts – click it or ticket  
Cell phones  
    Compare and contrast University policy on cell phones with state law  
Speed control  
Following distance/space cushion  
Lane control



Communication  
Visual scanning

#### External factors

Traffic conditions  
Time of day/visibility  
Weather conditions  
Aggressive drivers/road rage  
Distractions  
Unfamiliar areas  
Road conditions/hazardous surfaces

#### Driver/mechanic teamwork

Brief overview of systems  
Starting  
Electrical  
Cooling  
Braking  
Steering

#### Awareness of early signs of mechanical problems

Using all the senses  
Gauges – knowing what is “normal”  
Smells – rubber, oil, fuel, coolant, exhaust  
Smoke and steam

Communications between driver and mechanic

Preventing mechanical failures

Downshifting on long down hills  
Never coasting in neutral  
Early reporting of malfunctions

## Advanced Defensive Driving Principles

*Proactive Awareness – “Be Alert...Don’t Get Hurt”*

Concentration on the art of driving  
Seeing/analyzing what’s developing ahead – looking “through” intersections  
Near, intermediate and far time zones  
Systematic scanning of all time zones  
Long distance visual scanning: Look ahead 12 to 15 seconds down the road to see hazards sooner and have more time to react

Eliminate visual barriers  
Keep your eyes scanning – avoid the fixed stare

Check your mirrors frequently: Check at least one mirror every 3 to 5 seconds  
Develop/maintain peripheral vision

Be aware of others using the road (drivers, cyclists, pedestrians, etc.)  
Be aware of changing road and weather conditions

Resist distraction from passengers and other sources  
Be aware of hazards of fatigue/medication/illness

Avoid backing up whenever possible

If *necessary* to back up:

- Perform a circle of safety – identify hazards around vehicle
- Be aware of blind spots and clearances, including height



- Avoid distractions: lower driver's window; turn off radio; turn off fans (air conditioning or heater)
- Check all mirrors BEFORE backing
- While backing check a different mirror every 2 to 3 seconds.

*Proactive Defense – “Expect the Unexpected”*

Anticipate unsafe actions by other drivers  
Always be prepared to take evasive action

Maintain and protect a space cushion wherever possible  
Maintain a 4 to 6 second following distance  
Continually adjust space cushion  
Check rearview mirror before braking

Never drive faster than is safe for conditions  
Adjust speed as conditions change  
Respect the speed limit

Cover the brake when a hazard is observed  
Watch for distracted pedestrians

*Respond safely to sudden mechanical failure*

- Loss of power steering/power brakes
- Tire blowout
- Headlight failure

*Respond safely to running off the pavement edge – avoid overcorrecting*

*When parking:*

- Be aware of personal safety when selecting parking spots
- Position vehicle to avoid backing whenever possible
- Select a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow
- Turn wheels appropriately on inclines – noting presence or absence of curbs
- Always set parking brake

*When backing:*

- First rule of backing to prevent a collision is to AVOID BACKING if at all possible
- Use a ground guide (backer) whenever possible
- Driver and ground guide should agree on signals to be used
- Use backup alarms, sensors and cameras as available
- Back slowly
- When possible, set up vehicle so you can turn in the direction of the driver's side as you back for better visibility. Stop, get out and check to see if there is a hazard in your backing path that isn't visible in your mirrors

*Proactive Communications – “Don't Hesitate – Communicate”*

Always communicate intentions – use turn signals when turning and making lane changes

Lights on for visibility  
Activate four-way emergency flashers when appropriate  
Activate any auxiliary lights, beacons, flashers and arrow boards as necessary



Make eye contact with other road users, including pedestrians

Use the horn as appropriate to alert other drivers or to avoid a collision

Signal turns and lane changes early and as needed

#### When backing:

- Tap horn before you back
- Make sure back-up alarm is on (for those vehicles equipped with an alarm cut-off switch)
- Activate four-way emergency flashers
- Communicate with ground guide if available

## Collisions, Breakdowns and Other Mishaps

### Collisions

Assess personal safety first  
Get help by calling 911, or use local seven-digit emergency numbers  
Encourage injured parties to remain in vehicles unless danger is imminent  
Collision kit/triangle placement  
Photograph or mark locations before moving vehicles  
Identify witnesses  
Exchange information without statements of fault  
Location towing protocol – determine need for ramp-type tow truck

### Breakdowns

Pull over at first sign of a mechanical problem  
Warning lights  
Warnings from other drivers  
Overheating/steam versus smoke  
Low/flat tires – don't drive on flats  
Dead batteries/jump starts  
Location protocol for assistance  
Logging noncritical maintenance items for next service

### Other Mishaps

Breakins/thefts  
Lockouts  
Fueling errors (e.g., putting gas in a diesel vehicle)

### “At Fault” and “Preventable” Collisions

Definitions  
“AT FAULT” is a legal term based on a review of applicable traffic laws – it is not a defensive driving concept.  
“PREVENTABLE” is a defensive driving term. According to the National Safety Council, “A collision is preventable unless the driver did everything reasonably possible to prevent the collision, including anticipating the hazard.”  
Why the difference is critical  
Why we don't say “accident”

## Written Test of Core Plus™ Knowledge



### **Behind-the-Wheel Self-Assessment – Optional by Location**

Trainees are asked to complete and document a structured, behind-the-wheel practice session and self-assessment, including but not limited to the following skills while actually driving:

- Identify and perform systematic scanning of the near, intermediate and far time zones
- Establish and maintain a 4 to 6 second following distance in different traffic conditions
- Establish and maintain a space cushion around the vehicle
- Check mirrors every 3 to 5 seconds
- Activate four-way emergency flashers and tap horn before backing into a parking space
- Perform a self-directed verbal commentary while practicing the skills above



**UNIVERSITY OF CALIFORNIA CORE PLUS®  
CORE DRIVER TRAINING  
DRIVING SELF-EVALUATION**

DRIVER: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_ START TIME: \_\_\_\_\_ END TIME: \_\_\_\_\_

TRAFFIC CONDITIONS:  LIGHT  MODERATE  HEAVY      ROADS USED:  RURAL  URBAN  FREEWAY

**INSTRUCTIONS TO DRIVER:** Please review the skill exercises below prior to driving so you know what you are going to practice. **Do not attempt to read the form while driving.** If necessary, pull over to read the next section – every stop provides an opportunity to practice turning knowledge into skill. Turn off all audio distractions while performing your self-evaluation. **While safely stopped**, place an [X] next to each item you have completed. After completing, please turn in your self evaluation form as directed by your instructor. Most trainees complete this self-evaluation in under thirty minutes. Thank you for taking the time to Be Smart About Safety!

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**INSPECTION**

- Check tires for inflation and tread wear
- Check headlights, taillights, turn signals and four-way flashers
- Adjust seat and mirrors for optimal driving position

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**PROACTIVE AWARENESS**

- Check your driving knowledge and awareness by continuous commentary driving during your self-evaluation
- Check your eye lead time – pick out distant objects and count the time to get there – try for 15 seconds minimum
- By counting, locate the near (4-6 second) intermediate (12-15) and far (20-30) time zones at different speeds
- Keep your eyes scanning – don't stare as you count your eye lead times
- Check your mirrors frequently – one mirror every 3-5 seconds
- If backing will be necessary, both look back and check a different mirror every 2-3 seconds

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**PROACTIVE DEFENSE**

- Identify distracted drivers, pedestrians and cyclists
- Cover the brake pedal and horn when a hazard is observed
- Check your following distance at least four times – practice maintaining a 4-6 second distance at different speeds
- Establish and maintain space cushions – align your vehicle so you maintain routes of escape
- Move out from behind large vehicles blocking your view to preserve your 15 second eye lead time
- Check your mirror as you begin to slow or stop – know how close the vehicle behind you is
- Park your vehicle in a way that won't require backing

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**PROACTIVE COMMUNICATIONS**

- Assures headlights are on for safety
- Signal turns and lane changes early and consistently
- Sound your horn when needed for other vehicles and pedestrians
- Make eye contact with other road users and pedestrians – don't assume recognition
- Tap horn before backing

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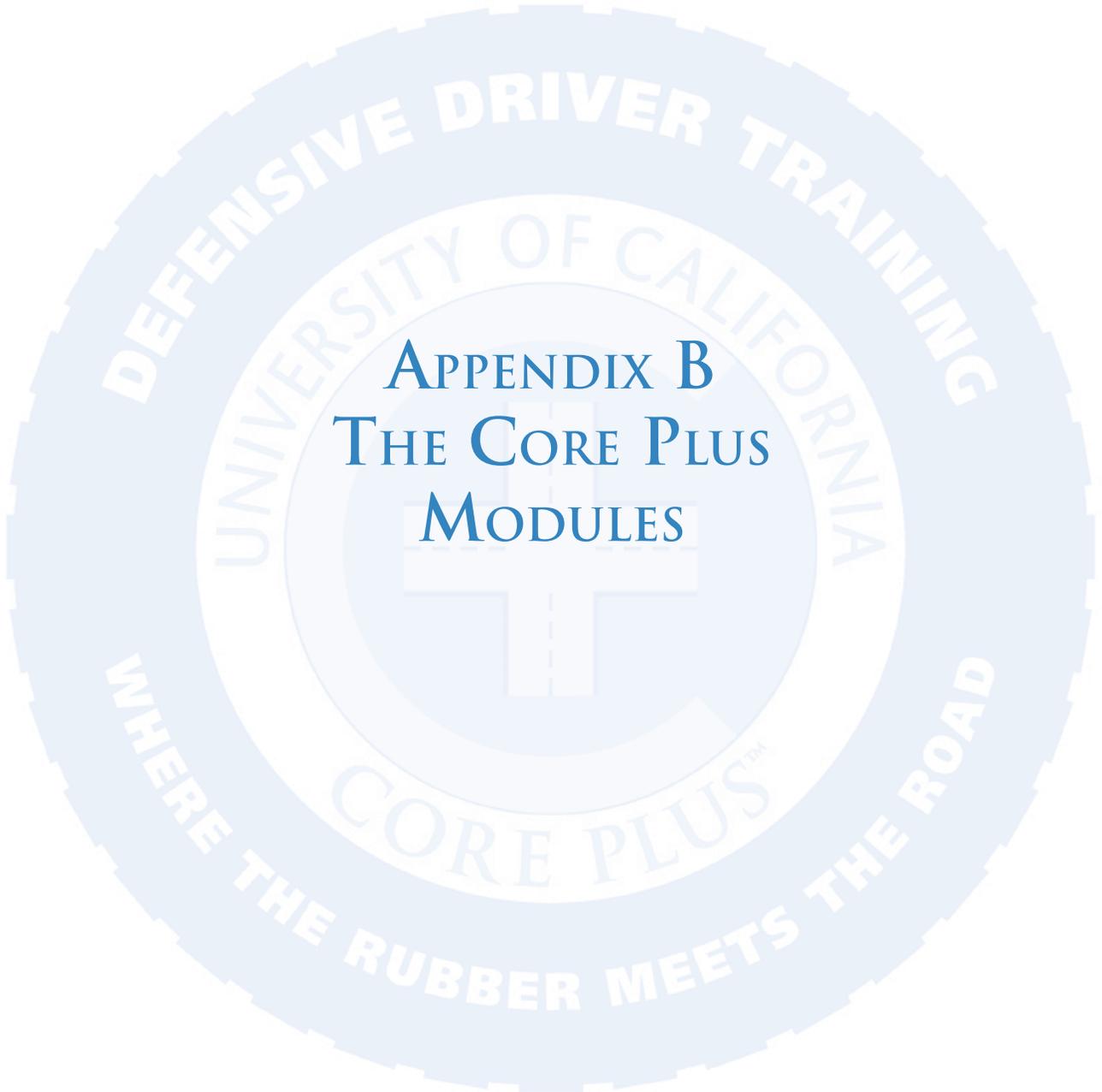
**SELF-EVALUATOR COMMENTS — ASSESS YOUR OWN PERFORMANCE**

Which skills are you naturally good at?

What are your goals for self-improvement?

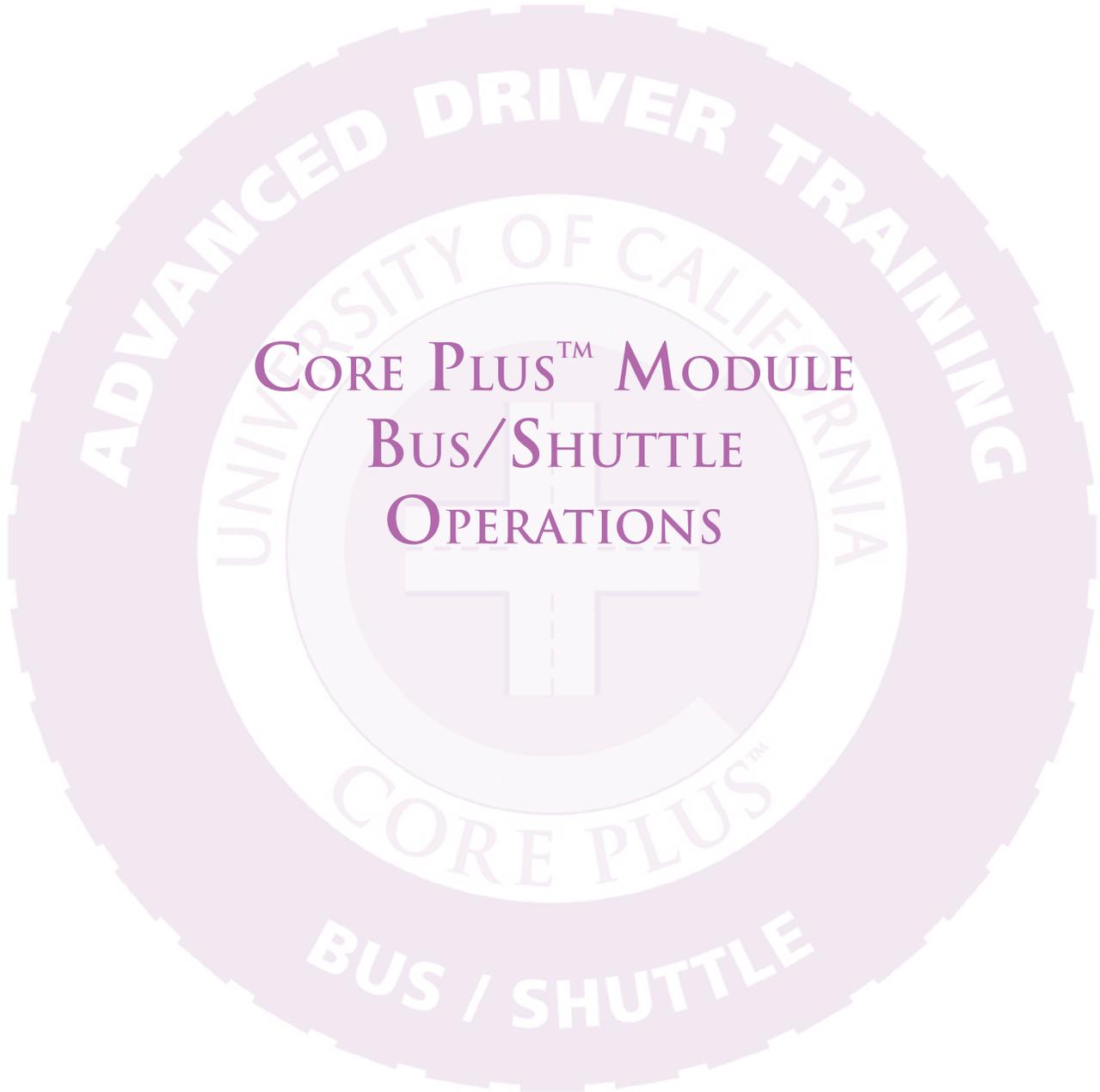
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APPENDIX B  
THE CORE PLUS  
MODULES





CORE PLUS™ MODULE  
BUS/SHUTTLE  
OPERATIONS





## CORE PLUS™ MODULE

### Bus/Shuttle Operations

**Intended for:** Professional drivers of transit buses and shuttles.

**Classification Characteristics:** Continuous passenger transportation by professional drivers with commercial licenses.

