

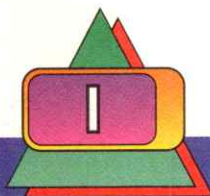


Texas

***Traffic Safety Education
Student Manual***



2003



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Your License to Drive

Texas is one of the most mobile societies in the world. A vast network of roadways has been built to accommodate the public and private vehicles that provide this mobility. From pedestrians to the largest transport trucks, they all share this system.

Each individual person, whether walking, riding a bicycle, or operating a motorized vehicle, is the nucleus of the safe and efficient operation of the Highway Transportation System or HTS.

Now that you are about to acquire your first driver's license and become a driver, you must become more familiar with this role and its responsibilities. You must also be aware of the procedures for acquiring your license and the regulations that govern this privilege.



AFTER COMPLETING THIS CHAPTER, THE STUDENT MUST BE ABLE TO UNDERSTAND THE IMPORTANCE OF AND RESPOND TO:

- the safe operation of the HTS.
- the criteria for acquiring a license in Texas.
- the vehicle inspection requirements in Texas.
- the safety responsibility requirements in Texas.



Understanding the HTS

As a passenger, you have more than likely experienced some of the freedom that an automobile provides.

Millions of Texas residents drive countless miles every day for a wide variety of reasons. Meanwhile, others ride bicycles or motorcycles, drive trucks, vans, or buses to earn a living, or operate emergency or other vehicles to supply essential public services. All of these people (and others) must share the same network of public highways. This variety of road users will inevitably lead to potential conflicts.

A multitude of professionals are involved in the proper planning or improvement of this complex system of roadways. From planning and design, to the placement of traffic control devices, engineers labor to provide a safe environment. Municipal, state and federal regulations govern all aspects of the use of the HTS.

Federal, state, and local governments cooperate to enact legislation that governs the operation of the HTS.

THE FEDERAL GOVERNMENT passes laws setting general standards for the use of the HTS. Some examples are:

- **THE NATIONAL TRAFFIC AND MOTOR VEHICLE SAFETY ACT-** legislating regulations for vehicle manufacturers; such as safety features, vehicle emissions and recall of defects.

- **THE NATIONAL HIGHWAY SAFETY ACT-** establishing general guidelines for state regulations concerning vehicle registration and inspection, driver licensing and traffic laws.
- **THE UNIFORM TRAFFIC CONTROL DEVICES ACT-** regulating the shape, color, and location of road signs.

TEXAS, following the guidelines set by federal laws, enacts statutes that regulate all aspects of the HTS: the ownership, registration, and inspection of vehicles; the licensing of drivers; traffic laws and courts; and highway construction/maintenance.

LOCAL GOVERNMENTS, cities, towns, etc. pass ordinances that regulate the use of the HTS within their regions. They govern the speed limit, traffic directions, particular rules at intersections, parking rules, etc.

It is your responsibility to know the rules. The Texas Department of Public Safety issues a handbook on the specific rules and regulations that apply in Texas. **IGNORANCE OF THE LAW IS NO EXCUSE!**

TEXAS DEPARTMENT OF PUBLIC SAFETY

The Texas regulatory agency (Texas Department of Public Safety) authorizes individuals to operate motor vehicles by issuing licenses and endorsements according to the class of vehicle that will

be operated. Certain requirements must be met to apply for each class of license.

A driver's license is a privilege, not a right, that is granted by the state. As such, the Department of Public Safety has been empowered to restrict, revoke, or suspend the license, or driving privilege of individuals under specific conditions (administrative revocation).

The Texas Department of Public Safety is also required to keep a record on every driver in order to identify, penalize, and deny the privilege of operating motor vehicles to persons who, by their conduct and record, have demonstrated their indifference for the safety of others. These drivers have also shown their disrespect for the laws of the state, for the orders of the courts, as well as the statutorily required acts of the administrative agencies that govern the HTS.

Having a driver's license is a privilege. Once you obtain your driver's license, you must continually demonstrate you have the skill, knowledge, and attitude to drive safely, or the license may be restricted, suspended, or revoked. The Texas Department of Public Safety has access to information about all crashes, traffic law violations, and certain drug convictions.

However, only those crashes that involve findings of your responsibility for civil infractions, as well as convictions for felonies or misdemeanors, are considered public information.

Most violations stay on your record for at least seven years. Certain violations and license suspensions under the Texas Implied Consent Law stay on your record for at least ten years.

OUT-OF-STATE INFRACTIONS

The Texas Department of Public Safety is also notified of any traffic crashes, convictions, and findings of responsibility in other states or jurisdictions. These will be recorded on your Texas driving record, and remain there for the same period of time as any conviction that occurs in Texas.

When your driving record shows, by the accumulation of specified number of points, that you have had problems driving safely and obeying the traffic laws, you will be contacted by the Texas Department of Public Safety.

THE POLICE

All police agencies are empowered to supervise the operation of the HTS and enforce the traffic laws enacted in Texas. When a uniformed law enforcement officer driving an official police vehicle signals you to stop, you are required to pull out of traffic and stop as soon as safely possible.

The officer may be stopping you for a variety of reasons. You may be receiving an emergency message, your vehicle may match the description of a stolen vehicle, it may have defective equipment, or the officer may believe you have committed a violation.

When stopped, you must be able to produce your driver's license, the vehicle registration, and proof of financial responsibility (insurance) for the officer.

Police officers may stop vehicle operators whenever they have reasonable grounds to suspect that an infraction has been committed. They may serve a citation, confiscate or mark the driver's license, destroy the driver's license in rare cases, have a vehicle towed, etc.

Drivers must stop when signaled to do so, assist at the scene of a collision upon request, sign a citation to appear in court, accompany the officer to the station when requested, submit to a breath/blood test when asked, and in general, cooperate with any instructions from the police.

THE COURTS

Under Texas law, some traffic violations are civil infractions; others are misdemeanors, or felonies. Depending on the charge and how it is resolved, a driver may be fined, referred to a special program, or in the most serious cases, sent to jail or prison.

Courts are structured to adjudicate and impose sentences and penalties. They do not create the laws; they merely interpret and impose sentences for the infractions of the law. They decide whether drivers charged with violating the laws are guilty or innocent.

Drivers are required to appear, testify, and conform to all imposed penalties. In most cases, if a driver does not resolve a citation, his/her driver's license will be suspended until it is resolved.

If a person continues to drive after he/she has been notified of the suspension or revocation of their driver's license, he/she will be charged with a misdemeanor. The vehicle registration will be cancelled, the suspension/revocation will be extended for an additional like period, a fine and/or jail time will be imposed.

The court may also order the impoundment, for a given period, of the motor vehicle being driven at the time of the offense (provided that the defendant was an owner of the vehicle at the time of the offense and is an owner on the date of conviction).

Many other varied penalties can be imposed by the courts - special programs, community service, etc. - depending on the infraction that was committed by the person who has been found guilty.

Yet, despite all of these efforts, the safe operation of the HTS depends on the attitude and behavior of each of its users.

ROAD USER RESPONSIBILITY

With the freedom and mobility the license to drive will grant you, you must be prepared to accept the responsibilities as well. If your vehicle was alone on the road, driving would be a simple task. The

fact is that the HTS is becoming more and more crowded every day. It is your duty to know and abide by the rules and further, to be courteous and communicate with other road users.

You are responsible for your safety, the safety of your passengers, and the safety of any others who share the HTS.