**Application:** All existing drivers and all subsequent new drivers, including rehires and transfers.

**Implementation:** Initially, it will target occupational drivers – then others according to recommended implementation schedule. The goal is the initial training of all new hires prior to initial driving assignment.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course followed by behind-the-wheel practice, evaluation and skill-building.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Three-year cycle recommended.

**Subject-Specific Retraining:** Individually designed based on identified individual training needs.

## Content

### Introduction to BUS/SHUTTLE Operations

#### Why train experienced commercial drivers?

- Protecting your commercial driving record

- Likelihood of harm to others

#### Vehicle-specific risks

- Constant starts and stops

- Distractions during loading/unloading

- Seriously extended stopping distance

- Impaired visibility at sides and back

- Schedule demands

- Multiple potential litigants onboard

### Vehicle Inspections in BUS/SHUTTLE Operations

#### Safety

- Legal requirements – Commercial Driver requirements

- Prevention of breakdowns/mechanical failures

- Liability/personal responsibility

#### Types of Inspections

- Pre-trip

- Checklist-driven – a legal document

- Appropriate procedures for hydraulic and air brake systems

#### Midtrip/Midshift – walk-around mini-check

- Tires – pressure, tread failure, embedded objects

- Wheels – check for loose lug nuts – visually/physically

- Fluids – evidence of leaks

- Windshield – clean

- Lights – clean and functioning

- Hand off report to replacement driver

#### Post-trip/out of service

- walk-around mini-check

- Tires



Body damage  
    The “rolling billboard”  
Fuel  
Interior trash and sweeping

### Inspection Areas

Engine  
Belts  
Hoses  
Fluids – levels and leaks are critical  
Compartment visual  
Electrical connections

### Exterior

Lights and Signals  
Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks  
    on inside sidewalls  
Body damage  
Exterior compartment covers secure  
Wipers – secure and pliable  
Mirrors – secure and clean  
Glass – clean and clear along critical sight lines  
Exhaust tailpipe secure  
Fuel tank straps secure  
Driveline retainers intact  
Springs/shocks – visual inspection for problems  
Steering linkage – visual inspection

### Interior

Mirror/seat adjustment  
Brakes/air  
Heater/defroster  
Door operation  
Damage  
Cleanliness  
Collision reporting kit  
First aid kit  
Fire extinguisher – gauge/inspection date  
Glass – clear of interior condensation

### Reporting Procedures

Commercial vehicle requirements  
Problems needing resolution before further operation  
Problems needing resolution at end of task  
Problems worthy of note for next service

Introduction of Local Inspection Forms

## Driving Defensively in BUS/SHUTTLE Operations

Achieving low-forces driving in BUS/SHUTTLE Operations



Reducing “G” forces – acceleration, deceleration and cornering

Benefits of low-forces driving

- Self
- Others
- Vehicle

Vehicle differences with BUS/SHUTTLE Operations

- Visibility
- Handling
- Stopping distances
- Clearances
- Parking
- Passengers

Driver’s role and responsibilities in BUS/SHUTTLE Operations

- Passenger safety
- Professionalism

- Rested and ready to drive/substance-free (including Rx medications)
- Hours of service/fatigue management

- Multitasking/unsafe behaviors
- Image and road courtesy
- Seat belts
- Cell phones
  - Use (including texting) prohibited while driving
- AM/FM radios/CD players/other sound systems
- Speed control
- Following distance/space cushion
- Visual scanning

External factors

- Traffic conditions and pedestrians
- Time of day/visibility – effect on mirrors
- Weather conditions

- Distractions

- Road surface conditions

Driver/mechanic teamwork

- Early signs of mechanical problems/safety sensitive issues
- Steering play
- Brake pedal travel
- Starting problems
- Communications between driver and mechanic
- Preventing failures

**Collisions, Breakdowns and Other Mishaps in BUS/SHUTTLE Operations**



### Collisions

- Assess personal and passenger safety first
- Get help by calling 911 and Dispatch
- Emergency exit operation
- Encourage injured parties to remain in vehicle(s)
- Collision kit/triangle placement
- When and how to move vehicles
- Witness(es)/passenger counts and names
- Photos
- Information exchange/statements
- Towing

### Breakdowns

- Pull over before vehicle stops running
- Warning lights
- Smoke vs. steam
- Flat tires
- Dead batteries/jump starts
- Getting help
- Logging small items for next service

### Other Mishaps

- Fueling errors (e.g., putting gas in a diesel vehicle)
- Fluid spills/leaks – use of spill kits to prevent environmental damage

### “At Fault” and “Preventable” Collisions

- Definition review
- “AT FAULT”
- “PREVENTABLE”

## Written Test of BUS/SHUTTLE OPERATIONS Knowledge

### BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in BUS/SHUTTLE OPERATIONS

#### *Proactive Awareness – “Be Alert...Don't Get Hurt”*

- See/analyze what's developing ahead
- Systematically scan all time zones
- Eliminate visual barriers, including passengers blocking view of mirrors

Keep eyes scanning – avoid the fixed stare

Check mirrors frequently: Check at least one mirror every 3 to 5 seconds

Demonstrate awareness of changing road and weather conditions

- Resist distractions from passengers and other sources
- Demonstrate awareness of hazards posed by fatigue/medication/illness

Avoid backing up whenever possible

If *forced* to back up:

- Perform a circle of safety – identify hazards around the vehicle
- Demonstrate awareness of blind spots and clearances, including height
- Avoid distractions, especially from passengers
- Check all mirrors BEFORE backing



- While backing, check a different mirror every 2 to 3 seconds.

*Proactive Defense – “Expect the Unexpected”*

Anticipate unsafe actions by other drivers  
Demonstrate preparedness to take evasive action

Maintain and protect a space cushion wherever possible  
Maintain a 4 to 6 second following distance

Never drive faster than is safe for conditions  
Adjust speed as conditions change

Cover the brake when a hazard is observed  
Watch for distracted pedestrians

*Respond safely to sudden mechanical failure*

- Loss of steering/ brakes
- Tire failure
- Headlight failure

*Respond safely to running off the pavement edge – avoid overcorrecting*

*When parking*

- Avoid backing whenever possible
- Select a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow
- Always set parking brake – curb wheels on inclines

*When backing:*

- AVOID BACKING if at all possible
- Use a ground guide (backer) whenever possible
- Driver and ground guide agree on signals to be used
- Back up slowly
- When possible, set up vehicle so you can turn in the direction of the driver’s side as you back for better visibility
- Stop, get out, and check to see if a hazard is in the backing path that isn’t visible in mirrors

*Proactive Communications – “Don’t Hesitate – Communicate”*

Always communicate intentions – use turn signals when turning and making lane changes

Lights on for visibility

Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

Signal turns and lane changes early and as needed

*When backing:*

- Tap horn before backing
  - Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
  - Make sure backup camera is on (for vehicles equipped with video)
  - Activate four-way emergency flashers
  - Communicate with the ground guide if available



**UNIVERSITY OF CALIFORNIA CORE PLUS®**  
**DRIVING EVALUATION**  
**BUS/SHUTTLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Demonstrates proper procedures for air brake system (if so equipped)
- Identify what to look for with critical engine compartment components
- Identify critical exterior and interior inspection components
- Adjusts seat and mirrors for optimal driving position

**PROACTIVE AWARENESS**

- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Avoids backing whenever possible
- If forced to back, performs a circle of safety – identifies hazards around the vehicle
- If forced to back, checks a different mirror every 2-3 seconds \_\_\_\_\_

**PROACTIVE DEFENSE**

- Anticipates unsafe actions by other drivers – identifies distracted pedestrians
- Demonstrates preparedness to take evasive action – covers the brake when hazard is observed
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change
- Describes proper response to loss of steering, brakes, headlight failure, tire failure
- If forced to back, uses a ground guide whenever possible – agrees on signals
- Sets up vehicle to back from the driver's side
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on
- Activates 4-way hazard lights when appropriate
- Communicates with ground guide if available

**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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CORE PLUS™ MODULE  
EMERGENCY VEHICLE  
OPERATIONS

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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## CORE PLUS™ MODULE

### **Emergency Vehicle Operations**

**Intended for:** Licensed/certified drivers of authorized emergency vehicles who may operate that vehicle under the exemptions of California Vehicle Code § 21055 (emergency operations) for response, rescue, pursuit or as otherwise permitted by law.

**Classification Characteristics:** Intermittent emergency driving of law enforcement, fire or emergency medical service vehicles on behalf of the university. Additional training by qualified instructors may be necessary for such emergency driving. Training in *non-emergency* driving of such vehicles is provided under the PLUS MODULE appropriate to that category of vehicle.

**Application:** All existing drivers and all subsequent new drivers including rehires and transfers – implementation schedule to be determined locally.

**Implementation:** Initially, it will target Occupational Drivers – then others according to local implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course followed by in-vehicle practice and evaluation.

**Enhancements:** Certificate of completion; “UC Core Plus Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### **Content**

TO BE DEVELOPED IN CONSULTATION WITH UC EMERGENCY SERVICES AND  
RELEASED AT A LATER DATE.

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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A large, light blue, semi-transparent version of the "Advanced Driver Training" logo is centered in the background of the page. It features the same circular design with the text "ADVANCED DRIVER TRAINING" at the top, "LOW SPEED VEHICLES" at the bottom, and "UNIVERSITY OF CALIFORNIA" and "CORE PLUS" in the center.

**CORE PLUS™ MODULE**  
**LOW-SPEED VEHICLE**  
**OPERATIONS**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



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## CORE PLUS™ MODULE

### Low-Speed Vehicle Operations

**Intended for:** Regular drivers of low-speed electric- and gas-powered vehicles, including Neighborhood Electric Vehicles (NEVs) (e.g., GEM, John Deere E-Gator, E-Ride, Ford Think, Columbia, Zenn, Miles, Zap, etc.).

**Classification Characteristics:** Short range, speed-limited electric- and gas-powered vehicles with extremely limited crash protection.

**Application:** All existing drivers and all subsequent new drivers including rehires and transfers. Goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially, it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course followed by behind-the-wheel practice and evaluation.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### Content

#### Introduction to LOW-SPEED VEHICLE Operations

Why train *LOW-SPEED VEHICLE* drivers?

- Significantly different handling characteristics
- Deceptive perception that they’re “harmless”

Vehicle-specific risks

- Tip-over hazards – especially cornering
- Low-tech braking systems (no ABS)
- High center of gravity – minimal evasive capability
- Rollover/ejection hazard
- Minimal body protection from side impacts
- Small wheel/tire diameter
- Little/no suspension
- Unexpected visual blind spots
- Frequently operated on irregular terrain
- Surprise factor/silent operation
- Load restrictions
- Infrequent mechanic contact

#### Vehicle Inspections in LOW-SPEED VEHICLE Operations

Safety

- Prevention of mechanical failures

Types of Inspections

- Pre-use (Minimum once daily)
- Checklist-driven – responsibility assigned
  
- Midtrip/Midshift – typically not applicable

Post-trip/out of service – walk-around mini-check

- Tires
- Body damage



- Fully charged/charging
- Interior cleanliness
- Secure/locked against theft
- Removable tools/equipments secured

#### Inspection Areas

- Motor – per location policy
- Electrical connections/charger operational
- Belts and fluids (if applicable)

#### Exterior

- Lights – clean and functioning
- Signals functioning properly
  - Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
- Body damage and cleanliness
- Wipers – secure and pliable
- Mirrors – secure and clean
- Windshield – clean
- Load – secure

#### Interior

- Mirror/seat adjustment
- Seatbelts functional (all)
- Steering – excessive play
- Brake pedal travel
- Heater/defroster (if present)
- Gauges/warning lights
- Glass – clean
- Damage
- Cleanliness
- Collision reporting kit
- Extension cord for field charging
- Next scheduled service

#### Reporting Procedures

- Problems needing resolution before further operation
- Problems needing resolution at end of task
- Problems worthy of note for next service

#### Introduction of Local UTILITY CART Inspection Forms

### Driving Defensively in LOW-SPEED VEHICLE Operations

#### Achieving low-forces driving in LOW SPEED VEHICLE Operations

- Reducing “G” forces in cornering
- Benefits of low-forces driving
  - Self
  - Vehicle

#### Vehicle differences with LOW SPEED VEHICLE Operations

- Visibility (to other vehicles)
- Handling
- Steering



- Suspension
- Reduced braking power/regenerative braking on downgrades
- Lower ground clearance
- Governed speeds (14 and 24 mph)
- Additional battery draw of aftermarket additions
- Rollaway risk if parking brake not set
- Passengers

#### Driver's role and responsibilities in LOW SPEED VEHICLE Operations

- Safety for operator and passengers
- Not a toy
- Vehicle use restricted per local policy
- Concentration on the art of driving
- Multitasking/unsafe behaviors
- Image and road courtesy
- Seat belts – no passengers without seatbelts
- Cell phones
  - Use (including texting) prohibited while driving
- No headsets/earbuds (iPods, etc.)
- Speed control appropriate for terrain and traffic conditions
- Following distance/space cushion
- Visual scanning

#### External factors

- Traffic conditions and pedestrians
- Time of day/visibility – effect on mirrors
- Weather conditions
- Exterior distractions
- Terrain/road surface conditions

#### Driver/mechanic teamwork

- Early signs of mechanical problems/safety-sensitive issues
- Steering play
- Brake pedal travel
- Charging/lighting problems

#### Communications between driver and mechanic

- Vehicle maintenance requests

#### Preventing failures

## Collisions, Breakdowns and Other Mishaps in LOW-SPEED VEHICLE Operations

#### Collisions

- Assess personal and passenger safety first
- Get help by calling 911
- Collision reporting
- Moving vehicles
- Witnesses/passenger names
- Photos
- Information exchange/statements
- Towing – local protocol



### Breakdowns

- Pull over before vehicle stops running
- Gauges/charge level
- Smoke/burning smell
- Flat/low tires
- Dead batteries
- Getting help – local towing protocol
- Logging small items for next service

### Other Mishaps

- Breakins/thefts/vandalism
- Lockouts

Review of “At Fault” and “Preventable” collision concepts

## Written Test of LOW-SPEED VEHICLE OPERATIONS Knowledge

### BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in LOW-SPEED VEHICLE OPERATIONS

#### *Proactive Awareness – “Be Alert...Don’t Get Hurt”*

- See/analyze what’s developing ahead
- Systematically scan all time zones
- Generally focus on 15 seconds ahead
- Eliminate visual barriers
- Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds

Demonstrate awareness of changing road/surface, weather, and pedestrian traffic conditions – especially transitions

Resist distractions from passenger and other sources

Avoid backing up whenever possible

If *forced* to back up:

- Perform a circle of safety – *actively look for hidden hazards before backing*
- Demonstrate awareness of blind spots and clearances including height
- Avoid distractions, especially from passengers
- Check all mirrors BEFORE backing
- Check a different mirror every 2 to 3 seconds while backing
- Enlist support of passengers – asks for a ground guide when appropriate

#### *Proactive Defense – “Expect the Unexpected”*

- Anticipate unsafe actions by other drivers
- Remain prepared to take evasive action
- Maintain and protect space cushions wherever possible
- Maintain a 4 to 6 second following distance
- Never drive faster than is safe for conditions
- Adjust speed as conditions change
- Cover the brake when a hazard is observed
- Watch for distracted pedestrians



Avoid driving across inclined surfaces

Demonstrate techniques to respond safely to sudden mechanical failures

- Loss of steering/ brakes
- Tire failure
- Headlight failure
- Jammed accelerator

Demonstrate ability to make safe transition between different surface types

When parking

- Avoid backing whenever possible
- Select a spot that provides room for others to maneuver and does not create a hazard
- Assure clear access to building entrances, electrical panels and fire lanes
- Select a spot that is out of traffic flow
- Set the parking brake – curb wheels on inclines
- Remove key to prevent vehicle theft

AVOID BACKING if at all possible

*Proactive Communications – “Don’t Hesitate – Communicate”*

Always communicate intentions – use turn/hand signals when turning and making lane changes

Use lights as conditions require

Activate four-way emergency flashers when appropriate

Make eye contact with other road users — especially pedestrians

Use the horn or other audio warning devices appropriately to alert other drivers, pedestrians and cyclists to avoid a collision

- When forced to back:
- Tap horn before backing
- Make sure back-up alarm is on (for those vehicles equipped with an alarm cut-off switch)
- Activate four-way emergency flashers (if present)
- Communicate with ground guide when necessary

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS®**  
**DRIVING EVALUATION**  
**LOW SPEED VEHICLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Assesses state of battery charge on electric vehicles
- Identifies critical exterior and interior inspection components
- Confirms all seatbelts are accessible and in good operating condition
- Adjusts seat and mirrors for optimal driving position

**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Recognizes visual barriers and demonstrates awareness of vehicle blind spots
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Demonstrates awareness of safety hazards associated with nearly silent electric vehicles
- Avoids backing whenever possible
- If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds \_\_\_\_\_

**PROACTIVE DEFENSE**

- Consistently uses seatbelt whenever vehicle is moving; asks passengers to do the same
- Assures all external tools and equipment are properly secured
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change
- Anticipates unsafe actions by other drivers, cyclists and pedestrians – covers the brake when a hazard is observed
- Checks for hidden surface and other hazards when transitioning from regular paved roads and paths
- Avoids driving across inclined surfaces whenever possible
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
- Selects parking spot out of traffic flow – assures clear access to building entrances, electrical panels and fire lanes
- Curbs or turns wheels when parked on inclines, removes key to prevent vehicle theft

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds horn or other warning device when needed for other vehicles, cyclists and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on

**ADDITIONAL COMMENTS:**

A large, faded graphic of a tire tread is centered on the page. The text "ADVANCED DRIVER TRAINING" is arched across the top of the tread, "UNIVERSITY OF CALIFORNIA" is arched across the middle, "CORE PLUS™" is arched across the bottom, and "OFF-ROAD VEHICLES" is arched across the very bottom. The text "CORE PLUS™ MODULE OFF-ROAD VEHICLE OPERATIONS" is overlaid in the center in a dark red, serif font.