CLASSROOM & BEHIND-THE-WHEEL PREPARATION

Although completing a state-approved public or private driver education course may not be required for all license applicants, it is strongly recommended that all students experience a driver education program. This program will provide the foundation of knowledge, understanding, skills, and experiences necessary for the novice driver as well as the parent, guardian, or adult mentor to launch and continue the lifelong learning process of legal and responsible reduced-risk driving practices.

This manual, the student workbook, and other supplemental materials will be valuable aids to your proper understanding of the course your school presents.

Each school designs and schedules their own program within certain norms. Make sure you take note of the hours, dates, and topics that are to be given. Prepare yourself by reading the chapters prior to the class. Review the material after class by completing the review section in this book and the appropriate

sections in the workbook. If anything is not understood, ask your instructor at the start of the next class.

With the same diligence, apply yourself to the requirements for the behind-the-wheel segment of the driver education program.

Your parents, guardians, or adult mentors must become involved in this behind-the-wheel segment of the program while coordinating and communicating with your program instructors. They will provide you with the opportunity to practice the skills and knowledge provided by the Texas Driver Education and Traffic Safety Program.

DRIVING PLAN

With the assistance of your program instructors as well as your parents or guardians, you should formulate a driving plan that will enable you, at your own pace, to acquire the foundation of knowledge, understanding, skills, and experience necessary to launch and continue the lifelong learning process of legal and responsible reduced-risk driving practices in the HTS.

This driving plan should be formulated from the outset based on the material that has been presented in your driver education program. As the program progresses, the driving plan should be modified in keeping with the new material presented as well as your increasing experience.



Texas Licensing Regulations

The Texas Department of Public Safety may not grant you a driver's license unless you fulfill all of the requirements necessary to obtain your first license.

INSTRUCTION PERMIT REQUIREMENTS

An instruction permit is issued without a photograph for the purpose of allowing a student driver to legally practice driving when accompanied by a licensed driver who is occupying the seat beside the driver. This licensed driver must be at least 21 years of age and have at least one year of driving experience.

To qualify for an instruction permit, you must be at least 15 years of age and be enrolled in a driver education program (parent or school). Until you are 18 years of age, when you apply for an instruction permit or a driver's license, you must prove that you:

- 1) Have obtained a high school diploma or its equivalent; or
- 2) Are a student enrolled in a public or private school who attended school for at least 80 days in the fall or spring semester preceding the date of application; or
- 3) Have been enrolled for at least 45 days, and are currently enrolled in a program to prepare persons to pass the high school equivalency exam.

The Texas Education Agency has developed an attendance certification form (VOE) that you must obtain from your respective school, and then present it to the Drivers License personnel when you are applying for or renewing your driver's license or instruction permit.

At the Drivers License Office, you must:

- Fill out an application form with your full name, home address, a brief history of your physical and mental condition (persons with certain medical conditions may have their cases reviewed by the Texas Medical Advisory Board for Driver Licensing before the license is issued), your past driving experience and record (if any), your county of residence, and U.S. citizenship status.
- Pay the required fees.
- The application must be signed at the DPS, or under oath by the parent / guardian / mentor having custody.
- Present identification documents
 - a) one piece of stand-alone identification, or
 - b) one piece of documented identification plus one or more pieces of support identification.
- Physical description.
- Present your Social Security Card or other acceptable proof of Social Security number.
- Provide proof of school attendance (VOE Form) and enrollment in a driver education program.

- Provide thumbprints.
- Pass the written examinations (at least 70% on each test; oral exams may be provided, when they are needed) -
 - a) a rules test for original applicants, and
 - b) a signs test on the meaning of standard highway signs.
- Pass the vision test. You may be required to wear corrective lenses while driving if they improve your vision and help to increase the safety of your driving.
- Sign a **Zero Tolerance** notification document that explains the **Zero Tolerance Law** which applies to all applicants under the age of 21. Your parent / guardian / mentor must co-sign the document at the DPS or under oath.

If you pass all of the tests, an instruction permit will be issued. It will be valid for one year, or until your next birth date (whichever occurs first).

If you do not pass, you are entitled to three examinations for each type of test required before you must make a new application and repay the fees. There is a 90 day time limit for the successful completion of the tests. After this period, a new application and fees are also required.

This instruction permit will allow you to legally practice driving so that you are able to acquire the knowledge and skills required to operate a motor vehicle in the HTS. You must be accompanied by a

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licensed driver occupying the front seat beside you; who is at least 21 years of age with at least one year of driving experience.

During your training, ask one of your parents or some other mature adult to take you driving so you may practice the maneuvers that you have already learned. Driving skills require practice to become automatic and comfortable. Make sure they are involved in the TSE program and follow the procedures that have been established for practice.

TRAFFIC SAFETY EDUCATION PROGRAM

Each school district has predetermined policies and regulations (within the



SAFETY TIPS

Learning the mental and physical skills necessary to drive safely takes time. Practice with your parent/guardian or designated driver will develop the experience needed to drive in a risk-reduction collision-free manner.

norms of the Texas Education Agency) governing their Traffic Safety Education Programs. Some of these items are:

- goals,
- attendance requirements,
- course structure,
- student worksheet procedures,
- procedures for test failures,
- cheating/copying on tests or student worksheets,
- scheduling on-street instruction,
- student responsibilities,
- student opportunities,
- classroom schedule,
- assessment /grading policies,
- permit procedures,
- classroom program,
- laboratory program,
- parent-involvement program,
- advantages, and
- disadvantages.

YOUR FIRST CLASS C DRIVER'S LICENSE

After successfully completing a driver education program, you must return to the Drivers License Office to apply for your Class C driver's license.

At the Drivers License Office, you must:

- Present a Texas Driver Education Certificate (Form DE 964) stating that you have successfully completed both

the classroom and laboratory phases of the Texas Driver and Traffic Safety Education Course.

- Present a VOE Form (proof of school attendance) - not always required.
- Show evidence of financial responsibility in accordance with the Texas Motor Vehicle Safety-Responsibility Act.
- Provide thumbprints (if they were not taken when applying for your instruction permit).
- Pay the required fees.

A Provisional Class C license will be issued. It will be valid for one year, or until your next birth date, whichever occurs first. It must be renewed every



year until you are 18 years of age; at which time, the license will be issued for up to 6 years. As of June 2001, the Provisional (purple title) and Under 21 (red title) Licenses will be issued in a vertical format (see opposite page). An ID card, which is available upon request, for those under 21 years of age will also use the vertical format and will feature a green title.

GRADUATED DRIVER LICENSE PROGRAM

The Texas Graduated Driver License (GDL) Program was implemented as a result of Senate Bill 577. This law changed original licensing requirements for persons under age 18. GDL creates two phases of driving requirements for minors. The effective date of the law was January 1, 2002. Basic requirements for obtaining a license have not changed.

A person under age 18 must show proof of driver education, verification of current enrollment and attendance in school (or high school graduation or GED), proof of social security number, as well as proof of identification (TRC 521.204, 521.222 and 545.424).

Phase One

Applicants under age 18 must hold an instruction permit or hardship license for a minimum of six months prior to issuance of a provisional Class A, B, or C driver license. In addition, the minimum age of the person who must accompany any instruction permit holder during the operation of the vehicle is 21 years of

age. Except for hardship licenses, a minor is not eligible to graduate to Phase Two (provisional license) for a Class A, B, or C driver license until they have completed this phase and met all other current licensing and age requirements.

Under the GDL program, there is no minimum time that a person must hold a restricted motorcycle or moped license before they can apply for a Class M license. Phase One does not apply to Class M or Hardship license holders.

The instruction permit must remain valid during the mandatory six-month period to meet this regulation. If an instruction permit expires during this period, the permit must be renewed to complete the six-month requirement.

Once the applicant has held a valid instruction permit or hardship license for a minimum of six months, has reached the age of 16 for a Class C license (17 years of age for a Class B or Class A non-CDL), and has completed both the classroom and laboratory (driving), portions of driver education, they are eligible to "graduate" to Phase Two.

Phase Two

Phase Two restricts the driving privileges of persons under 18 years of age during the six-month period following the issuance of an original Class A, B, or C driver license (Provisional License). These persons may not operate a motor vehicle with more than one passenger in the vehicle under the age of 21 who is

not a family member. In addition, they may not operate a motor vehicle between midnight and 5:00 a.m. unless the operation of the vehicle is necessary for the operator to attend or participate in employment or a school-related activity or because of a medical emergency.

The license restriction will state, "TRC 545 424 applies until mm dd yy" and will indicate the date in which the second phase of the graduated driver license expires for the person who holds that license. Upon completion of the six-month period, the above time and/or passenger restrictions no longer apply. The licensee may wish to apply for a duplicate license at a driver license office to remove this restriction. A fee is required to obtain a duplicate license. If not, this restriction will be removed at the time the applicant renews the license on their next birthday, provided the Phase Two six-month time has lapsed.

Provisional Driver License

All original licenses, other than an instruction permit, issued to persons under 18 years of age will be marked "Provisional." The license will be vertical and will be dated to expire on the applicant's next birthday occurring after date of issuance. A fee is required to obtain this license. The renewal fee is required for each one year of renewal period. No renewal notice will be sent as it is the responsibility of the applicant to obtain a verification of enrollment and attendance from their school. If the instruction permit or driver license is not

due for renewal a fee is required for a duplicate instruction permit or duplicate license (i.e.: lost license, change of address, removal of GDL restrictions).

LICENSE RESTRICTIONS

A reasonable restriction may be placed on your driver's license to improve the safety of your driving. This restriction is not meant to interfere with your driving but to make you a better driver.

In such cases, a code letter is placed on the license which designates the type of restriction. The following table illustrates some of these restrictions and the code letter assigned.

- A - With corrective lenses
- B - LOFS age 21 or over
- C - Daytime driving only
- D - Not to exceed 45 mph
- E - No expressway driving
- I - M/C not to exceed 50 cc
- J - Licensed M/C Operator age 18 or over in sight
- K - Moped
- P - Stated on license
- S - Outside mirror or hearing aid
- T - Automatic transmission
- U - Applicable prosthetic devices
- V - Applicable vehicle devices
- W - Power steering

Contact your local Drivers License Office or a Drivers License Trooper for the procedures to remove any restrictions from your driver's license or instruction permit. Endorsements, which can be

added to your license for Commercial Driver License (CDL) purposes, require special applications and testing. Check with the above-mentioned for the information and procedures required.

RENEWING YOUR DRIVER'S LICENSE

A renewal notice card will be mailed to you about 6 weeks before your license expires. The notice will be sent to the last address that you gave to the Department of Public Safety. Remember, if you do not receive this notice, it is still up to you to renew your license. Application for renewal must be made in person at any Texas Drivers License Office, except licensees who have received an invitation

from the Department of Public Safety to renew by an alternate means, as specified by the invitation. You will be asked questions concerning your medical history. Depending on the circumstances, your case may be referred to the Texas Medical Advisory Board for their opinion.

DRIVING WITHOUT A LICENSE PENALTIES

The penalties are:

1st conviction - up to \$200 fine.

2nd conviction (in 1 year) -
\$25 to \$200 fine.

3rd conviction (in 1 year after 2nd) -
\$25 to \$500 fine and/or 2 hours to 6 months in jail, or both.



Vehicle Inspection and Registration

All motor vehicles registered in Texas including cars, trucks, motorcycles, motor scooters, and mopeds must be inspected each year by an official motor vehicle inspection station.

An inspection station or inspector may not issue an inspection certificate for a vehicle unless the owner or operator furnishes proof of financial responsibility at the time of inspection. A personal automobile insurance policy used as evidence of financial responsibility must be written for a term of 30 days or more as required by the Insurance Code.

REQUIRED EQUIPMENT

A motor vehicle must have the following items inspected, and they must be in proper working order for your vehicle to be considered safe:

1) **Brakes** (including power brakes)

The foot brake must stop the vehicle within 25 feet at a speed of 20 mph. The parking brake must be adequate to stop and hold the vehicle.

2) **Lights**

Two headlights - one on each side of the front - with a beam indicator light showing when the high beams are illuminated.

Two red taillights - one on each side of the rear of the vehicle.

Two red brake lights - one on each side of the rear of the vehicle - that are activated when the brake is depressed.

Two white reverse lights - one on each side of the rear of the vehicle - that are activated when backing.
Electric turn signals visible from the front and rear of the vehicle that can be activated by the driver.

License plate light, white in color, which lights the rear license plate when any lights are activated.

Two red reflectors, one on each side of the vehicle, visible from 600 feet (may be in combination with taillights).

Parking lights, white or amber on the front and red to the rear, activated by the driver (may be in combination with other lights).

3) **Horn**

The horn must be audible from a distance of 200 feet.

4) **Exhaust and emissions system**

A muffler and an exhaust system to help reduce air pollution (emissions control equipment as designated by department rule).

5) **Safety glass**

All glass must be safety glass (any replacements must meet department standards).

6) **License plates**

All vehicles must have one valid plate at the front and one at the rear (exceptions: dealer plates, government vehicles and some commercial vehicles).

7) **Windshield wipers**

Wiper blades and system for safety in inclement weather.

8) **Rearview mirror**

The mirror shall be so located as to reflect a view of the road for a distance of at least 200 feet to the rear of the vehicle.

9) **Sunscreen**

Sunscreening devices, approved by department rule, unless the vehicle is exempt from sunscreen device restrictions under Section 547.613.

10) **Front seat belts**

Front seat belts are required in vehicles on which seat belt anchorages were part of the manufacturer's original equipment.

11) **Tires**

All vehicles must be equipped with tires that are in proper and safe condition with a minimum tread depth of 2/32nds of an inch.

12) **Fuel cap**

A fuel tank cap must be present and will be tested using pressurized testing equipment approved by department rule.

Antique and classic vehicles (as well as other vehicles) may be exempt from some of these regulations.

PROHIBITED EQUIPMENT

Certain equipment is considered unsafe and therefore not allowed:

- a red light showing from the front of the vehicle (except emergency vehicles);
- a bell, siren, or exhaust whistle (except on an emergency vehicle);
- a muffler cutout;
- anything that extends more than

three inches beyond the left side or six inches beyond the right side of the body, running board, or fenders of a vehicle; and

- flashing red lights on the front of the vehicle (except on emergency vehicles or school and church buses).

MINIMUM ROAD CLEARANCE

A vehicle must not be modified or weighted in such a manner that the body is below the lowest part of the rims of the wheels.

DISPLAYING CERTIFICATE

When a vehicle passes inspection, an approved certificate must be placed on

the windshield (motorcycles and mopeds shall have the inspection certificate displayed near the rear license plate).

These certificates are valid for one year from the month of inspection. Any vehicle involved in a collision must be reinspected after repairs have been completed.

NEW RESIDENTS

When a nonresident owner or operator establishes residency in Texas or enters into gainful employment, his/her vehicle may be operated for 30 days thereafter, after which time the vehicle must be currently registered in Texas.