**CORE PLUS™ MODULE**  
**OFF-ROAD VEHICLE**  
**OPERATIONS**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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## CORE PLUS™ MODULE

### Off-Road Vehicle Operations

**Intended for:** Drivers of special-purpose vehicles and equipment, such as tractors, backhoes, dozers, trenchers, loaders, excavators, riding mowers and all-terrain vehicles (ATVs).

**Classification Characteristics:** Intermittent or continuous driving and/or operation of specialized vehicles and accessory equipment, primarily in off-road environments where road usage is typically between job sites. Additional training by qualified instructors is necessary for equipment operations other than driving.

**Application:** All existing drivers and all subsequent new drivers including rehires and transfers. Goal is initial training within 30 days of their being hired.

**Implementation:** Initially it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course followed by in-vehicle practice and evaluation.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### Content

#### Introduction to OFF-ROAD VEHICLE Operations

Why train OFF-ROAD VEHICLE drivers?

- Likelihood of harm to self and others

- Unique challenges of campus and off-road driving environment

- Apply appropriate defensive driving techniques to off-road operations

- Adjust driving technique to compensate for specific characteristics of the vehicle

#### Vehicle-specific risks

- Driving generally a secondary function of the vehicle – may be unstable even at low speed

- Some vehicles may need to be operated in reverse for road travel

- High center of gravity and off-road slopes create serious rollover hazard – most common cause of fatalities

- Failure to use seatbelts may result in control and/or ejection hazards

- Risk of falls entering and exiting elevated cabs

- Risk of personal injury during loading/unloading vehicle from transport trailer

- Roll-away risk due to improper parking

- Operation of many types of specialized off-road vehicles and equipment require specific instruction and certification

- Unique hazards specific to the particular vehicle (e.g., trenching and shoring)

#### Vehicle Inspections in OFF-ROAD VEHICLE Operations

##### Safety

- Prevention of breakdowns/mechanical failures

- Prevention of harm to other drivers, pedestrians and persons working around the vehicle

##### Types of Inspections

- Pre-shift

- Checklist-driven

- Introduction of local OFF-ROAD VEHICLE inspection forms



### Midshift

#### Post-shift/out of service – walk-around mini-check

- Tires/wheels or tracks
- Fuel
- Fluid Levels
- Vehicle security for vandalism

#### Inspection Areas

- Engine – per location policy
- Belts
- Hoses
- Fuel levels – to prevent engine from stopping at a critical moment
- Fluids – levels and leaks are critical
- Compartment visual
- Electrical connections

#### Exterior

- Lights (if equipped) – clean and functioning
- Signals and warning devices functioning properly
- Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
- Physical damage
- Mirrors – secure and clean
- Windshield (if present) – clean

- Body and rollover protective structures – broken bolts, cracked welds, fatigue fractures
- Wheel chocks – if provided
- Shielding on power take off (PTO) and other hazardous moving parts
- Specialized accessory equipment – connections, fluid leaks, cables, etc.

#### Interior

- Mirror/seat adjustment
- Seatbelts functional (all)
- Procedures for hydraulic and brake systems
- Gauges/warning lights
- Back-up alarm (if so equipped)
- Back-up camera (if so equipped)
- Glass – sightlines clear of interior condensation
- New damage
- Collision/incident reporting kit and warning triangles
- Next vehicle service date

#### Reporting Procedures

- Local reporting instructions
- Problems needing resolution before further operation
- Problems needing resolution at end of task
- Problems worthy of note for next service

### Driving Defensively in OFF-ROAD VEHICLE Operations

- Achieving low- forces driving in OFF-ROAD VEHICLE Operations
  - Reducing “G” forces – acceleration, deceleration and cornering
  - Benefits of low-forces driving
  - Self
  - Vehicle



### Vehicle differences with OFF-ROAD VEHICLE Operations

- Rollover hazard – increased with soft surfaces and sharp turns
- Extended stopping distances
- Clearances – sides and overhead (including energized power lines)
- Operation of specialized vehicle equipment

### Driver's role and responsibilities in OFF-ROAD VEHICLE Operations

- Professionalism
- Rested and ready to drive/substance-free (including Rx medications)
- Multitasking/unsafe behaviors
- Seatbelts and other safety equipment (helmet or hard hat, safety glasses or goggles, safety shoes) – consistent use
- Cell phones
  - Use (including texting) prohibited while driving
- Speed control
- Space cushions
- Visual scanning within the field of operation

### External factors

- Traffic or job site conditions, including lighting and terrain
- Other workers and equipment
- Weather conditions
- Exterior distractions
- Road surface/off-road conditions
- Recurring operations at “familiar” sites

### Driver/mechanic teamwork

- Early signs of mechanical problems/safety sensitive issues
- Control problems
- Brake problems
- Starting problems
- Specialized equipment problems
- Communications between operators and mechanics
- Preventing failures

## Collisions, Breakdowns and Other Mishaps in OFF-ROAD VEHICLE Operations

### Collisions

- Assess personal safety first
- Get help by calling 911
- Encourage injured parties to remain in place
- Collision kit/triangle placement
- Moving vehicles/equipment
- Witness names and contact information
- Location-specific reporting protocol
- Photos
- Information exchange/statements
- Towing – local protocol

### Breakdowns

- Pull over/shut down before vehicle stops running
- Triangle placement
- Flat/low tires



Specialized equipment problems  
Getting help – local towing protocol  
Logging small items for next service

#### Other Mishaps

Injuries/damage/conflicts during specialized operations  
Hazardous material spills/releases  
Fires  
Vandalism/sabotage/thefts  
Fueling errors (e.g., putting gas in a diesel vehicle)

Review of “At Fault” and “Preventable” collision concepts

### Written Test of OFF-ROAD VEHICLE OPERATIONS Knowledge

## AT THE CONTROLS EVALUATION – Application of Advanced Defensive Driving Principles in OFF-ROAD VEHICLE OPERATIONS

#### *Proactive Awareness – “Be Alert...Don’t Get Hurt”*

See/analyze what’s developing ahead  
Systematically scan all time zones  
Generally focus on 15 seconds ahead  
Keep eyes scanning – avoid the fixed stare

Demonstrate awareness of blind spots  
Check mirrors frequently (if so equipped)  
Change body position as needed to expand sight angles  
Pull over frequently to let faster road traffic pass

Demonstrate awareness of changing road and weather conditions  
When going off-road, check for hidden or partially hidden surface and overhead obstructions, especially power lines

Resist distractions – including cell phones and two-way radios

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary

If *forced* to back up:

- Perform a circle of safety before entering the vehicle – identify hazards around the vehicle  
*Never back up in traffic without checking behind the vehicle*
- Ask co-worker or other person to help as ground guide
- If using cones, pick up cone behind vehicle *last*
- Demonstrate awareness of blind spots and clearances, including height
- Avoid distractions
- Check all mirrors BEFORE backing – change body position to improve sight angles
- Check a different mirror every 2 to 3 seconds while backing

Demonstrate awareness of safety hazards associated with operation of specialized vehicle equipment

#### *Proactive Defense – “Expect the Unexpected”*

Anticipate unsafe actions by other drivers, pedestrians and co-workers  
Maintain and protect space cushions wherever possible  
Maintain a 6 to 8 second following distance



Never drive faster than is safe for conditions  
Adjust speed as conditions change  
Cover the brake when a hazard is observed  
Slow significantly for turns  
Watch for distracted pedestrians

**Use appropriate defensive measures when operating specialized vehicle equipment:**

- Establish an operating “danger zone” around the vehicle at the job site
- Keep dozer blade between unit and edge when operating near embankments
- Know the lift capacity of loaders to avoid tip-overs
- *Back* the tractor up if necessary to climb a slope

*Proactive Communications – “Don’t Hesitate – Communicate”*

Always communicate intentions – signal when turning and making lane changes

Use available lights for visibility when operating on streets and roads  
Place a slow-moving vehicle (SMV) emblem on rear of vehicle when forced to drive on public roads

Make eye contact with other road users including pedestrians

Use the horn appropriately to alert other drivers or pedestrians, or to avoid a collision

When forced to back:

- Tap horn before backing
- Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure backup camera is on (for vehicles equipped with video)
- Communicate with ground guide (if available) using prearranged signals

Communicate appropriately when operating specialized vehicle equipment



**UNIVERSITY OF CALIFORNIA CORE PLUS®**  
**DRIVING EVALUATION**  
**OFF-ROAD VEHICLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/OFF

**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Identify what to look for with critical engine compartment components (if included at your location)
- Identify critical exterior and specialized equipment inspection components
- Adjusts seat and belts for optimal driving position; identifies necessary personal protective equipment

**PROACTIVE AWARENESS**

- Demonstrates driving knowledge and awareness (as observed by evaluator in trailing vehicle)
- Scans all time zones ahead
- Identifies and responds appropriately to pertinent information ahead.
- Pulls over frequently to let faster road traffic pass
- Checks for hidden surface and overhead hazards when going off-road
- Avoids backing whenever possible
- If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
- Identifies specific terrain or worksite hazards pertinent to the vehicle
- Demonstrates awareness of safety hazards associated with operation of specialized vehicle equipment

**PROACTIVE DEFENSE**

- Anticipates unsafe actions by others – responds pro-actively
- Demonstrates preparedness to take evasive actions – covers the brake when hazard is observed
- Maintains and protects space cushions including 6-8 second following distance \_\_\_\_\_
- Slows significantly for turns
- Stops, gets out and checks if hazard possibly in backing path – requests ground guide if available
- Responds appropriately to terrain and other hazards present on a worksite
- Takes appropriate defensive measures while operating specialized equipment

**PROACTIVE COMMUNICATIONS**

- Communicates intentions to others – signals all turns
- Assures available lights to enhance visibility when operating on roadways
- Uses horn or other signal when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – utilizes backing alarm but watches for workers who may not hear backing alarm
- Communicates with ground guide using pre-arranged signals

**ADDITIONAL COMMENTS:**



CORE PLUS™ MODULE  
PASSENGER AUTO  
OPERATIONS

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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## CORE PLUS™ MODULE

### Passenger Auto Operations

**Intended for:** Drivers of both UC-owned and non-UC-owned passenger automobiles operated on UC business.

**Classification Characteristics:** Operation of passenger autos, including sport utility vehicles, for UC business purposes by both regular and occasional drivers, including student drivers and non-emergency fire and law enforcement operations. Applies to fleet-owned, department-owned, personally owned, and rental vehicles in local and long-distance business travel operations.

**Application:** All existing drivers and all subsequent new drivers including rehires and transfers. The goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially, it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Upon presentation of proof of successful completion of UC Core Training within the previous three years, only a documented behind-the-wheel skill practice and evaluation by a UC-approved instructor/evaluator is required.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award,

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### Content

## BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in PASSENGER AUTO OPERATIONS

Proactive Awareness – “Be Alert...Don’t Get Hurt”

- See/analyze what’s developing ahead
- Systematically scan all time zones
- Generally focus on 15 seconds ahead
- Eliminate visual barriers
- Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds  
Change body position to expand sight angle

Demonstrate awareness of changing road and weather conditions and posted speed limits

Resist distraction by passengers and other sources

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary.  
If *forced* to back up:

- Perform a circle of safety before entering vehicle – *actively look for obvious and hidden hazards before backing*
- Demonstrate awareness of blind spots and clearances, including overhangs
- Avoid distraction, especially by passengers
- Check all mirrors BEFORE backing
- Check a different mirror every 2 to 3 seconds while backing
- Enlist support of passengers – ask for a ground guide when appropriate

*Proactive Defense – “Expect the Unexpected”*



Anticipate unsafe actions by other drivers  
Remain prepared to take evasive action  
Maintain and protect space cushions wherever possible  
Maintain a 4 to 6 second following distance  
Never drive faster than is safe for conditions  
Adjust speed as conditions change  
Cover the brake when a hazard is observed  
Watch for distracted pedestrians, bicyclists, skateboarders, etc.  
Wait with wheels straight when stopped for turns in intersections

**Demonstrate how to respond safely to sudden mechanical failures:**

- Loss of steering
- Loss of brakes
- Tire failure
- Headlight failure

Describe how to respond safely to running off the pavement edge – avoiding overcorrecting

**When parking:**

- Avoid backing up whenever possible – selects “drive-through” spots
- Select a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow
- Set the parking brake – turn wheels appropriately on inclines with and without curbs

Avoid backing up whenever possible

When forced to back up, take necessary time to follow safe backing procedures despite external pressures

*Proactive Communications – “Don’t Hesitate – Communicate”*

Always communicate intentions – use turn signals when turning and making lane changes

Turn lights on for visibility

Activates four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians and cyclists – don’t assume they recognize your intention

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

Signal turns and lane changes early and as needed

**When forced to back:**

- Tap horn before backing
- Partially open driver’s window
- Activate four-way emergency flashers
- Communicate with ground guide (if available) using prearranged signals



**UNIVERSITY OF CALIFORNIA CORE PLUS®**  
**DRIVING EVALUATION**  
**PASSENGER AUTO OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Identify what to look for with critical engine compartment components (if included at your location)
- Identify critical exterior and interior inspection components
- Adjusts seat and mirrors for optimal driving position

**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers
- Keeps eyes moving – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Avoids backing whenever possible
- If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
- If backing will be necessary, both looks back and checks a different mirror every 2-3 seconds \_\_\_\_\_

**PROACTIVE DEFENSE**

- Anticipates unsafe actions by other drivers – identifies distracted pedestrians
- Demonstrates preparedness to take evasive action – covers the brake when hazard is observed
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows posted speed limit
- Describes proper response to loss of steering, brakes, headlight failure, tire failure
- Checks rear-view mirror before backing
- Stops, gets out and checks if hazard possibly in backing path

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights
- Assures headlights are on for safety
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing
- Activates 4-way hazard lights when appropriate

**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**CORE PLUS™ MODULE**  
**PASSENGER VAN**  
**OPERATIONS**



## CORE PLUS™ MODULE

### Passenger Van Operations

**Intended for:** Regular but nonprofessional (CDL not required) UC drivers of passenger vans.

**Classification Characteristics:** Operation of vans and minivans for passenger transport purposes other than organized vanpools by both regular and occasional drivers, including student drivers. Includes fleet and rental vehicles in local as well as long-distance operation.