SAFETY TIPS

You are responsible for keeping your vehicle in good condition. The Texas inspection program gives you further safety protection. Its purpose is to ensure that the Texas vehicles on the highways are in safe working condition.



The Safety Responsibility Act

Texas enacted a law to ensure that all drivers are capable of paying in case they injure or kill a person, or damage property in a collision while operating a motor vehicle. This is referred to as the Texas Safety Responsibility Law.

All owners and/or operators of motor vehicles in Texas must have at least the minimum amount of liability coverage as required by this law.

The minimum auto insurance liability coverage required by Texas law is:

- \$20,000 per person,
- \$40,000 per collision (injuries), and
- \$15,000 for property damage.

When these minimum Texas insurance liability requirements are insufficient, you will be held personally responsible for any claims that exceed the dollar limits of your policy.

EVIDENCE OF FINANCIAL RESPONSIBILITY

In order to comply with the Safety Responsibility Act, a driver (unless exempt) must purchase liability insurance or be self-insured under the provisions of the Act.

Most drivers carry auto insurance. They pay a premium, or fee, to provide protection from financial losses which may arise from a collision or mishap in which they are involved. The insurance company issues a policy, or written contract, and proof of insurance to the individual indicating how much and under what circumstances it will pay.

To be self-insured, an owner of a vehicle must:

- deposit money or securities with the state treasurer in at least the amount (\$55,000) required by the Texas Transportation Code (TRC), Section 601.12. The state controller will issue a certificate;
- deposit a bond with the Department of Public Safety as provided by TRC, Section 601.121. The Department will issue a certificate;
- deposit cash or a cashier's check with the county judge, of the county in which the vehicle is registered, in at least the amount (\$55,000) required by TRC Section 601.123. The judge will issue a certificate; or
- hold a certificate issued by the Department of Public Safety that shows a person has more than 25 vehicles registered in his/her name.

Evidence of financial responsibility (usually proof of insurance) must be presented to the proper authorities at the time a person applies for a driver's license, registers a motor vehicle, or obtains a motor vehicle inspection certificate, or renew the license plate.

In addition, every owner or operator of a motor vehicle in Texas is required, as a condition of driving, to furnish, upon request, proof of financial responsibility to a law enforcement officer or to another person involved in a collision.

FAILURE TO SHOW PROOF

If an owner or operator fails to show proof of financial responsibility when required, he/she may receive a citation. The court will dismiss the charge if proof is provided that a liability insurance policy was in effect when the citation was issued.

Upon conviction, a driver is subject to a \$175 to \$350 fine for a first offense. Second and subsequent convictions will result in driver's license and vehicle registration suspensions, in addition to a fine of \$350 to \$1,000. The court will also order the impoundment, for a period of 180 days, of the motor vehicle being driven at the time of the offense (provided that the defendant was an owner of the vehicle at the time of the offense and is an owner on the date of conviction). Before the court orders the release of the vehicle, evidence of financial responsibility must be presented to the court.

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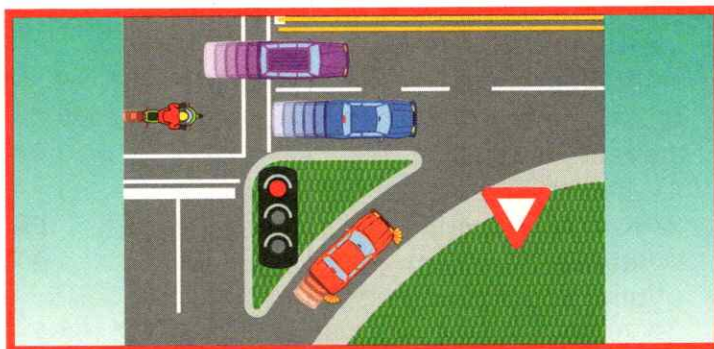
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Review

Right-of-Way Concepts

The adoption, promulgation, and enforcement of new laws is an important step towards road safety. These laws, whether federal, state, or municipal, govern the operation of the Highway Transportation System or HTS. They establish norms for all motorized vehicles and their manufacturers. Rules for road sharing and safety, from professional drivers to pedestrians, are specified in these laws.

The intersection is a high risk location because two or more road users often wish to occupy it simultaneously. There are right-of-way rules to control these situations. Are you certain other road users know the rules? Will they obey them? Should you yield?

Law enforcement is the responsibility of the police agencies who patrol the HTS. Judges and the court systems will apply the penalties.



AFTER COMPLETING THIS CHAPTER, THE STUDENT MUST BE ABLE TO KNOW AND APPLY RIGHT-OF-WAY RULES AND PRINCIPLES AT:

- intersections.
- merge situations.
- a variety of special situations.
- railroad crossings.



Right-of-Way

Traffic laws are important because they promote the orderly operation of the HTS. They govern the behavior of all road users and assist in predicting what others will do. They include basic driving rules, rules of right-of-way, and speed laws.

BASIC DRIVING RULES:

- Always drive on the right half of the roadway, unless:
 - 1) you are passing another vehicle,
 - 2) an obstruction obliges you to move to the left, and you yield to any vehicle that is moving in the lane and presents an immediate hazard,
 - 3) you are driving on a multi-lane roadway, or
 - 4) you are driving on a one-way roadway (TRC §545.051).
- When driving slower than the normal speed of other vehicles, you must drive in the right-hand lane, or as close as possible to the right curb or edge of the road, unless:
 - 1) you are passing another vehicle, or
 - 2) you are preparing to turn left at an intersection or into a private road or driveway (TRC §545.051).
- When driving on a two-way road with two or more lanes in each direction, you must not drive to the left of the center line, except:
 - 1) when a traffic control device designates the use of a specified lane to the left of center,
 - 2) when an obstruction obliges you to move to the left, and you yield to any vehicle that is moving in the lane and presents an immediate hazard, or
 - 3) when crossing the center line to make a left turn into or out of an alley, private road, or driveway (TRC §545.051).
- Obey all posted, official traffic control devices and signals, unless:
 - 1) otherwise directed by a traffic or police officer, or
 - 2) operating an authorized emergency vehicle (TRC §544.007).
- When traffic signal lights are defective, all drivers must stop (four-way stop), unless otherwise directed by a traffic or police officer.
- Comply with a lawful order or direction of:
 - 1) a traffic or police officer, or
 - 2) a school crossing guard who is performing crossing guard duties in a school crosswalk (TRC §542.501).
- Pass other vehicles on the left only when the way is clear. On multilane one-ways, passing or overtaking on the right is permitted.
- Always communicate your intention to turn, change lanes, or start from a parked position by using your turn

signals. You must signal continuously for not less than 100 feet of movement before a left or right turn. You must not use a turn signal when your vehicle is parked or disabled, nor as a courtesy or "do not pass" signal to other motorists (TRC §545.104).

- Make sure that maneuvers can be performed safely before executing them (TRC §545.402, §545.415).
- When following another vehicle, you must maintain a reasonable, prudent, and assured clear distance, taking into account vehicle speed, the road, weather and traffic conditions. You must be able to stop without colliding with the preceding vehicle or veering into another vehicle, object, or person on or near the roadway.

Truckers, drivers towing trailers, or drivers in a motorcade or caravan must leave sufficient space so that passing road users may safely enter and occupy the space (exception for a funeral procession) (TRC §545.062).

- You must drive at a careful and prudent speed not greater than nor less than is reasonable and proper, having due regard to the traffic, surface, and width of the highway and any other condition then existing. You must not drive at a speed greater than that which will permit a stop within the assured clear distance ahead.

In ideal conditions, the prima facie

(legal non-posted) speed limits are:

- 1) 30 mph in an urban residential district,
 - 2) 15 mph in an alley,
 - 3) 20 mph in school zones, unless otherwise posted (sign),
 - 3) 70 mph in daytime and 65 mph at night on numbered highways and interstates,
 - 4) 60 mph in daytime and 55 mph at night on roadways outside an urban area (not numbered), and
 - 5) a school bus outside an urban area:
 - 55 mph on an interstate (60 mph with a DOT inspection sticker),
 - 50 mph on other roads (TRC §545.352).
- You may not back your vehicle unless the movement can be made safely without interference with other traffic. It is illegal to back on the shoulder or roadway of a limited or controlled access highway (TRC §545.415).
 - You may drive on an improved shoulder to the right of a roadway, if that operation is necessary and may be done safely, but only:
 - 1) to stop, stand, or park,
 - 2) to accelerate to enter the flow of traffic,
 - 3) to decelerate before making a turn,
 - 4) to pass another vehicle that is slowing or stopped, disabled, or preparing to make a left turn,
 - 5) to allow another vehicle to pass,
 - 6) as permitted or required by an official traffic control device, or
 - 7) to avoid a collision,
 - 8) exception for emergency vehicles, police patrol, and bicycles (TRC §545.058).

- You may drive on an improved shoulder to the left of a divided or limited-access or controlled-access highway, if that operation may be done safely, but only:
 - 1) to slow or stop when your vehicle is disabled, and traffic or other circumstances prohibit the safe movement to the right shoulder,
 - 2) as permitted or required by an official traffic control device, or
 - 3) to avoid a collision,
 - 4) exception for emergency vehicles, police patrol, and bicycles (TRC §545.058).
- You may not leave your vehicle unattended without:
 - 1) stopping the engine,
 - 2) locking the ignition,
 - 3) removing the key from the ignition,
 - 4) setting the parking brake effectively, and
 - 5) if standing on a grade, turning the front wheels to the curb or side of the roadway (TRC §545.404).

RIGHT-OF-WAY

Right-of-way is the privilege of the immediate use of the roadway, and is determined by a set of rules and guidelines as listed for intersections, merges, and special conditions. The prime directive requires a road user to yield the right-of-way to avoid a collision.

In Texas, right-of-way is defined as "the right of one vehicle or pedestrian to proceed in a lawful manner in preference

to another vehicle or pedestrian that is approaching from a direction, at a speed, and within a proximity that would cause a collision, unless one grants precedence to the other" (TRC §545.401(8)).

The rules apply when more than one road user wants to occupy the same space; however, **the law never specifies who has the right-of-way, rather, it specifies who must yield.**

If for example, road user A is required by law to give the right-of-way to B in a given situation, and does not do so, A may be cited and fined. Road user B does not "have" the right-of-way until it is given, and should act accordingly, even though B may be upset by this flagrant breach of the law and act of discourtesy.

In Texas, failure to yield is the number two listed cause of crashes.

PEDESTRIANS

- You must yield to pedestrians on a marked or unmarked crossing if:
 - 1) no traffic control signal is in place or in operation,
 - 2) the pedestrian is:
 - on the half of the roadway in



- which you are traveling,
 - approaching so closely as to be in immediate danger.

Drivers approaching from the rear of a vehicle that is stopped to yield to pedestrians may not pass (must stop) (TRC §552.003).

PRIVATE PROPERTY OR ROAD

- You must not drive upon or through private property in order to avoid compliance with a posted, official traffic control device.
- When entering or crossing a road, street, or highway from an alley, building, private road, driveway, or private property, you must stop prior to the sidewalk (or edge of the road),



and yield to all vehicles and pedestrians who constitute an immediate hazard (TRC §545.155).

Other right-of-way concepts will be discussed in the rest of this chapter, under specific headings.



SAFETY TIPS

Right-of-way principles are based on giving the privilege of passage to others. Drivers must realize that the right-of-way cannot be taken, as it is not a right to proceed. Failure to yield is the number two listed cause of crashes in Texas!



Intersections

Intersections are the most dangerous areas of the HTS, because large numbers of a wide variety of road users meet there regularly. (Intersections are defined as any location where two or more highways cross or join.) Applying the rules of right-of-way properly is essential to reducing the risk.

Statistics demonstrate that a high percentage of collisions occur here, especially those involving pedestrians, cyclists, and motorcyclists. Right-of-way rules must be applied at these crossroads in order to proceed safely. One reason for the large number of collisions is the failure of drivers to apply the SIPDE

System on approaching the intersection and when interacting with other road users at the crossroad.

APPROACH TO THE INTERSECTION

The first step (**vehicle 1** - diagram) is to search and identify the intersection, and whether or not official traffic controls are posted.

CONTROLLED INTERSECTIONS

Controlled intersections have signs or signals posted to control the flow of traffic and help determine right-of-way. Most commonly - STOP signs, occasionally - YIELD signs and very frequently- signal lights may be used depending on the volume of traffic. Identification is easy!

NEARING THE INTERSECTION

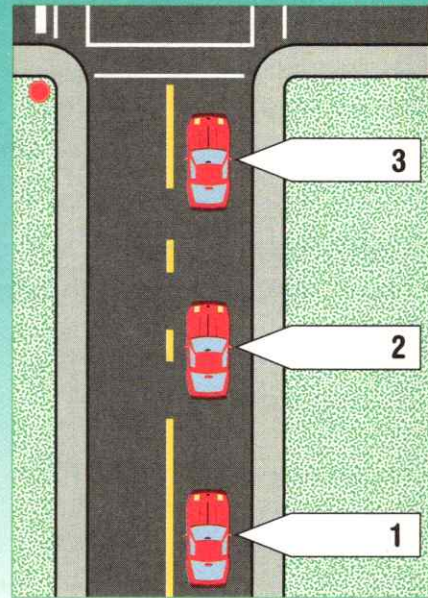
Search the intersection (**vehicle 2** and below) to identify other road users, lines of sight, and whether the areas to the left and right are open and clear. Be prepared to yield to anyone who has already entered the intersection or who is so close as to constitute a hazard.

Adjust speed, maintain lane position and remain parallel to the curb.

AT THE INTERSECTION

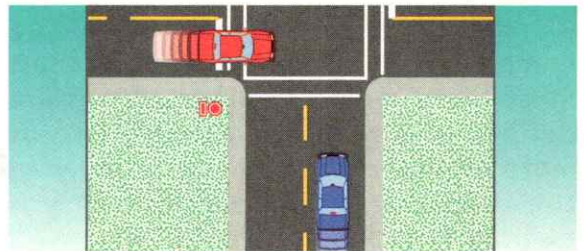
Search (**vehicle 3**) left, center, right and then left again, repeat as needed. Check for changing frontal areas, other road users, or any other factor that may present a risk. If your line of sight is clear, return to the accelerator and proceed through the open space area crossing the intersection.