**Application:** All existing drivers and all subsequent new drivers, including rehires and transfers – implementation schedule to be determined locally.

**Implementation:** Initially it will target Occupational Drivers. The goal is initial training of all new hires within 30 days of their being hired.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course followed by behind-the-wheel practice and evaluation.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

## Content

### Introduction to PASSENGER VAN Operations

Why train PASSENGER VAN drivers?

- Likelihood of harm to others

- Increase knowledge of defensive driving techniques

- Upgrade everyday driving skills

- Adjust driving technique to compensate for specific characteristics of passenger vans

#### Vehicle-specific risks

- Heavier than passenger car – slower acceleration/extended stopping distance

- Wider/longer/taller than passenger car – increased susceptibility to cross winds and clearance hazards

- High center of gravity – reduced evasive capability

- Rollover/ejection hazard

- Impaired visibility side and back – use of mirrors is critical

- Size impairs forward visibility for vehicles driving behind

- Driving position forward of usual – changes steering perspective

- Extended overhang behind rear wheels affects backing

- Reduced body protection from side impacts

- Inconsistent seatbelt use by passengers

- Loading/unloading risks

- Conversational distractions from greater number of passengers

- Schedule/distance demands may result in monotony/fatigue

- Increased exposure to impaired drivers when driving during nighttime hours on long trips

- Travel may require operation in unfamiliar environments

### Vehicle Inspections in PASSENGER VAN Operations

#### Safety

- Prevention of breakdowns/mechanical failures

- Personal responsibility for passengers

- Learning to operate an unfamiliar vehicle safely

#### Types of Inspections

- Pre-trip

- Checklist-driven



Introduction of local PASSENGER VAN inspection forms

#### Midtrip/Midshift

- Tires – pressure, tread failure
- Fluids – evidence of leaks
- Windshield – clean
- Lights – clean and functioning

#### Post-trip/out of service – walk-around mini-check

- Tires
- Body damage
  - The “rolling billboard”
- Fuel
- Interior cleanliness

#### Inspection Areas

- Engine – per location policy
- Belts
- Hoses
- Fluids
- Compartment visual

#### Exterior

- Lights – clean and functioning
- Signals functioning properly
- Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
- Body damage
- Wipers – secure
- Mirrors – secure and clean
- Windshield – clean

#### Interior

- Mirror/seat adjustment
- Seatbelts functional (all)
- Brake pedal travel
- Heater/defroster
- Gauges/warning lights
- Glass – sightlines clear of interior condensation
- Damage
- Cleanliness
- Collision reporting kit
- Fire extinguisher/first aid kit
- Next vehicle service date

#### Reporting Procedures

- Local reporting instructions
- Problems needing resolution before further operation
- Problems needing resolution at end of task
- Problems worthy of note for next service



## Driving Defensively in PASSENGER VAN Operations

### Achieving low-forces driving in PASSENGER VAN Operations

- Reducing “G” forces – acceleration, deceleration and cornering
- Benefits of low-forces driving
- Self
- Others
- Vehicle

### Vehicle differences with PASSENGER VAN Operations

- Visibility
- Handling/cornering
- Stopping distances – brakes overheating on long downgrades
- Clearances
- Parking
- Passengers

### Driver’s role and responsibilities in PASSENGER VAN Operations

- Passenger safety
- Professionalism
- Rested and ready to drive/substance-free (including Rx medications)
- Pull over immediately if drowsy – address problem
- Concentration on the Art of Driving
- Multitasking/unsafe behaviors
- Image and road courtesy
- Seatbelt use by passengers – personal legal exposure
- Hanging garments and right-side windows
- Cell phones
  - Use (including texting) prohibited while driving
- AM/FM radios/CD players/other sound systems
- Speed control
- Following distance/space cushion
- Visual scanning

### External factors

- Traffic conditions and pedestrians
- Time of day/visibility – effect on mirrors
- Weather conditions
- Exterior distractions
- Road surface conditions

### Driver/mechanic teamwork

- Early signs of mechanical problems/safety-sensitive issues
- Steering play
- Brake pedal travel
- Starting problems
- Communications between driver and mechanic
- Assistance during long and/or out-of-state trips
- Preventing failures



## Collisions, Breakdowns and Other Mishaps in PASSENGER VAN OPERATIONS

### Collisions

- Assess personal and passenger safety first
- Get help by calling 911
- Encourage injured parties to remain in vehicle(s)
- Collision kit
- Moving vehicles
- Witnesses/passenger names
- Local notification protocol (UCPD, Fleet, Risk Management, etc.)
- Photos – remember cell phone cameras
- Information exchange/statements
- Towing – local protocol

### Breakdowns

- Pull over before vehicle stops running
- Emergency flashers
- Dashboard warning lights
- Steam vs. smoke
- Flat/low tires
- Dead batteries/jump starts
- Getting help – local and long-distance towing protocol – other UC locations as resources
- Logging small items for next service

### Other Mishaps

- Breakins/thefts
- Lockouts
- Fueling errors (e.g., putting gas in a diesel vehicle)

Review of “At Fault” and “Preventable” collision concepts

## Written test of PASSENGER VAN OPERATIONS Knowledge

### BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in PASSENGER VAN OPERATIONS

#### *Proactive Awareness – “Be Alert...Don’t Get Hurt”*

- See/analyze what’s developing ahead
- Systematically scan all time zones
- Generally focus on 15 seconds ahead
- Eliminate visual barriers
- Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – checks at least one mirror every 3 to 5 seconds  
Change body position to expand sight angle

Demonstrate awareness of changing road and weather conditions

Resist distractions from passengers and other sources

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary.

If *forced* to back up:

- Perform a circle of safety – *actively look for obvious and hidden hazards before backing*
- Demonstrate awareness of blind spots and clearances, including overhangs



- Avoid distractions, especially from passengers
- Check all mirrors BEFORE backing
- Check a different mirror every 2 to 3 seconds while backing
- Enlist support of passengers – ask for a ground guide

*Proactive Defense – “Expect the Unexpected”*

Anticipate unsafe actions by other drivers  
Remain prepared to take evasive action  
Maintain and protect space cushions wherever possible  
Maintain a 4 to 6 second following distance  
Never drive faster than is safe for conditions  
Adjust speed as conditions change  
Cover the brake when a hazard is observed  
Watch for distracted pedestrians, bicyclists, skateboarders, etc.  
Wait with wheels straight when stopped for turns in intersections

*Demonstrate techniques to respond safely to sudden mechanical failures:*

- Loss of steering
- Loss of brakes
- Tire failure
- Headlight failure

*Describe how to respond safely to running off the pavement edge – avoiding overcorrecting*

- When parking:
- Avoid backing whenever possible – selects “drive-thru” spots
- Select a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow
- Set the parking brake – turn wheels appropriately on inclines with and without curbs

Avoid backing up whenever possible

When forced to back up, take necessary time to follow safe backing procedures despite external pressures

*Proactive Communications – “Don’t Hesitate – Communicate”*

Always communicate intentions – use turn signals when turning and making lane changes

Turn lights on for visibility

Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians and cyclists – don’t assume they recognize your intention

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

Signal turns and lane changes early and as needed

*When forced to back up:*

- Tap horn before backing
- Partially open driver’s window
- Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure backup camera is on (for vehicles equipped with video)
- Activate four-way emergency flashers
- Communicate with ground guide (if available) using prearranged signals



**UNIVERSITY OF CALIFORNIA CORE PLUS®**  
**DRIVING EVALUATION**  
**PASSENGER VAN OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Identify what to look for with critical engine compartment components (if included at your location)
- Identify critical exterior and interior inspection components
- Adjusts seat and mirrors for optimal driving position

**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Confirms seatbelt use by all occupants
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers, including interior factors affecting window visibility
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Avoids backing whenever possible
- If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
- If backing will be necessary, asks for a ground guide and checks a different mirror every 2-3 seconds \_\_\_\_\_

**PROACTIVE DEFENSE**

- Anticipates unsafe actions by other drivers – identifies distracted pedestrians and cyclists
- Demonstrates preparedness to take evasive action – covers the brake when a hazard is observed
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows posted speed limit
- Describes proper response to loss of steering, brakes, headlight failure, tire failure, running off the pavement edge
- Selects "drive-thru" parking spots when possible
- Enlists support of passengers for backing – asks for a ground guide; checks rear-view mirror before backing
- Stops, gets out and checks if hazard possibly in backing path

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights
- Assures headlights are on for safety
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing
- Communicates with ground guide using pre-arranged signals

**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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A large, light blue graphic of a tire tread is centered on the page. The text "ADVANCED DRIVER TRAINING" is written along the top arc of the tire, "UNIVERSITY OF CALIFORNIA" along the left arc, "CORE PLUS™" along the bottom arc, and "SERVICE VEHICLES" along the right arc. In the center of the tire is a large, faded version of the blue cross logo with a yellow circle in the middle.

CORE PLUS™ MODULE  
SERVICE VEHICLE  
OPERATIONS

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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## CORE PLUS™ MODULE

### Service Vehicle Operations

**Intended for:** Regular drivers of service-related work trucks, such as pickups, cargo vans, utility trucks, mail trucks, etc.

**Classification Characteristics:** Intermittent or continuous driving of trucks most commonly used to transport tools or goods to job sites or delivery destinations. Does not typically require specialized commercial license.

**Application:** All existing drivers and all subsequent new drivers, including rehires and transfers. The goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course, followed by behind-the-wheel practice and evaluation.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### Introduction to SERVICE VEHICLE Operations

Why train SERVICE VEHICLE drivers?

Likelihood of harm to self and others

Unique challenges of the campus driving environment

Increase knowledge of defensive driving techniques

Upgrade everyday driving skills

Adjust driving technique to compensate for specific characteristics of vehicle

#### Vehicle-specific risks

Heavier than passenger car – higher center of gravity

Equipment may be older

Cab seats and floors may be cluttered

Impaired visibility at side and back – use of mirrors is critical

Inconsistent seatbelt use resulting in control/ejection hazards

Typically slower acceleration and greater stopping distances than passenger cars

Difficulty finding parking near job sites – possible obstruction of transit or fire lanes

Frequent parking and exiting the vehicle – roll-away risk due to improper parking

Personal injury during loading/unloading

Failure to secure exterior compartment doors properly, resulting in accidental opening

Loss or injury caused by improperly secured loads or exterior materials/equipment

Exhaust (carbon monoxide) intrusion while driving with back doors or windows opened improperly

Operation of specialized equipment – lift gates, winches, hoists, specialized racks, etc.

### Vehicle Inspections in SERVICE VEHICLE Operations

Safety

Prevention of breakdowns/mechanical failures

#### Types of Inspections

Pre-trip

Checklist-driven

Introduction of local SERVICE VEHICLE inspection forms

#### Midtrip/midshift – important if working off-road

Dual tires for embedded rocks

Underside for suspension/steering damage



### Post-trip/out of service – walk-around mini-check

- Tires
- Body damage
  - The “rolling billboard”
- Fuel
- Interior cleanliness

### Inspection Areas

- Engine – per location policy
- Belts
- Hoses
- Fluids – levels and leaks are critical
- Compartment visual
- Electrical connections
- Steering linkage – visual inspection

### Exterior

- Lights – clean and functioning
- Signals and warning devices functioning properly
- Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
- Body damage
- Wipers – secure and pliable
- Mirrors – secure and clean
- Windshield – clean
- Springs/shocks – visual inspection for problems
- Removable exterior equipment and cargo – present and properly secured

### Interior

- Mirror/seat adjustment
- Seatbelts functional (all)
- Brake pedal travel
- Heater/defroster
- Gauges/warning lights
- Glass – sightlines clear of interior condensation
- Damage
- Cleanliness
- Collision reporting kit
- First aid kit
- Fire extinguisher (if present) – pressure/inspection date
- Next vehicle service date

### Reporting Procedures

- Local reporting instructions
- Problems needing resolution before further operation
- Problems needing resolution at end of task
- Problems worthy of note for next service

## Driving Defensively in SERVICE VEHICLE Operations

- Achieving low-forces driving in SERVICE VEHICLE Operations
- Reducing “G” forces – acceleration, deceleration and cornering
- Benefits of low-forces driving



Self  
Others  
Vehicle

#### Vehicle differences with SERVICE VEHICLE Operations

Weight  
Handling  
Stopping distances  
Clearances  
Blind spots  
Removable external equipment  
Maximum safe speed on curves and ramps will often be less than posted  
Importance of parking brake use

#### Driver's role and responsibilities in SERVICE VEHICLE Operations

Professionalism  
Rested and ready to drive/substance-free (including Rx medications)  
Concentration on the art of driving  
Multitasking/unsafe behaviors  
Image and road courtesy  
Seat belts – consistent use  
Cell phones  
    Use (including texting) prohibited while driving  
AM/FM radios/CD players/other sound systems  
Securing accessible tools/equipment when leaving vehicle  
Speed control  
Following distance/space cushion  
Visual scanning

#### External factors

Traffic conditions and pedestrians  
Unsafe actions by others  
Time of day/visibility – effect on mirrors  
Weather conditions  
Exterior distractions  
Road surface/off-road conditions

#### Driver/mechanic teamwork

Early signs of mechanical problems/safety-sensitive issues  
Steering play  
Brake pedal travel  
Starting problems  
Problems with specialized equipment  
Communications between driver and mechanic  
Preventing failures

## Collisions, Breakdowns and Other Mishaps in SERVICE VEHICLE Operations

#### Collisions

Assess personal and passenger safety first  
Get help by calling 911  
Encourage injured parties to remain in vehicle(s)



Collision kit/triangle placement  
Moving vehicles  
Witnesses/passenger names  
Local notification protocol (UCPD, Fleet, Risk Management, etc.)  
Photos – consider cell phone camera – appropriate/inappropriate photographs  
Information exchange/statements  
Towing – local protocol

#### Breakdowns

Pull over before vehicle stops running  
Triangle placement  
Warning lights  
Steam vs. smoke  
Flat/low tires  
Dead batteries/jump starts  
Getting help – local towing protocol  
Logging small items for next service

#### Other Mishaps

Breakins/thefts  
Lockouts  
Fueling errors (e.g., putting gas in a diesel vehicle)  
Loss of exterior equipment  
Getting stuck during off-road operation

Review of “At Fault” and “Preventable” collision concepts

## Written Test of SERVICE VEHICLE OPERATIONS Knowledge

### BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in SERVICE VEHICLE OPERATIONS

#### *Proactive Awareness – “Be Alert...Don’t Get Hurt”*

See/analyze what’s developing ahead  
Systematically scan all time zones  
Generally focus on 15 seconds ahead  
Eliminate visual barriers  
Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds  
Change body position as needed to expand sight angle

Demonstrate awareness of changing road and weather conditions  
If necessary to go off-road, check for hidden or partially hidden surface and overhead obstructions

Resist distractions from passengers and other sources

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary

If *forced* to back up:

- Perform a circle of safety – identify hazards around the vehicle – *actively look for hidden hazards before backing up*
- If using cones, pick up cone behind vehicle *last*



- Demonstrate awareness of blind spots and clearances, including height
- Avoid distractions, especially from passengers
- Partially open driver's window
- Check all mirrors BEFORE backing up
- Check a different mirror every 2 to 3 seconds while backing
- Enlist support of passengers – ask for a ground guide

#### Demonstrate awareness of safety hazards associated with operation of specialized vehicle equipment

##### *Proactive Defense – “Expect the Unexpected”*

- Anticipate unsafe actions by other drivers
- Remain prepared to take evasive action
- Maintain and protect space cushions wherever possible
- Maintain a 4 to 6 second following distance
- Never drive faster than is safe for conditions
- Adjust speed as conditions change
- Cover the brake when a hazard is observed
- Watch for distracted pedestrians
- Wait with wheels straight when stopped for turns in intersections
- Demonstrate techniques to respond safely to sudden mechanical failures:
  - Loss of steering
  - Loss of brakes
  - Tire failure
  - Headlight failure

##### When parking:

- Avoid backing whenever possible
- Select a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow – uses signs/cones appropriately
- Set the parking brake – turn wheels appropriately on inclines with and without curbs

##### AVOID BACKING in all situations

- Take necessary time to follow safe backing procedures despite external pressures
- Use appropriate defensive measures when operating specialized vehicle equipment
- Make sure specialized equipment is properly secured before moving vehicle

##### *Proactive Communications – “Don't Hesitate – Communicate”*

Always communicate intentions – use turn signals when turning and making lane changes

- Turn lights on for visibility
- Activate four-way emergency flashers when appropriate

- Make eye contact with other road users, including pedestrians
- Use horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision
- Signal turns and lane changes early and as needed

##### When forced to back up:

- Tap horn before backing
- Partially open driver's window
- Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure backup camera is on (for vehicles equipped with video)
- Activate four-way emergency flashers
- Communicate with ground guide (if available) using prearranged signals

Communicates appropriately when operating specialized vehicle equipment



**UNIVERSITY OF CALIFORNIA CORE PLUS®**  
**DRIVING EVALUATION**  
**SERVICE VEHICLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Identifies what to look for with critical engine compartment components (per location policy)
- Identifies critical exterior and interior inspection components
- Confirms all seatbelts are accessible and in good operating condition
- Adjusts seat and mirrors for optimal driving position

**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers and demonstrates awareness of vehicle blind spots
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Demonstrates awareness of safety hazards associated with specialized vehicle equipment
- Avoids backing whenever possible
- If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds \_\_\_\_\_

**PROACTIVE DEFENSE**

- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows the posted speed limit
- Anticipates unsafe actions by other drivers and pedestrians – covers the brake when a hazard is observed
- Describes proper response to loss of steering, brakes, headlight failure, tire failure
- Checks for hidden surface and overhead hazards when going off-road
- If forced to back, uses a ground guide whenever possible
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
- Selects parking spot out of traffic flow – uses traffic control signs and cones appropriately
- Utilizes proper defensive measures when securing or operating specialized vehicle equipment

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on
- Communicates with ground guide if available, using pre-arranged signals

**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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CORE PLUS™ MODULE  
SPECIALIZED VEHICLE  
OPERATIONS

UNIVERSITY OF CALIFORNIA  
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SAFETY WORKGROUP



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## CORE PLUS™ MODULE

### Specialized Vehicle Operations

**Intended for:** Regular drivers of special purpose work trucks, such as straight trucks, waste collection trucks, bucket trucks, tow trucks, street sweepers, and fire apparatus engaged in nonemergency driving.

**Classification Characteristics:** Intermittent or continuous driving and operation of trucks where the vehicle and its accessory equipment are an integral part of the work being performed. Additional training/re-training and a specialized commercial license or endorsement may be required for some assignments (e.g., hazardous materials transport).

**Application:** All existing drivers and all subsequent new drivers, including rehires and transfers. Goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially, it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course, followed by behind-the-wheel practice and skill-building.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### Content

#### Introduction to SPECIALIZED VEHICLE Operations

Why train SPECIALIZED VEHICLE drivers?

Likelihood of harm to self and others

Unique challenges of the campus driving environment

Increase knowledge of defensive driving techniques

Upgrade everyday driving skills

Adjust driving technique to compensate for specific characteristics of the vehicle

#### Vehicle-specific risks

Heavier/slower than passenger car – higher center of gravity

Slower acceleration/greater stopping distance than passenger cars

Size may result in other drivers misjudging truck's speed

Seriously impaired visibility at side and back – use of mirrors is critical

Driving position may be forward of usual – changes steering geometry

Flat-sided vehicles especially vulnerable to cross-winds

Failure to use seatbelts may result in control/ejection hazards

Frequent parking and exiting the vehicle – roll-away risk due to improper parking

Risk of falls entering and exiting elevated cabs

Personal injury risk during loading/unloading operations

Failure to properly secure exterior compartment doors resulting in accidental opening/loss of contents

Loss or injury caused by improperly secured loads or exterior materials/equipment

Operation of specialized equipment – winches, hoists, booms, lift gates, hydraulic forks and other bin lifting systems, rotating brushes, specialized racks, etc.

Unique hazards specific to the vehicle



## Vehicle Inspections in SPECIALIZED VEHICLE Operations

### Safety

- Prevention of breakdowns/mechanical failures
- Prevention of harm to other drivers, pedestrians and persons working around the truck

### Types of Inspections

- Pre-trip
- Checklist-driven
- Introduction of local SPECIALIZED VEHICLE inspection forms

### Midtrip/Midshift – important if working off-road

- Dual tires for embedded rocks
- Underside for suspension/steering damage

### Post-trip/out of service – walk-around mini-check

- Tires/wheels
- Body damage
  - The “rolling billboard”
- Fuel
- Interior cleanliness

### Inspection Areas

- Engine – per location policy
- Belts
- Hoses
- Fluids – levels and leaks are critical
- Compartment visual
- Electrical connections
- Steering linkage – visual inspection

### Exterior

- Lights – clean and functioning
- Signals and warning devices functioning properly
- Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
- Body damage
- Wipers – secure and pliable
- Mirrors – secure and clean
- Windshield – clean
- Springs/shocks – visual inspection for problems
- Utility body and mounts – broken bolts, cracked welds, fatigue fractures
- Wheel chocks – if provided
- Specialized accessory equipment – connections, fluid leaks, cables, etc.
- Removable exterior equipment – present and properly secured

### Interior

- Mirror/seat adjustment
- Seatbelts functional (all)
- Procedures for hydraulic and air brake systems
- Heater/defroster
- Gauges/warning lights
- Backup alarm (if so equipped)



- Backup camera is on (if so equipped)
- Glass – sightlines clear of interior condensation
- Damage
- Cleanliness
- Collision reporting kit and warning triangles
- First aid kit
- Fire extinguisher – pressure/inspection date
- Next vehicle service date

### Reporting Procedures

- Local reporting instructions
- Problems needing resolution before further operation
- Problems needing resolution at end of task
- Problems worthy of note for next service

## Driving Defensively in SPECIALIZED VEHICLE Operations

- Achieving low-forces driving in SPECIALIZED VEHICLE Operations
- Reducing “G” forces – acceleration, deceleration and cornering

### Benefits of low forces driving

- Self
- Others
- Vehicle

### Vehicle differences with SPECIALIZED VEHICLE Operations

- Weight
- Handling – hydroplaning risk at speeds as low as 30 mph
- Stopping distances
- Clearances – sides and overhead
- Blind spots
- Removable external equipment
- Operation of specialized vehicle equipment
- Maximum safe speed on curves and ramps will often be 5 to 10 mph less than posted

### Driver’s role and responsibilities in SPECIALIZED VEHICLE Operations

- Professionalism
- Rested and ready to drive/substance-free (including Rx medications)
- Concentration on the art of driving
- Multi-tasking/unsafe behaviors
- Image and road courtesy
- Seat belts – consistent use
- Cell phones
  - Use (including texting) prohibited while driving
- AM/FM radios/CD players/other sound systems
- Speed control
- Following distance/space cushion
- Visual scanning

### External factors

- Traffic conditions and pedestrians
- Time of day/visibility – effect on mirrors
- Weather conditions



- Exterior distractions
- Road surface/off-road conditions
- Recurring operations at “familiar” sites

#### Driver-mechanic teamwork

- Early signs of mechanical problems/safety-sensitive issues
- Steering play
- Brake pedal travel and other problems
- Starting problems
- Specialized equipment problems
- Communications between drivers and mechanics
- Preventing failures

## Collisions, Breakdowns and Other Mishaps in SPECIALIZED VEHICLE Operations

### Collisions

- Assess personal and passenger safety first
- Get help by calling 911
- Encourage injured parties to remain in vehicles
- Collision kit/triangle placement
- When and how to move vehicles
- Witness names and contact information
- Location reporting protocol
- Photos
- Information exchange/statements
- Towing – local protocol

### Breakdowns

- Pull over before vehicle stops running
- Triangle placement
- Warning lights
- Steam vs. smoke
- Flat/low tires
- Dead batteries/jump starts
- Specialized equipment problems
- Getting help – local towing protocol
- Logging small items for next service

### Other Mishaps

- Injuries/damage/conflicts during specialized operations
- Hazardous material spills/releases
- Fires
- Breakins/thefts
- Lockouts
- Fueling errors (e.g., putting gas in a diesel vehicle)
- Loss of exterior equipment

Review of “At Fault” and “Preventable” collision concepts

## Written Test of SPECIALIZED VEHICLE OPERATIONS Knowledge

## BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in SPECIALIZED VEHICLE OPERATIONS

*Proactive Awareness – “Be Alert...Don’t Get Hurt”*  
See/analyze what’s developing ahead



Systematically scan all time zones  
Generally focus on 15 seconds ahead  
Eliminate visual barriers  
Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds  
Change body position as needed to expand sight angles

Demonstrate awareness of changing road and weather conditions  
If necessary to go off-road, check for hidden or partially hidden surface and overhead obstructions

Resist distractions, including cell phones and two-way radios

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary

If *forced* to back up:

Perform a circle of safety – identify hazards around the vehicle

- *Never back in traffic without checking behind the vehicle*
- Ask partner or other person to help as ground guide
- If using cones, pick up cone behind vehicle *last*
- Demonstrate awareness of blind spots and clearances, including height
- Avoid distractions
- Check all mirrors BEFORE backing – change body position to improve sight angles
- Check a different mirror every 2 to 3 seconds while backing

Demonstrate awareness of safety hazards associated with operation of specialized vehicle equipment

*Proactive Defense – “Expect the Unexpected”*

Anticipate unsafe actions by other drivers

Remain prepared to take evasive action

Maintain and protect space cushions wherever possible

Maintain a 4 to 6 second following distance

Never drive faster than is safe for conditions

Adjust speed as conditions change

Cover the brake when a hazard is observed

Watch for distracted pedestrians

Demonstrate techniques to respond safely to sudden mechanical failures:

- Loss of steering/ brakes
- Tire failure
- Headlight failure

*When parking:*

- Avoid backing up whenever possible
- Select a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow
- Set the parking brake – turn wheels appropriately on inclines with and without curbs
- Chock wheels when appropriate

Use appropriate defensive measures when operating specialized vehicle equipment

*Proactive Communications – “Don’t Hesitate – Communicate”*



Always communicate intentions – use turn signals when turning and making lane changes

Turn lights on for visibility

Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

Signal turns and lane changes early and as needed

**When forced to back up:**

- Taps horn before backing
- Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure backup camera is on (for vehicles equipped with video)
- Activate four-way emergency flashers
- Communicate with ground guide (if available) using prearranged signals

**Communicate appropriately when operating specialized vehicle equipment**



**UNIVERSITY OF CALIFORNIA CORE PLUS®**  
**DRIVING EVALUATION**  
**SPECIALIZED VEHICLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Demonstrates proper procedures for air brake system (if so equipped)
- Identifies what to look for with critical engine compartment components (per location policy)
- Identifies critical exterior and interior inspection components
- Confirms all seatbelts are accessible and in good operating condition
- Adjusts seat and mirrors for optimal driving position

**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers and demonstrates awareness of vehicle blind spots and clearance requirements
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Checks for hidden surface and overhead obstructions when going off-road
- Avoids backing whenever possible
- If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds \_\_\_\_\_

**PROACTIVE DEFENSE**

- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows the posted speed limit
- Anticipates unsafe actions by other drivers and pedestrians – covers the brake when a hazard is observed
- Describes proper response to loss of steering, brakes, headlight failure, tire failure
- If forced to back, uses a ground guide whenever possible
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
- Selects parking spot out of traffic flow – uses traffic control signs and cones appropriately, picks up rear cone *last*
- Demonstrates proper safety measures when securing or operating specialized vehicle tools and equipment

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on as well as back-up camera, if so equipped
- Communicates with ground guide if available, using pre-arranged signals

**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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CORE PLUS™ MODULE  
TRAILER OPERATIONS

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## CORE PLUS™ MODULE

### Trailer Operations

**Intended for:** Regular and occasional UC drivers whose driving duties include towing of trailers and towable equipment.

**Classification Characteristics:** Towing trailers of various sizes, including travel trailers, those used for general cargo, heavy equipment, boats, bicycles, etc., as well as towable equipment, such as compressors, wood chippers, cement mixers, recreational climbing walls, vehicular tow bars, etc. Includes both local and long-distance towing.

**Application:** All existing drivers and all subsequent new drivers who tow trailers, including rehires and transfers. The goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially, it will target Occupational Drivers – then others according to locally developed implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course, followed by behind-the-wheel practice and evaluation

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principle, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### Content

#### Introduction to TRAILER Operations

##### Why train drivers for trailer towing?

- Likelihood of harm to others
- Potential loss of cargo
- Potential damage to trailer/towable equipment

##### Towing-specific risks

- Extended stopping distances – brakes overheating on long downgrades
- Minimal evasive capability
- Jackknife response to sudden steering corrections
- Susceptibility to crosswinds
- Engine overheating in tow vehicle
- Impaired visibility at side and back of trailer – use of mirrors is critical
- Connection failures
- Specific loading/unloading hazards (e.g., boats, heavy equipment)
- Loss of cargo or contents when transporting bulk materials
- Exceeding trailer’s or tow vehicle’s maximum weight capacity
- Unique backing challenges

#### Inspections in TRAILER Operations

##### Safety

- Prevention of control problems
- Prevention of accidental disconnection
- Prevention of breakdowns/mechanical failures
- Prevention of loss of load

##### Types of Inspections

- Pre-trip
- Checklist-driven
- Hitch/chains
- Tires



Lights  
Balanced cargo distribution – front/back, side/side  
Cargo weight within limits for trailer  
Load secure – tie-down straps or chains

#### Midtrip/Midshift

Hitch/chains  
Tires  
Lights  
Load secure

#### Post-trip/out of service – walk-around mini-check

Hitch/chains  
Tires  
Body/cargo damage

#### Inspection Areas

Hitch  
Pin securing ball mount to receiver intact  
Connection point properly lubricated  
Hitch coupler completely over ball and latching mechanism locked  
Spring bar hinges tight with safety clips in place (if so equipped)  
Safety chains crossed in “X” fashion and properly secured (hooks facing out)  
Electrical plug properly connected

#### Trailer

Brake lights and turn signals functioning properly  
All running lights functioning properly  
Tires/wheels – condition and pressure, visual for cracks/damage  
Trailer damage  
Wheel chocks/jack stand  
Ramps/gates secured  
Next trailer service date  
Trailer brakes tested for function while moving forward slowly  
Load properly fastened/secure

#### Reporting Procedures

Problems needing resolution before further operation  
Problems needing resolution at end of task  
Problems worthy of note for next service

Introduction of Local TRAILER inspection forms

### Driving Defensively in TRAILER Operations

Achieving low-forces driving in TRAILER Operations  
Reducing “G” forces – acceleration, deceleration  
and cornering

#### Benefits of low-forces driving

Self  
Others  
Towing vehicle  
Trailer



### Vehicle differences with TRAILER Operations

- Visibility
- Handling/swaying/fishtailing
- Speed limitations
- Lane restrictions
- Stopping distances
- Lane changes
- Clearances and turning – effects of bumps and dips
- Parking challenges
- Loading and unloading
- Backing

### Driver's role and responsibilities in TRAILER Operations

- Concentration on the art of driving
- Multitasking/unsafe behaviors
- Image and road courtesy
- Speed control
- Extended following distance/space cushions
- Enhanced visual scanning
- Ensuring adequacy of tow vehicle for load demands
- Ensuring safety in trailer connections and towing technique

### External factors

- Traffic conditions and pedestrians
- Time of day/visibility – effect on mirrors
- Weather/wind conditions
- Road surface conditions

### Driver-mechanic teamwork

- Early signs of mechanical problems/safety-sensitive issues
- Braking problems
- Hitch problems
- Wheel and bearing problems
  
- Communications between driver and mechanic
- Questions about various weight capacities – trailer, tow vehicle, hitch weight
- Use of vehicle scales
- Notification of mechanic if trailer wheels are immersed in water (especially salt water) so bearings can be inspected and greased
  
- Preventing failures

## Collisions, Breakdowns and Other Mishaps in TRAILER OPERATIONS

- Collisions
- Assess personal and passenger safety first
- Get help by calling 911
- Encourage injured parties to remain in vehicles
- Collision kit/triangle placement
- When and how to move vehicles
- Witness names
- Photos
- Information Exchange/Statements



Towing procedures for vehicle and/or trailer if necessary – location protocol

#### Breakdowns

Pull over at first sign of a problem  
Triangle placement  
Hitch failures  
Flat/low tires  
Wheel loss/bearing problems  
Brake failures  
Electrical failures  
Connection/disconnection problems  
Getting help – location towing protocol  
Logging small items for next service

#### Other Mishaps

Breakins/thefts  
Loss of cargo  
Loading/unloading incidents – boats, heavy equipment, etc.