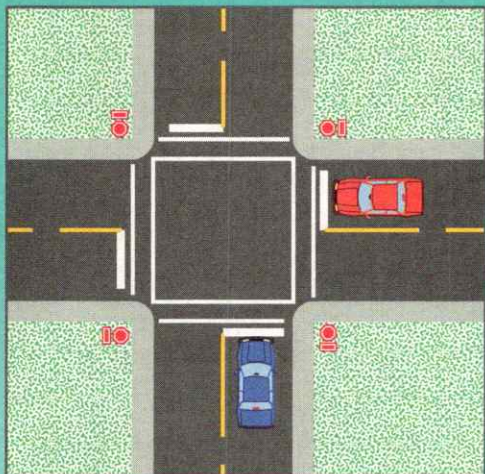
APPROACHING AN INTERSECTION



INTERSECTIONS:

- You must obey all traffic control devices/signals unless otherwise directed by police/traffic officer. You must yield to avoid a collision or to any other vehicles approaching on a road without traffic controls (TRC §545.151).
- Drivers approaching an intersection must yield to any road users within the intersection (TRC §545.151).





AT A FOUR-WAY STOP INTERSECTION

1. The vehicle that stops first, should go first.
2. The vehicle that enters the intersection first, should go first.
3. If two or more vehicles stop simultaneously, the vehicle on the left should yield to the vehicle on the right.

**AFTER STOPPING,
ROLL SLOWLY FORWARD.**

**OTHER ROAD USERS
CANNOT READ YOUR MIND.**

**ANNOUNCE YOUR INTENT TO
PROCEED WHEN IT IS YOUR TURN.**

PROCEED IF THE WAY IS CLEAR.

- Vehicles approaching at the same time must yield to the vehicle on the right (this also applies at a 4-way stop) (TRC §545.151);

Exceptions:

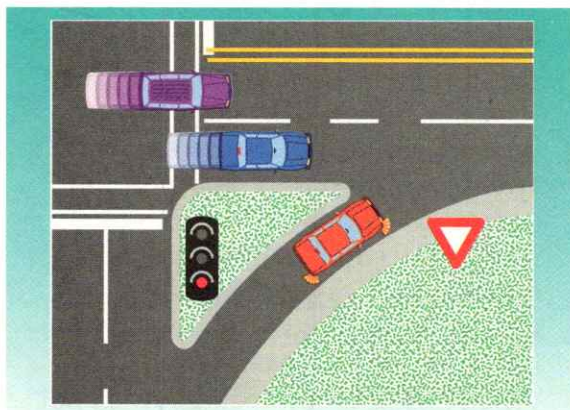
- 1) vehicles at a terminating road such

- as at a T-intersection, must yield;
- 2) drivers on a single lane or two-lane road intersecting with a divided roadway must yield; and
- 3) drivers on an unpaved road at an intersection with a paved road must yield.

• YIELD SIGN

Approaching an intersection on a road controlled by a yield sign, you must:

- 1) slow to a speed that is reasonable under the existing conditions, and
- 2) yield the right-of-way to any road user in the intersection or approaching on another highway so closely as to be an immediate hazard to your movement in or across the intersection (TRC §545.153).



- To turn left at an intersection, into an alley, private road, or driveway, you must yield to any oncoming vehicle that is in the intersection or in such proximity to the intersection as to be an immediate hazard (TRC §545.152).

TRAFFIC SIGNAL LIGHTS:

- **GREEN** - When facing a circular green signal, you may proceed straight, or turn right or left, unless a sign prohibits the turn. You must yield to other vehicles and to pedestrians lawfully in the intersection or an adjacent crosswalk when the signal is exhibited.

When facing a green arrow signal, displayed alone or with another signal, you may cautiously enter the intersection to move in the direction permitted by the arrow or other signal. You must yield to other vehicles and to pedestrians lawfully in the intersection or an adjacent crosswalk when the signal is exhibited (TRC §544.007).

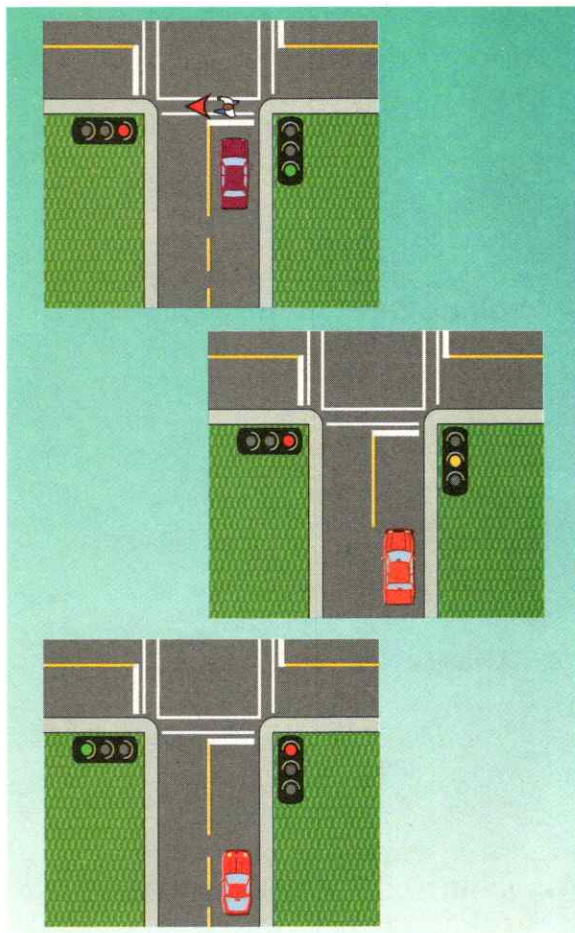
- **YELLOW** - When facing a steady yellow signal, you are warned that:

- 1) movement authorized by a green signal is being terminated, or
- 2) a red signal is about to be given.

You must stop before entering the nearest crosswalk or at a limit line when marked. If the stop cannot be made in safety (point of no return), then proceed cautiously through the intersection (TRC §544.007).

When facing a flashing yellow signal, you may proceed through an intersection or past the signal only with caution (TRC §544.008).

- **RED** - When facing only a steady red signal, you must stop at a clearly marked stop line, or if no stop line, before entering the crosswalk or the



near side of the intersection. If not turning, remain standing until an indication to proceed is shown.

If you intend to turn, after stopping, standing until the intersection may be entered safely, and yielding the right-of-way to pedestrians in an adjacent crosswalk and other traffic in the intersection, you may:

- 1) turn right, or
- 2) turn left, if the intersecting roads are both one-way streets, and a left turn is permissible (TRC §544.007).

When facing a flashing red signal, you must stop at a clearly marked stop line. In absence of a stop line, you must stop before entering the nearest crosswalk. In the absence of a crosswalk, you must stop at the place nearest the intersecting roadway where you have a view of approaching traffic on the cross street. The right to proceed is subject to the rules at a stop sign (TRC §544.008).

- **When traffic lights are inoperative**, all drivers approaching from any direction must stop, and apply the same right-of-way rules as at a four-way stop intersection.

UNCONTROLLED INTERSECTIONS

An uncontrolled intersection does not have any traffic control devices present. (They are usually found in light traffic areas - residential.) As such, drivers may not notice the intersection, or they may assume that the cross traffic has some control device. To avoid errors, search ahead and look for breaks in the normal

environment - hedges, fences, lights, parked vehicles, etc. Check for traffic controls; if not present, reduce speed and check the cross traffic before proceeding.

Once the intersection is identified, check traffic to the rear (rear-view mirror), then adjust speed (cover the brake) and lane position to minimize risk. Be prepared to stop your vehicle.

- When approaching an intersection that is not controlled by an official traffic control device, you:
 - 1) must stop, yield, and grant the immediate use of the intersection to any vehicle that has entered from the right, or is approaching from the right in a proximity that is a hazard, and
 - 2) may, after stopping, proceed when the intersection can be entered safely without interference or collision with traffic using a different street or roadway (TRC §545.151).