Review of “At Fault” and “Preventable” collision concepts

## Written Test of TRAILER OPERATIONS Knowledge

### BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in TRAILER OPERATIONS

#### *Proactive Awareness – “Be Alert...Don't Get Hurt”*

Demonstrate ability to perform a complete inspection using appropriate checklist

See/analyze what's developing ahead  
Systematically scan all time zones  
Generally focus on 15 seconds ahead  
Eliminate visual barriers  
Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – adjust awareness for trailer length

Demonstrate awareness of changing road and weather conditions – slow appropriately for trailer-specific hazards

Avoid backing up whenever possible

If *forced* to back up:

- Performs a circle of safety – identify hazards around the vehicle – ask partner or other person to help as ground guide
- Demonstrate awareness of blind spots and clearances, including height
- Avoid distractions, including passengers
- Check all mirrors BEFORE backing up
- Check a different mirror every 2 to 3 seconds while backing up
- Move hand at bottom of steering wheel to reduce directional confusion (right turns right, left turns left)

#### *Proactive Defense – “Expect the Unexpected”*

Connect/disconnect trailer using proper technique



Anticipate unsafe actions by other drivers  
Remain prepared to take evasive action  
Maintain and protect space cushions wherever possible  
Allow more time to brake, accelerate, pass and stop  
Maintain a 4 to 6 second following distance  
Never drive faster than is safe for conditions – slow for bumpy roads, railroad crossings and ditches  
Adjust speed as conditions change  
Cover the brake when a hazard is observed  
Downshift on long downgrades for added speed control – apply brakes at intervals  
Use trailer brakes properly  
Allow for wider turning radius

**Demonstrate techniques to respond safely to sudden mechanical failures or handling problems:**

- Loss of trailer brakes
- Trailer tire failure
- Hitch failure
- Sudden excessive sway/fishtailing

**Demonstrate ability to respond safely to running off the pavement edge – avoid overcorrecting**

- When parking:
- Avoid backing up whenever possible
- Select a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow
- On inclines;
  - Curb the tow vehicle's wheels
  - Set the parking brake
  - Place transmission in PARK (or first gear with manual transmission)
  - Block trailer wheels

Avoid backing up whenever possible

When forced to back up – take necessary time to follow safe backing procedures despite external pressures

Follow special procedures for boat launching

**When uncoupling a trailer**

- Block trailer wheels front and rear to prevent rollaways

*Proactive Communications – “Don’t Hesitate – Communicate”*

Always communicate intentions – use turn signals well in advance when turning and making lane changes

Turn lights on for visibility

Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

**When forced to back up:**

- Taps horn before backing up
- Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure backup camera is on if appropriate (for vehicles equipped with video)
- Activate four-way emergency flashers
- Communicate with ground guide if available



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**DRIVING EVALUATION**  
**TRAILER OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

**INSPECTION**

- Demonstrates ability to perform a complete trailer inspection, utilizing designated checklist
- Identifies critical checks — hitch, safety chains, tires, load balance and total weight, cargo secured within trailer
- Confirms proper electrical plug connection—trailer taillights, brake lights and turn signals functioning properly
- Tests trailer brakes for function while moving forward slowly

**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers and demonstrates awareness of vehicle blind spots
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_ adjusts awareness for trailer length
- Identifies and correctly assesses trailer-specific hazards ahead
- Avoids backing whenever possible
- If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds \_\_\_\_\_

**PROACTIVE DEFENSE**

- Connects and disconnects trailer using proper technique
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows the posted and trailer towing speed limits
- Downshifts on long downgrades for added speed control—uses brakes intermittently to avoid heat buildup
- Demonstrates proper use of trailer brake—describes response to tire failure, fishtailing and trailer brake failure
- Allows for wider turning radius of trailer—safely completes right turns at intersections with curbs
- If forced to back, uses a ground guide whenever possible
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
- Moves hand to bottom of steering wheels to reduce directional confusion while backing
- Selects parking spot out of traffic flow and preferably a drive-thru spot – uses traffic cones appropriately
- When parking on inclines—curbs tow vehicle wheels, sets parking brake, transmission in PARK, blocks trailer wheels
- Follows special procedures for boat launching if applicable

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on
- Communicates with ground guide if available, using pre-arranged signals

**ADDITIONAL COMMENTS:**

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**CORE PLUS™ MODULE**  
**VAN POOL OPERATIONS**

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## CORE PLUS™ MODULE

### Van Pool Operations

**Intended for:** Regular but non-professional UC drivers of commuter passenger vans.

**Classification Characteristics:** Elective commuter transport by volunteer drivers making one round trip per day. May or may not have commercial licenses.

**Application:** All existing drivers and all subsequent new drivers including rehires and transfers. The goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially, it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course, followed by behind-the-wheel practice and skill-building.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### Content

## Introduction to VAN POOL Operations

### Why train Van Pool drivers?

Likelihood of harm to others

### Vehicle-specific risks

Extended stopping distance  
High center of gravity – minimal evasive capability  
Rollover/ejection hazard  
Little body protection from side impacts  
Impaired visibility at side and back – use of mirrors is critical  
Inconsistent seatbelt use  
Loading/unloading and conversational distractions  
Schedule demands  
Infrequent mechanic contact

## Vehicle Inspections in VAN POOL Operations

### Safety

Prevention of breakdowns/mechanical failures  
Personal responsibility

### Types of Inspections

Pre-trip  
Checklist-driven – solely driver’s responsibility

Midtrip/Midshift – typically not applicable

Post-trip/Out of service – walk-around mini-check

Tires

Body damage

The “rolling billboard”

Fuel

Interior cleanliness



### Inspection Areas

- Engine – per location policy
- Belts
- Hoses
- Fluids – levels and leaks are critical
- Compartment visual
- Electrical connections
- Steering linkage – visual inspection

### Exterior

- Lights – clean and functioning
- Signals functioning properly
- Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
- Body damage
- Wipers – secure and pliable
- Mirrors – secure and clean
- Windshield – clean
- Springs/shocks – visual inspection for problems

### Interior

- Mirror/seat adjustment
- Seatbelts functional (all)
- Brake pedal travel
- Heater/defroster
- Gauges/warning lights
- Glass – sightlines clear of interior condensation
- Damage
- Cleanliness
- Collision reporting kit
- First aid kit
- Fire extinguisher – pressure/inspection date
- Next vehicle service date

### Reporting Procedures

- Commercial vehicle requirements (if applicable)
- Problems needing resolution before further operation
- Problems needing resolution at end of task
- Problems worthy of note for next service

### Introduction of Local Van Pool inspection forms

## Driving Defensively in VAN POOL Operations

### Achieving low-forces driving in VAN POOL Operations

- Reducing “G” forces – acceleration, deceleration and cornering
- Benefits of low-forces driving
- Self
- Others
- Vehicle

### Vehicle differences with VAN POOL Operations



- Visibility
- Handling
- Stopping distances – brakes overheating on long downgrades
- Clearances
- Parking
- Passengers

#### Driver's role and responsibilities in VAN POOL Operations

- Passenger safety, including proper weight distribution of partial loads
- Professionalism
- Vehicle use restricted per local policy
- Rested and ready to drive/substance-free (including Rx medications)
- Concentration on the art of driving
- Multi-tasking/unsafe behaviors
- Image and road courtesy
- Seat belts
- Cell phones
  - Use (including texting) prohibited while driving
- AM/FM radios/CD players/other sound systems
- Speed control
- Following distance/space cushion
- Visual scanning

#### External factors

- Traffic conditions and pedestrians
- Time of day/visibility – effect on mirrors
- Weather conditions
- Exterior distractions
- Road surface conditions

#### Driver/mechanic teamwork

- Early signs of mechanical problems/safety-sensitive issues
- Steering play
- Brake pedal travel
- Starting problems
- Communications between driver and mechanic
- Preventing failures

### Collisions, Breakdowns and Other Mishaps in VAN POOL OPERATIONS

- Collisions
  - Assess personal and passenger safety first
  - Get help by calling 911
  - Emergency Exit operation
  - Encourage injured parties to remain in vehicles
  - Collision kit/triangle placement
  - When and how to move vehicles
  - Witnesses/passenger names
  - Photos
  - Information exchange/statements
  - Towing – local protocol

#### Breakdowns

- Pull over before vehicle stops running
- Triangle placement



Warning lights  
Steam versus smoke  
Flat/low tires  
Dead batteries/jump starts  
Getting help – local towing protocol  
Logging small items for next service

#### Other Mishaps

Breakins/thefts  
Lockouts  
Fueling errors (e.g., putting gas in a diesel vehicle)  
Missed pick-ups/stranded passengers – local procedure

Review of “At Fault” and “Preventable” collision concepts

### Written Test of VAN POOL OPERATIONS Knowledge

#### BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in VAN POOL OPERATIONS

##### *Proactive Awareness – “Be Alert...Don't Get Hurt”*

See/analyze what's developing ahead  
Systematically scan all time zones  
General focus on 15 seconds ahead  
Eliminate visual barriers  
Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds

Demonstrate awareness of changing road and weather conditions

Resist distractions from passengers and other sources

Avoid backing up whenever possible

If *forced* to back up:

- Perform a circle of safety – identify hazards around the vehicle – *actively look for hidden hazards before backing up*
- Demonstrate awareness of blind spots and clearances, including height
- Avoid distractions, especially from passengers
- Check all mirrors BEFORE backing
- Check a different mirror every 2 to 3 seconds while backing up
- Enlist support of passengers – ask for a ground guide

##### *Proactive Defense – “Expect the Unexpected”*

Anticipate unsafe actions by other drivers  
Remain prepared to take evasive action  
Maintain and protect space cushions wherever possible  
Maintain a 4 to 6 second following distance  
Never drive faster than is safe for conditions  
Adjust speed as conditions change  
Cover the brake when a hazard is observed  
Watch for distracted pedestrians



**Demonstrate techniques to respond safely to sudden mechanical failures:**

- Loss of steering/ brakes
- Tire failure
- Headlight failure

Demonstrate ability to respond safely to running off the pavement edge – avoid overcorrecting

**When parking:**

- Avoid backing up whenever possible
- Selects a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow
- Set the parking brake – curb wheels on inclines

*Proactive Communications – “Don’t Hesitate – Communicate”*

Always communicate intentions – use turn signals when turning and making lane changes

Turn lights on for visibility

Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

Signal turns and lane changes early and as needed

**When forced to back up:**

- Tap horn before backing
- Make sure back-up alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure back-up camera is on (for those vehicles equipped with video)
- Activate four-way emergency flashers
- Communicate with ground guide if available



## UNIVERSITY OF CALIFORNIA CORE PLUS®

### DRIVING EVALUATION VAN-POOL OPERATIONS

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

#### INSPECTION

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Identify what to look for with critical engine compartment components (if included at your location)
- Identify critical exterior and interior inspection components
- Adjusts seat and mirrors for optimal driving position

#### PROACTIVE AWARENESS

- Demonstrates knowledge and awareness thru effective commentary driving
- Confirms seatbelt use by all occupants
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers, including interior factors affecting window visibility (condensation, hanging garments, etc.)
- Keeps eyes scanning – avoids the fixed stare
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information on all sides of vehicle
- Avoids backing whenever possible
- If backing is necessary, performs a circle of safety to identify hazards prior to entering the vehicle
- If backing is necessary, asks for a ground guide and checks a different mirror every 2-3 seconds \_\_\_\_\_
- When forced to back, takes time to follow safe backing procedures despite external pressures

#### PROACTIVE DEFENSE

- Anticipates unsafe actions by other drivers – identifies distracted pedestrians and cyclists
- Demonstrates preparedness to take evasive action – covers the brake when a hazard is observed
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows posted speed limit
- Describes proper response to loss of steering, brakes, headlight failure, tire failure, running off the pavement edge
- Selects "drive-thru" parking spots when possible—safely out of the line of traffic and preferably well-lit
- Picks up and discharges passengers in safe environments—requests they cross *behind* van if necessary
- Stops, gets out and checks if hazard possibly in backing path

#### PROACTIVE COMMUNICATIONS

- Effectively uses turn signals, 4-way flashers, brake lights and headlights on for safety
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing— ensures back-up alarm is on if so equipped
- Communicates with ground guide using pre-arranged signals

#### ADDITIONAL COMMENTS:



A large, light blue watermark of the Defensive Driver Training logo is centered on the page. It features the same circular design as the smaller logo above, with the text "DEFENSIVE DRIVER TRAINING", "UNIVERSITY OF CALIFORNIA", "CORE PLUS™", and "WHERE THE RUBBER MEETS THE ROAD" around a central cross.

APPENDIX C  
SAMPLE VEHICLE  
INSPECTION FORMS



**VEHICLE DAMAGE REPORT**

Circle Location of Damage  
Check appropriate box

LEFT		RIGHT		Fuel Level (Circle)
FENDER <input type="checkbox"/>	DOOR <input type="checkbox"/>	FENDER <input type="checkbox"/>	DOOR <input type="checkbox"/>	Full <input type="checkbox"/>
QRT. PANEL <input type="checkbox"/>	BUMPER <input type="checkbox"/>	QRT. PANEL <input type="checkbox"/>	BUMPER <input type="checkbox"/>	3/4 <input type="checkbox"/>
FENDER <input type="checkbox"/>	DOOR <input type="checkbox"/>	FENDER <input type="checkbox"/>	DOOR <input type="checkbox"/>	1/2 <input type="checkbox"/>
QRT. PANEL <input type="checkbox"/>	BUMPER <input type="checkbox"/>	QRT. PANEL <input type="checkbox"/>	BUMPER <input type="checkbox"/>	1/4 <input type="checkbox"/>
				Empty <input type="checkbox"/>

FRONT REAR

RIGHT  HOOD  GRILL  ROOF  WINDSHIELD  TRUNK   
WINDOW LEFT  ADDITIONAL COMMENTS \_\_\_\_\_

IN CASE OF EMERGENCY -- CONTACT UC SANTA CRUZ POLICE (831) 459-2231

- Seat belts must be worn at all times
- Headlights ON 100% of the time
- Two drivers will be required on outings when the length of the trip exceeds 4 hours. (drivers are allowed 4-5 hours at a time max. Multiple drivers for each vehicle are required to allow for frequent switches)
- Switch Rule—any time a second driver feels that the current driver is tired or no longer functioning at peak ability, the co-driver will say “let’s switch” and the transfer takes place without argument.
- Drivers focus primarily on driving and are not to be in conversations with the rest of the passengers. A designated second driver is shotgun and helps keep the driver alert, interprets info from the passengers as needed, handles radio, temperature control, navigation, etc., so the driver can focus.
- Awareness Rule: The responsiveness of the vans are slow and react slower when steering and braking so you have to allow yourself more time to maneuver and give yourself a larger following distance to ensure safe stopping.

Office of Physical Education, Recreation and Sports  
University of California, Santa Cruz

**DRIVER'S VEHICLE LOG**

VEHICLE # \_\_\_\_\_ TRAILER # \_\_\_\_\_ DESTINATION: \_\_\_\_\_  
 DRIVER \_\_\_\_\_ PROGRAM \_\_\_\_\_ EVENT: \_\_\_\_\_  
 DATE \_\_\_\_\_ TIME OUT \_\_\_\_\_ ENDING MILEAGE \_\_\_\_\_  
 DATE \_\_\_\_\_ TIME IN \_\_\_\_\_ BEGINNING MILEAGE \_\_\_\_\_  
 TOTAL MILES \_\_\_\_\_

The following check-list must be completed whenever transporting passengers:

√ - Okay X - Defective  Repaired

VAN		VAN	TRAILER #
Parking Brake		Horn	Brake Lights
Foot Brake		Wipers	Turn Signals
Head Lights	L R	Engine Oil*	Tires/Spare
Brake Lights		Flares/▲	Hitch
Turn Signals		Fire Extinguisher	Chains
Reflectors		First Aid Kit	Carabiners
Tires/Spares			

\*Check only if gas tank must be filled

REPAIRS NECESSARY: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

In the event defects are noted, the driver should make every effort to have them repaired prior to trip departure. If this is not possible, the driver is responsible for determine if the vehicle should be used.

Please return vehicle and keys to the East Fieldhouse Facility Center.



**BRAKE CHECK OUT**  
WRITE NUMBERS IN BLANKS

- FORD SHTL HYDRAULIC BRAKE TEST
  - FORD SHTL PARKING BRAKE (APPLY BRAKE/NO GAS)
  - AIR PRESSURE GAUGES
  - AIR PUMP GOVERNOR (MIN 85 PSI CUT IN/MAX 130 PSI CUT OUT) / OUT
- DO THE FOLLOWING WITH ENGINE & PARKING BRAKE OFF; CHECK TIRES IF NEEDED
- STATIC PRESSURE LOSS (UP TO 2 PSI/MIN) LOSS NOTED PSI
  - APPLIED PRESSURE LOSS (UP TO 3 PSI/MIN) LOSS NOTED PSI
  - LOW PRESSURE WARNING BUZZER & LIGHT (MIN 60-75 MAX PSI) ON AT PSI
  - EMERGENCY STOPPING SYSTEM/SPRING BRAKE (20 PSI-45 PSI) ON AT PSI

**TIRE PRESSURE & WHEELCHAIR LIFT**

The TIRE PRESSURE & WHEELCHAIR LIFT EVERY 10 DAY AS INSTRUCTED

- WHEELCHAIR LIFT AND TIEDOWNS

INITIAL TIRE PRESSURE AND TREAD CONDITION IN APPROPRIATE BOX  
WHEN TIRE PRESSURE IS BROUGHT TO CORRECT PSI CHECK OFF & INITIAL APPROPRIATE BOX.  
LARGE AIR BRAKE SHUTTLES  
FORD SHUTTLES

FRONT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REAR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DEFICIENCIES NOTED: \*Please put initials and time by each entry.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**PRE-TRIP CHECKLIST**

This sheet remains in the vehicle until it returns to the garage

VEHICLE #: \_\_\_\_\_ DATE: \_\_\_\_\_ M T W T H F S A S U

ODOMETER: \_\_\_\_\_ SERVICE DUE: \_\_\_\_\_

WITHIN 1000 MILES OF SERVICE

(owner's signature/time)

- WATER, OIL, BELTS, RADIATOR, HOSES, BATTERIES, BRAKE FLUID
- HORN, GAUGES, INDICATOR LIGHTS
- WINDSHIELD WIPERS, DEFROSTER
- MIRRORS AND SUPPORTS
- SEATS (PASSENGER, DRIVER, BELTS)
- ENTRANCE DOOR
- HANDRAILS, FLOOR, WINDOWS, LIGHTS
- EMERGENCY EXITS, WARNING DEVICES
- FIRE EXTINGUISHER (CHARGED, SEALED)
- TRIANGLE REFLECTORS (3)
- LICENSE PLATE LIGHT
- RUNNING LIGHTS, REFLECTORS
- HEADLIGHTS(H/L)/ HIGH BEAM INDICATOR
- STOPLIGHTS, TAIL LIGHTS, BACK-UP LIGHTS
- TURN SIGNALS/INDICATORS
- PKG BRAKE/LOW MSTR CYLNDR WARNING LIGHT
- TIRES, WHEELS, LUGNUTS, HUBS
- ELECTRIC STEP
- HITCH, CHAINS, PINS, LOCKS & CLIPS

ALL DEFICIENCIES HAVE BEEN DISCUSSED WITH RELIEF DRIVER.	<input type="checkbox"/>	before break				
PRIMARY DRIVER INITIALS BEFORE BREAK AND RELIEF DRIVER INITIALS AFTER BREAK.	<input type="checkbox"/>	after break				
RELIEF DRIVER'S IF NO CHANGE	<input type="checkbox"/>	new problem				

TIRE PRESSURE/LIFT/EXTINGUISHER MUST BE CHECKED WHEN LAST DIGIT

OF DATE AND LAST DIGIT OF VEHICLE # MATCH

(AIR BRAKE CHECKOUT AND TIRE PRESSURE CHART ON REVERSE)

SIGNATURE OF PERSON MAKING FIRST INSPECTION

Post shift rmt check will be done by the last driver of the day when the vehicle is parked in the yard. Primary shifts starting at CP are required to do rmt checkout at beginning of their shift or ASAP.



## PRE-TRIP INSPECTION CHECKLIST

VEHICLE#: \_\_\_\_\_ DATE: \_\_\_\_\_  
ODOMETER: \_\_\_\_\_

✓= OK, X=Defective

- Vehicle Walk-Around Inspection
- Running Lights, Reflectors
- Windshield Wipers, Defroster
- Horn, Gauges, Indicator Lights
- Seat Belts
- Headlights/High Beam Indicator
- Parking Brake
- Stoplights, Tail Lights, Back-Up Lights, Flashers
- Turn Signals/Indicators
- Water, Oil, Belts, Radiator, Hoses, Battery, Brake Fluid
- Tires, Wheels, Lug Nuts
- Lift Gate

Explain any defects from above list or note any new problems:

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\_\_\_\_\_  
SIGNATURE OF PERSON MAKING INSPECTION



**UCLA RECREATION  
ELECTRIC VEHICLE CHECKLIST**

Driver: \_\_\_\_\_

Date: \_\_\_\_\_

	YES	NO
1. <b>Brake lights are functioning properly?</b> On the club care the brake light will stay lit until brakes are in the park mode. On the Taylor Dunn, the brakes will light up when pressed upon to stop. This is the same for both the EZGO and G.E.M.		
2. <b>Charge cord OK?</b> Check for fraying, cuts, bent prongs and exposed insulation.		
3. <b>Turn signals working?</b> Make sure right, left, and emergency turn signals work. If turn signals are not available then follow proper traffic hand signals. Club cars do not have electric "signals".		
4. <b>Battery OK?</b> Battery light indicator on dashboard should be solid red and not blinking. If light is blinking, do not use. Call for service.		
5. <b>Tires OK?</b> Visually check tires for under/over inflation or abnormal wear. Also check for tire chock and remove from tire before driving if one is in place.		
6. <b>Rear view mirror available?</b> Also check adjustment and angle of mirror and adjust to your viewing levels.		
7. <b>Safety belts present and working properly?</b> Ensure that you and all passengers buckle up.		
8. <b>Cable lock down with lock present?</b> Ensure use when leaving the vehicle.		
9. <b>Tire chock present?</b> Use when parking the vehicle on a hill.		
10. <b>Parking brake functional?</b> Make sure parking brake is engaged when parking electric vehicle.		
11. <b>First aid kit present?</b> First aid kit should be located underneath glove compartment on the passenger side.		
12. <b>Accident report forms present?</b> A folder containing accident reporting forms and emergency contact cards will located on the roof interior.		



BUS SAFETY INSPECTION CHECKLIST	
1. INCIDENT NAME/NUMBER	2. ORDER/REQUEST NUMBER
3. OWNER/VENDOR NAME & COMPANY NUMBER	
4. AGREEMENT, PO, CONTRACT NO.	5. EXPIRES
6. MAKE	7. MODEL, TYPE
8. SERIAL NO./VIN	9. LICENSE NO.

* Safety Items, Do Not Accept Until Repaired	Pre-Use		Release	
	Yes	No	Yes	No
1. DOT inspection in previous 12 mths when required *				
2. Gauges and lights *				
3. Seat belts *				
4. Glass and mirrors *				
5. Wipers and horn *				
6. Clutch pedal: proper adjustment, 3/4" free travel				
7. Cooling system: check radiator and hoses				
8. Oil level/condition: full and clean				
9. Battery: check for corrosion, loose terminals, tie downs				
10. Fuel system *				
11. Electrical system: alternator and starter working				
12. Engine running: check for knocks and leaks				
13. Transmission: check for leaks				
14. Steering ( <i>See specialty items</i> ) *				
15. Tie rods, ball joints: check for looseness or bent *				
16. Lubrication: check for dry fittings				
17. Brakes ( <i>See specialty items</i> ) *				
18. Drive line/U-joints: check for looseness				
19. Springs and shocks *				
20. Differential: check for leaks				
21. Exhaust system ( <i>See specialty items</i> ) *				
22. Frame *				
23. Tire and wheels: 3/4" front, 3/16" rear tread required *				
24. Accessories: jack, lug wrench, mounted spare				
25. Body and interior condition: describe & locate damage on back side of form				
26. Emergency Equipment required: Fire Extinguisher Spare fuses Reflectors Chock Blocks *				
27. Operator(s) properly licensed: State _____ License No. _____ Class _____ Endorsements _____ Med Cert Exp Date _____				

11. RELEASE INSPECTION		
MILES _____	DATE _____	TIME _____
VENDOR SIGNATURE: _____ TITLE _____		
INSPECTOR NAME: _____ TITLE _____ Print		

10. PRE-USE INSPECTION		
REJECTED		
MILES: _____	DATE: _____	TIME: _____
INSPECTOR NAME: _____ TITLE _____ Print		
ACCEPTED		
MILES: _____	DATE: _____	TIME: _____
VENDOR SIGNATURE: _____ TITLE _____ Print		
INSPECTOR NAME: _____ TITLE _____ Print		

Bus Specialty Requirements	Yes	No
<b>1. PERSONAL PROTECTIVE EQUIPMENT (PPE):</b> Flame Resistant Clothing, Boots, Gloves, Hardhat & Fire Shelter.		
<b>2. SAFETY CAGE:</b> Nets WILL NOT be accepted.		
<b>3. EMERGENCY DOORS:</b> Marked with 1-inch letters and identified with a red electric lamp that works when lights are needed. 393.92 1. No emergency exit sign over rear door (if cage in rear) 2. If required roof hatch minimum size is 13"X17" 3. All exits shall be properly labeled		
<b>4. DRIVE SHAFT PROTECTION:</b> Must have at least one guard or bracket at the end of the shaft that would prevent whipping of the shaft in the event of failure.		
<b>5. EXHAUST SYSTEM:</b> Gas Powered Buses: Tailpipe will exit at or within 6" forward of the rear most part of the bus. Diesel Buses: Tailpipe will exit within 15" of the rear most part of the bus or to the rear of all doors or windows designed to be opened except windows designed to open solely as emergency exits 393.83 No exhaust leaks will be tolerated, no temp repairs.		
<b>6. SPARE TIRE:</b> Full size, mounted on wheel required on all buses; tire must be secured.		
<b>7. STEERING SYSTEM:</b> 393.209 See table in CFR book for maximum steering lash allowed. Gear box, u-joints, ball joints and tie rods must be in good condition. Power steering systems will NOT have ANY leaks. Belts in good condition, steering wheel spokes may not be cracked or missing.		
<b>8. BRAKES:</b> Parking brake must hold, air brakes must meet front protection regs and have low air warning devices and working air pressure gauge. Slack adjusters must be properly adjusted. Brake lining will conform to specs. NO leaks of air or fluid allowed.		

**COMMENTS:**




BOUND EDGE

Rev. 7/07

## DRIVER'S VEHICLE INSPECTION REPORT

AS REQUIRED BY THE D.O.T. FEDERAL MOTOR CARRIER SAFETY REGULATIONS

CARRIER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ A.M. \_\_\_\_\_ P.M.  
CHECK ANY DEFECTIVE ITEM AND GIVE DETAILS UNDER "REMARKS"

TRACTOR/  
TRUCK NO. \_\_\_\_\_ ODOMETER READING \_\_\_\_\_

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Air Compressor     | <input type="checkbox"/> Front Axle      | <input type="checkbox"/> Safety Equipment       |
| <input type="checkbox"/> Air Lines          | <input type="checkbox"/> Fuel Tanks      | <input type="checkbox"/> Fire Extinguisher      |
| <input type="checkbox"/> Battery            | <input type="checkbox"/> Horn            | <input type="checkbox"/> Flags - Flares - Fuses |
| <input type="checkbox"/> Belts and Hoses    | <input type="checkbox"/> Lights          | <input type="checkbox"/> Reflective Triangles   |
| <input type="checkbox"/> Body               | <input type="checkbox"/> Head - Stop     | <input type="checkbox"/> Spare Bulbs and Fuses  |
| <input type="checkbox"/> Brake Accessories  | <input type="checkbox"/> Tail - Dash     | <input type="checkbox"/> Spare Seal Beam        |
| <input type="checkbox"/> Brakes, Parking    | <input type="checkbox"/> Turn Indicators | <input type="checkbox"/> Starter                |
| <input type="checkbox"/> Brakes, Service    | <input type="checkbox"/> Mirrors         | <input type="checkbox"/> Steering               |
| <input type="checkbox"/> Clutch             | <input type="checkbox"/> Muffler         | <input type="checkbox"/> Suspension System      |
| <input type="checkbox"/> Coupling Devices   | <input type="checkbox"/> Oil Pressure    | <input type="checkbox"/> Tire Chains            |
| <input type="checkbox"/> Defroster/Heater   | <input type="checkbox"/> Radiator        | <input type="checkbox"/> Tires                  |
| <input type="checkbox"/> Drive Line         | <input type="checkbox"/> Rear End        | <input type="checkbox"/> Transmission           |
| <input type="checkbox"/> Engine             | <input type="checkbox"/> Reflectors      | <input type="checkbox"/> Trip Recorder          |
| <input type="checkbox"/> Exhaust            |  | <input type="checkbox"/> Wheels and Rims        |
| <input type="checkbox"/> Fifth Wheel        |  | <input type="checkbox"/> Windows                |
| <input type="checkbox"/> Fluid Levels       |  | <input type="checkbox"/> Windshield Wipers      |
| <input type="checkbox"/> Frame and Assembly |  | <input type="checkbox"/> Other                  |

- TRAILER(S) NO.(S) \_\_\_\_\_
- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Brake Connections   | <input type="checkbox"/> Hitch                      | <input type="checkbox"/> Suspension System |
| <input type="checkbox"/> Brakes              | <input type="checkbox"/> Landing Gear               | <input type="checkbox"/> Tarpaulin         |
| <input type="checkbox"/> Coupling Devices    | <input type="checkbox"/> Lights - All               | <input type="checkbox"/> Tires             |
| <input type="checkbox"/> Coupling (King) Pin | <input type="checkbox"/> Reflectors/Reflective Tape | <input type="checkbox"/> Wheels and Rims   |
| <input type="checkbox"/> Doors               | <input type="checkbox"/> Roof                       | <input type="checkbox"/> Other             |

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CONDITION OF THE ABOVE VEHICLE IS SATISFACTORY

DRIVER'S SIGNATURE: \_\_\_\_\_

ABOVE DEFECTS CORRECTED

ABOVE DEFECTS NEED NOT BE CORRECTED FOR SAFE OPERATION OF VEHICLE

MECHANIC'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

DRIVER'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

VEHICLE COPY





APPENDIX D  
DRIVER  
EVALUATION FORMS

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™  
CORE DRIVER TRAINING  
DRIVING SELF-EVALUATION**

DRIVER: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_ START TIME: \_\_\_\_\_ END TIME: \_\_\_\_\_

TRAFFIC CONDITIONS:  LIGHT  MODERATE  HEAVY ROADS USED:  RURAL  URBAN  FREEWAY

INSTRUCTIONS TO DRIVER: **Please review the skill exercises below prior to driving** so you know what you are going to practice. **Do not attempt to read the form while driving.** If necessary, pull over to read the next section – every stop provides an opportunity to practice turning knowledge into skill. Turn off all audio distractions while performing your self-evaluation. **While safely stopped**, place an **[X]** next to each item you have completed. After completing, please turn in your self evaluation form as directed by your instructor. Most trainees complete this self-evaluation in less than thirty minutes. Thank you for taking the time to Be Smart About Safety!