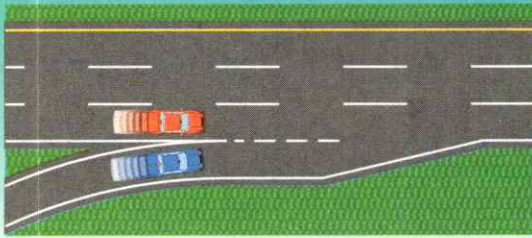


Merge Situations

The National Highway Traffic Safety Administration (NHTSA) has studied a category of collisions that they call **Lane Change/Merge (LCM)** crashes. They estimate there are 630,000 LCM crashes with 225 fatalities annually nationwide.

About 60% of the drivers involved in the collisions did not see the other vehicle; about 30% of the drivers involved misjudged the position or speed of the other vehicle before they collided (see Chapter 7).

ENTERING A FREEWAY



ENTERING/EXITING A LIMITED-ACCESS HIGHWAY

Merging with the flow of traffic on an expressway, or exiting from the freeway, can be a hazardous situation (see Chapter 14). Ideally, you should try to avoid conflicts by thinking ahead, and adjusting speed or position (plan your arrival). Should a conflict arise, the basic rule to follow is to yield to the driver on the fast moving roadway.

- When driving on an access or feeder (frontage) road, you must yield:
 - 1) to any vehicle entering or about to enter the access or feeder road from the highway (exiting the expressway), or
 - 2) to any vehicle leaving or about to leave the access or feeder road to enter the highway (entering the expressway) (TRC §545.154).

DRIVING ON MULTI-LANE ROADWAYS

The procedures for changing lanes safely are explained in detail in Chapter 12. With respect to right-of-way, the vehicle changing lanes must always yield to any vehicle already in the lane.

On a roadway divided into three or more lanes of traffic moving in the same direction, the conflict situation of two vehicles, from opposite sides of the lane, attempting to change into the same lane occurs quite frequently. The rule of thumb is for the vehicle entering the lane of traffic from the right to yield to the vehicle entering the same lane of traffic from the left. (The vehicle entering the lane from the faster-moving lane should be given the right-of-way.)

TRAFFIC CIRCLE

When you approach a traffic circle, you must yield to the traffic already engaged in the circle, whether continuing around or exiting the traffic circle.

Once driving in the traffic circle, drivers traveling on the outside of the circle must yield to drivers traveling closer to the interior of the circle (in traffic circles with two or more lanes of traffic).



SAFETY TIPS

You must know the right-of-way rules; however, do not expect all road users to obey them. Expect the unexpected. Add the concepts of cooperation and courtesy to the basic rules. Think ahead and try to avoid situations that could cause conflicts. You'll diminish the risk and drive more safely.



Special Situations

2

Despite all that has been said about right-of-way rules, some special situations should be reviewed.

EMERGENCY VEHICLES

Any emergency vehicle (police, fire, ambulance) that has its siren operating and/or its lights flashing, must be given the right-of-way.

These vehicles are responding to an emergency; **it may be a matter of life and death. Co-operate!** These drivers have a difficult job as it is! **It is the law!**

- On the immediate approach of an authorized emergency vehicle using audible and visual signals, or of a police vehicle using only audible signal, you must, unless otherwise directed by a police officer:
 - 1) yield the right-of-way,
 - 2) immediately drive to a position parallel to, and as close as possible to, the right-hand edge or curb of the roadway clear of any intersection, and
 - 3) stop and remain standing until the authorized emergency vehicle has passed (TRC §545.156).

APPROACHED FROM THE REAR

While driving on a two-way roadway or a multi-lane highway, an emergency vehicle requesting passage approaches you from the rear.



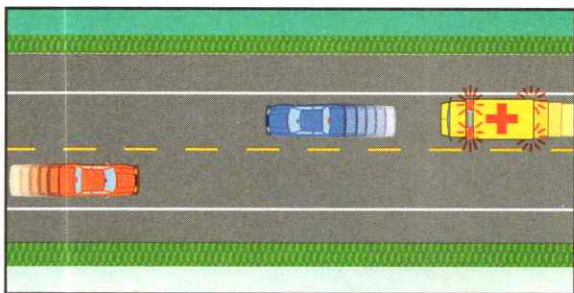
WHAT TO DO

- Check traffic and select a safe path.
- Change lanes towards the right side of the roadway (on a multi-lane, move into the right hand lane when safe).
- Stop your vehicle safely, parallel to the curb (edge of road), and clear of any intersection.
- Wait for the emergency vehicle to pass.
- Safely proceed on your way.

Be especially careful to maintain a following distance of at least 500 feet when driving behind any emergency vehicle. Pedestrians in the crosswalk should move to the nearest curb or sidewalk as quickly as possible.

MEETING AN ONCOMING VEHICLE

While driving, an emergency vehicle requesting passage (lights flashing/siren operating) approaches in an oncoming direction.



WHAT TO DO

- Check traffic, and select a safe path.
- Change lanes to the right.
- Stop your vehicle near the right curb or edge of the road.
- Remain standing until the emergency vehicle has passed.
- Proceed safely.

STOPPED AT AN INTERSECTION

While stopped at an intersection, an emergency vehicle approaches from the rear with its siren and lights operating.

WHAT TO DO

- Check the position of the emergency vehicle in your rear-view mirror.
- Remain stationary until it passes.



If the emergency vehicle nears your vehicle in your lane, check traffic, and proceed in a safe manner to clear its path.

APPROACHING A CRASH SCENE

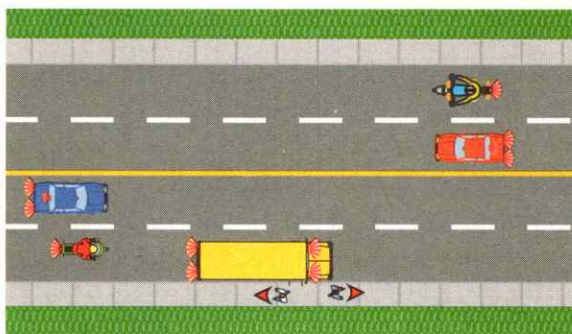
If you approach the scene of a crash, fire, etc., and the emergency vehicles are already present, **reduce speed and be prepared to stop, if necessary**. If not, proceed on your way; **don't rubberneck!**

SCHOOL BUSES

Following a school bus, if the overhead yellow lights are flashing and the bus is still moving, you must prepare to stop. (The bus is preparing to stop - communication.)

Approaching a railroad crossing behind a school bus, also be prepared to stop (the bus must stop at all railroad crossings).

When overtaking or meeting a school bus that is stopped with overhead red signal lights flashing, you are required to stop not less than 20 feet from the stopped bus, and remain standing until the bus resumes motion, the visual signals are no longer actuated, or the driver signals you to proceed.





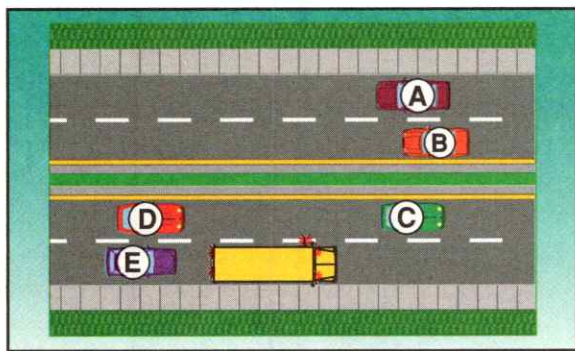
SAFETY TIPS

An average of 26 school-age children die in school transportation-related crashes each year - 7 occupants of school transportation vehicles and 19 pedestrians.