---

**INSPECTION**

- Check tires for inflation and tread wear
- Check headlights, taillights, turn signals and four-way flashers
- Adjust seat and mirrors for optimal driving position

---

**PROACTIVE AWARENESS**

- Check your driving knowledge and awareness by continuous commentary driving during your self-evaluation
- Check your eye lead time – pick out distant objects and count the time to get there – try for 15 seconds minimum
- By counting, locate the near (4-6 second) intermediate (12-15) and far (20-30) time zones at different speeds
- Keep your eyes scanning – don't stare as you count your eye lead times
- Check your mirrors frequently – one mirror every 3-5 seconds
- If backing will be necessary, both look back and check a different mirror every 2-3 seconds

---

**PROACTIVE DEFENSE**

- Identify distracted drivers, pedestrians and cyclists
- Cover the brake pedal and horn when a hazard is observed
- Check your following distance at least four times – practice maintaining a 4-6 second distance at different speeds
- Establish and maintain space cushions – align your vehicle so you maintain routes of escape
- Move out from behind large vehicles blocking your view to preserve your 15 second eye lead time
- Check your mirror as you begin to slow or stop – know how close the vehicle behind you is
- Park your vehicle in a way that won't require backing

---

**PROACTIVE COMMUNICATIONS**

- Assure headlights are on for safety
- Signal turns and lane changes early and consistently
- Sound your horn when needed for other vehicles and pedestrians
- Make eye contact with other road users and pedestrians – don't assume recognition
- Tap horn before backing

---

**SELF-EVALUATOR COMMENTS — ASSESS YOUR OWN PERFORMANCE**

Which skills are you naturally good at?

What are your goals for self-improvement?

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™**  
**DRIVING EVALUATION**  
**BUS/SHUTTLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

---

**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Demonstrates proper procedures for air brake system (if so equipped)
- Identify what to look for with critical engine compartment components
- Identify critical exterior and interior inspection components
- Adjusts seat and mirrors for optimal driving position

---

**PROACTIVE AWARENESS**

- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Avoids backing whenever possible
- If forced to back, performs a circle of safety – identifies hazards around the vehicle
- If forced to back, checks a different mirror every 2-3 seconds \_\_\_\_\_

---

**PROACTIVE DEFENSE**

- Anticipates unsafe actions by other drivers – identifies distracted pedestrians
- Demonstrates preparedness to take evasive action – covers the brake when hazard is observed
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change
- Describes proper response to loss of steering, brakes, headlight failure, tire failure
- If forced to back, uses a ground guide whenever possible – agrees on signals
- Sets up vehicle to back from the driver's side
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors

---

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on
- Activates 4-way hazard lights when appropriate
- Communicates with ground guide if available

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**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™**  
**DRIVING EVALUATION**  
**LOW SPEED VEHICLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    SURFACE: IMPROVED/UNIMPROVED

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**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Assesses state of battery charge on electric vehicles
- Identifies critical exterior and interior inspection components
- Confirms all seatbelts are accessible and in good operating condition
- Adjusts seat and mirrors for optimal driving position

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**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Recognizes visual barriers and demonstrates awareness of vehicle blind spots
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Demonstrates awareness of safety hazards associated with nearly silent electric vehicles
- Avoids backing whenever possible
- If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds \_\_\_\_\_

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**PROACTIVE DEFENSE**

- Consistently uses seatbelt whenever vehicle is moving; asks passengers to do the same
- Assures all external tools and equipment are properly secured
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change
- Anticipates unsafe actions by other drivers, cyclists and pedestrians – covers the brake when a hazard is observed
- Checks for hidden surface and other hazards when transitioning from regular paved roads and paths
- Avoids driving across inclined surfaces whenever possible
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
- Selects parking spot out of traffic flow – assures clear access to building entrances, electrical panels and fire lanes
- Curbs or turns wheels when parked on inclines, removes key to prevent vehicle theft

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**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds horn or other warning device when needed for other vehicles, cyclists and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on

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**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™**  
**DRIVING EVALUATION**  
**OFF-ROAD VEHICLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/OFF

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**INSPECTION**

- [ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- [ ] Identify what to look for with critical engine compartment components (if included at your location)
- [ ] Identify critical exterior and specialized equipment inspection components
- [ ] Adjusts seat and belts for optimal driving position; identifies necessary personal protective equipment

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**PROACTIVE AWARENESS**

- [ ] Demonstrates driving knowledge and awareness (as observed by evaluator in trailing vehicle)
- [ ] Scans all time zones ahead
- [ ] Identifies and responds appropriately to pertinent information ahead.
- [ ] Pulls over frequently to let faster road traffic pass
- [ ] Checks for hidden surface and overhead hazards when going off-road
- [ ] Avoids backing whenever possible
- [ ] If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
- [ ] Identifies specific terrain or worksite hazards pertinent to the vehicle
- [ ] Demonstrates awareness of safety hazards associated with operation of specialized vehicle equipment

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**PROACTIVE DEFENSE**

- [ ] Anticipates unsafe actions by others – responds pro-actively
- [ ] Demonstrates preparedness to take evasive actions – covers the brake when hazard is observed
- [ ] Maintains and protects space cushions including 6-8 second following distance \_\_\_\_\_
- [ ] Slows significantly for turns
- [ ] Stops, gets out and checks if hazard possibly in backing path – requests ground guide if available
- [ ] Responds appropriately to terrain and other hazards present on a worksite
- [ ] Takes appropriate defensive measures while operating specialized equipment

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**PROACTIVE COMMUNICATIONS**

- [ ] Communicates intentions to others – signals all turns
- [ ] Assures available lights to enhance visibility when operating on roadways
- [ ] Uses horn or other signal when needed for other vehicles and pedestrians,
- [ ] Makes eye contact with other road users and pedestrians – doesn't assume recognition
- [ ] Signals turns and lane changes early and consistently
- [ ] Taps horn before backing – utilizes backing alarm but watches for workers who may not hear backing alarm
- [ ] Communicates with ground guide using pre-arranged signals

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**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™**  
**DRIVING EVALUATION**  
**PASSENGER AUTO OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

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**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Identify what to look for with critical engine compartment components (if included at your location)
- Identify critical exterior and interior inspection components
- Adjusts seat and mirrors for optimal driving position

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**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers
- Keeps eyes moving – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Avoids backing whenever possible
- If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
- If backing will be necessary, both looks back and checks a different mirror every 2-3 seconds \_\_\_\_\_

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**PROACTIVE DEFENSE**

- Anticipates unsafe actions by other drivers – identifies distracted pedestrians
- Demonstrates preparedness to take evasive action – covers the brake when hazard is observed
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows posted speed limit
- Describes proper response to loss of steering, brakes, headlight failure, tire failure
- Checks rear-view mirror before backing
- Stops, gets out and checks if hazard possibly in backing path

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**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights
- Assures headlights are on for safety
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing
- Activates 4-way hazard lights when appropriate

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**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™**  
**DRIVING EVALUATION**  
**PASSENGER VAN OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

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**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Identify what to look for with critical engine compartment components (if included at your location)
- Identify critical exterior and interior inspection components
- Adjusts seat and mirrors for optimal driving position

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**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Confirms seatbelt use by all occupants
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers, including interior factors affecting window visibility
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Avoids backing whenever possible
- If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
- If backing will be necessary, asks for a ground guide and checks a different mirror every 2-3 seconds \_\_\_\_\_

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**PROACTIVE DEFENSE**

- Anticipates unsafe actions by other drivers – identifies distracted pedestrians and cyclists
- Demonstrates preparedness to take evasive action – covers the brake when a hazard is observed
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows posted speed limit
- Describes proper response to loss of steering, brakes, headlight failure, tire failure, running off the pavement edge
- Selects “drive-thru” parking spots when possible
- Enlists support of passengers for backing – asks for a ground guide; checks rear-view mirror before backing
- Stops, gets out and checks if hazard possibly in backing path

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**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights
- Assures headlights are on for safety
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing
- Communicates with ground guide using pre-arranged signals

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**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™**  
**DRIVING EVALUATION**  
**SERVICE VEHICLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Identifies what to look for with critical engine compartment components (per location policy)
- Identifies critical exterior and interior inspection components
- Confirms all seatbelts are accessible and in good operating condition
- Adjusts seat and mirrors for optimal driving position

**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers and demonstrates awareness of vehicle blind spots
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Demonstrates awareness of safety hazards associated with specialized vehicle equipment
- Avoids backing whenever possible
- If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds \_\_\_\_\_

**PROACTIVE DEFENSE**

- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows the posted speed limit
- Anticipates unsafe actions by other drivers and pedestrians – covers the brake when a hazard is observed
- Describes proper response to loss of steering, brakes, headlight failure, tire failure
- Checks for hidden surface and overhead hazards when going off-road
- If forced to back, uses a ground guide whenever possible
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
- Selects parking spot out of traffic flow – uses traffic control signs and cones appropriately
- Utilizes proper defensive measures when securing or operating specialized vehicle equipment

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on
- Communicates with ground guide if available, using pre-arranged signals

**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™**  
**DRIVING EVALUATION**  
**SPECIALIZED VEHICLE OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

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**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Demonstrates proper procedures for air brake system (if so equipped)
- Identifies what to look for with critical engine compartment components (per location policy)
- Identifies critical exterior and interior inspection components
- Confirms all seatbelts are accessible and in good operating condition
- Adjusts seat and mirrors for optimal driving position

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**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers and demonstrates awareness of vehicle blind spots and clearance requirements
- Keeps eyes scanning – avoids staring
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information ahead
- Checks for hidden surface and overhead obstructions when going off-road
- Avoids backing whenever possible
- If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds \_\_\_\_\_

---

**PROACTIVE DEFENSE**

- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows the posted speed limit
- Anticipates unsafe actions by other drivers and pedestrians – covers the brake when a hazard is observed
- Describes proper response to loss of steering, brakes, headlight failure, tire failure
- If forced to back, uses a ground guide whenever possible
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
- Selects parking spot out of traffic flow – uses traffic control signs and cones appropriately, picks up rear cone *last*
- Demonstrates proper safety measures when securing or operating specialized vehicle tools and equipment

---

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on as well as back-up camera, if so equipped
- Communicates with ground guide if available, using pre-arranged signals

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**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™**  
**DRIVING EVALUATION**  
**TRAILER OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

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**INSPECTION**

- Demonstrates ability to perform a complete trailer inspection, utilizing designated checklist
- Identifies critical checks — hitch, safety chains, tires, load balance and total weight, cargo secured within trailer
- Confirms proper electrical plug connection—trailer taillights, brake lights and turn signals functioning properly
- Tests trailer brakes for function while moving forward slowly

---

**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers and demonstrates awareness of vehicle blind spots
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_ adjusts awareness for trailer length
- Identifies and correctly assesses trailer-specific hazards ahead
- Avoids backing whenever possible
- If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds \_\_\_\_\_

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**PROACTIVE DEFENSE**

- Connects and disconnects trailer using proper technique
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows the posted and trailer towing speed limits
- Downshifts on long downgrades for added speed control—uses brakes intermittently to avoid heat buildup
- Demonstrates proper use of trailer brake—describes response to tire failure, fishtailing and trailer brake failure
- Allows for wider turning radius of trailer—safely completes right turns at intersections with curbs
- If forced to back, uses a ground guide whenever possible
- Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
- Moves hand to bottom of steering wheels to reduce directional confusion while backing
- Selects parking spot out of traffic flow and preferably a drive-thru spot – uses traffic cones appropriately
- When parking on inclines—curbs tow vehicle wheels, sets parking brake, transmission in PARK, blocks trailer wheels
- Follows special procedures for boat launching if applicable

---

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers and brake lights;
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing – ensures back-up alarm is on
- Communicates with ground guide if available, using pre-arranged signals

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**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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**UNIVERSITY OF CALIFORNIA CORE PLUS™**  
**DRIVING EVALUATION**  
**VAN-POOL OPERATIONS**

DRIVER: \_\_\_\_\_ EVALUATOR: \_\_\_\_\_

DATE: \_\_\_\_\_ U.C. LOCATION: \_\_\_\_\_

PASS     NO PASS    OVERALL SCORE: \_\_\_\_\_    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

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**INSPECTION**

- Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- Identify what to look for with critical engine compartment components (if included at your location)
- Identify critical exterior and interior inspection components
- Adjusts seat and mirrors for optimal driving position

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**PROACTIVE AWARENESS**

- Demonstrates knowledge and awareness thru effective commentary driving
- Confirms seatbelt use by all occupants
- Systematically scans all time zones – proper eye lead time (seconds) \_\_\_\_\_
- Eliminates visual barriers, including interior factors affecting window visibility (condensation, hanging garments, etc.)
- Keeps eyes scanning – avoids the fixed stare
- Checks mirrors frequently – one mirror every 3-5 seconds \_\_\_\_\_
- Identifies and correctly assesses pertinent information on all sides of vehicle
- Avoids backing whenever possible
- If backing is necessary, performs a circle of safety to identify hazards prior to entering the vehicle
- If backing is necessary, asks for a ground guide and checks a different mirror every 2-3 seconds \_\_\_\_\_
- When forced to back, takes time to follow safe backing procedures despite external pressures

---

**PROACTIVE DEFENSE**

- Anticipates unsafe actions by other drivers – identifies distracted pedestrians and cyclists
- Demonstrates preparedness to take evasive action – covers the brake when a hazard is observed
- Maintains and protects space cushions including 4-6 second following distance \_\_\_\_\_
- Adjusts speed as conditions change – knows posted speed limit
- Describes proper response to loss of steering, brakes, headlight failure, tire failure, running off the pavement edge
- Selects “drive-thru” parking spots when possible—safely out of the line of traffic and preferably well-lit
- Picks up and discharges passengers in safe environments—requests they cross *behind* van if necessary
- Stops, gets out and checks if hazard possibly in backing path

---

**PROACTIVE COMMUNICATIONS**

- Effectively uses turn signals, 4-way flashers, brake lights and headlights on for safety
- Covers horn – sounds when needed for other vehicles and pedestrians,
- Makes eye contact with other road users and pedestrians – doesn't assume recognition
- Signals turns and lane changes early and consistently
- Taps horn before backing– ensures back-up alarm is on if so equipped
- Communicates with ground guide using pre-arranged signals

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**ADDITIONAL COMMENTS:**

UNIVERSITY OF CALIFORNIA  
DRIVER AND VEHICLE  
SAFETY WORKGROUP



RISK MANAGEMENT LEADERSHIP COUNCIL  
CORE PLUS™ DRIVER SAFETY  
TRAINING PROGRAM

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