*Half of the school-age pedestrians killed in school transportation-related crashes **were between 5 and 7 years old** (from 1991 to 2001).*

National Highway Traffic Safety Administration (NHTSA) - DOT HS 809 478

Reduce speed and search carefully when school children and school buses are visible in your environment. Stop whenever the school bus signals are flashing. Wait until the bus moves, and then check carefully before proceeding.



You need not stop when meeting or passing a school bus which is on a different roadway (road divided by a median). As illustrated above, vehicles A and B would not be required to stop.

You are also not required to stop when meeting or passing a school bus upon a controlled-access highway where the school bus is stopped in a loading zone and pedestrians are not permitted to cross the roadway.

PEDESTRIANS

Don't turn your vehicle into a deadly weapon. You should always be on the lookout for people on foot, whether or not they have the right-of-way.

Pedestrians are the most vulnerable and least trained of road users. Many do not drive, nor do they understand the characteristics of motorized vehicles. They may not know or obey the traffic rules and signals.

Children are unpredictable. They are smaller and more difficult to see. Their poor judgement and comprehension of the consequences may lead them to run into the roadway. Watch for them near playgrounds, schools, at the side of the road, or in many areas where they may use the street as their playground.

The elderly and the physically or visually impaired decide more slowly and take more time to cross the roadway. Avoid honking the horn or revving the engine; these noises are distracting and cover important audible cues used by the blind.

Also avoid blocking designated crosswalks. This is an inconvenience, makes crossing a street especially difficult for the blind, and violates the rule of always yielding to pedestrians. Be patient! Give them the extra time required.

Adults, who should know better, often jaywalk or dart into the roadway without looking (especially in bad weather, when jogging, or when hurrying). Be aware and watch for them.

Always yield to pedestrians, even when they make right-of-way errors in crossing the roadway. Cooperate and stop your vehicle when other drivers stop to yield to pedestrians crossing. Reduce your speed and increase your space from the curb in areas where they are present.

Communicate; tap your horn from a distance to attract their attention. Make sure they see you (make eye-to-eye contact). At intersections, always check for pedestrians before entering a turn or proceeding straight.

PEDESTRIANS

- You must yield to pedestrians on a marked or unmarked crossing if:

- 1) no traffic control signal is in place or in operation,
- 2) the pedestrian is:
 - on the half of the roadway in which you are traveling,
 - approaching so closely as to be in immediate danger. (TRC §552.003).

- Drivers approaching from the rear of a vehicle that is stopped to yield to pedestrians may not pass (must stop) (TRC §552.003).
- Pedestrians must obey traffic signs or signals, exercise due care, and not obstruct traffic; this does not remove the obligation for drivers to exercise due care for their safety.
- On roads without sidewalks, pedestrians must walk on the left side of the road facing oncoming traffic.
- Drivers must yield to all pedestrians before driving over or on a sidewalk (TRC §545.155).
- Skiers crossing at a slow pace or riders (horseback) at a crossing marked by signs are considered pedestrians.

WHITE CANE LAW:

Drivers failing to yield to the visually impaired (white cane or guide dog) or physically handicapped, or fail to exercise all reasonable and prudent precaution to avoid injury, are guilty of a misdemeanor.



SAFETY TIPS

In 2001, 4,882 pedestrians were killed and 78,000 pedestrians were injured in traffic crashes in the United States. On average, a pedestrian is killed every 108 minutes, and a pedestrian is injured every 7 minutes.

Older pedestrians (ages 70+) accounted for 18 percent of pedestrian fatalities; nearly one-fifth of all traffic fatalities under age 16 were pedestrians. Alcohol involvement -either for the driver or the pedestrian - was reported in nearly one-half of all pedestrian fatalities. NHTSA - DOT HS 809 478

Search carefully for pedestrians and always yield the right-of-way to them. They are very vulnerable in any conflict or crash.



Railroad Crossings

Railroad crossings require drivers to exercise extra caution. In Texas, there are more miles of track, and more car and train collisions than in any other state in the nation.

- When approaching a railroad crossing, you must stop not closer than 15 feet or farther than 50 feet from the nearest rail if:

- 1) a clearly visible railroad signal warns of the approach of a train,
- 2) a crossing gate is lowered, or a flagger warns of the approach or passage of a train,
- 3) a railroad engine, approaching within 1,500 feet of the crossing, emits an audible signal, and the engine is an immediate hazard because of its speed or proximity to the crossing,

- 4) an approaching train is plainly visible, and is in hazardous proximity to the crossing, or

- 5) you are required to stop by:

- a) other law,
- b) an official traffic-control device, or
- c) a traffic-control signal.

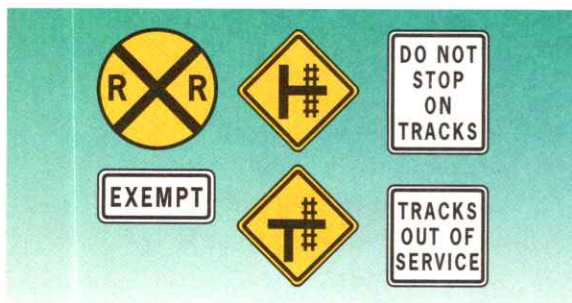
You must remain stopped until it is safe to proceed (TRC §545.251).

- When approaching a crossing with a posted crossbuck (no other signals, gates, etc.), you must yield the right-of-way to a train in hazardous proximity to the crossing, and proceed at a speed that is reasonable for the existing conditions. If required for safety, you must stop at a clearly marked stop line (if no line, 15 feet to 50 feet from the nearest rail) (TRC §545.251).

The railroad tracks are private property. Trains can travel at very high speeds. Even at slow speeds, a train requires a very long distance to stop. A train can cross at any time. Combine these four concepts. You will realize that safety at railroad crossings is your responsibility.

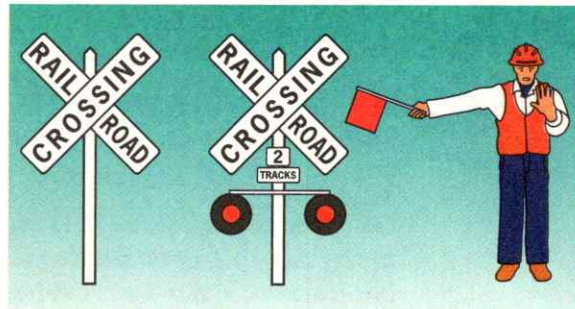
ADVANCE WARNING

Don't take signs for granted. Reduce speed, search the controls at the crossing as well as the lines of sight. Turn off the radio, lower a window and listen for trains. Reduce speed further when a line of sight is closed in either direction.



CROSSING CONTROLS

In Texas, 65 to 70% of crossings only have a crossbuck posted. The rest have flashing signals, bells, crossing gates and on occasion, a stop sign or flagman, depending on the circumstances at the



particular crossing. The small tab under the crossbuck indicates the number of sets of rails. Trains emit an audible signal 1,500 feet before reaching a crossing.

CROSSING SAFETY

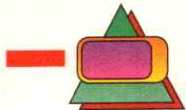
Never pass as you near a crossing. Stop at least 15 feet from the nearest rail if a train is approaching. (Prepare to stop behind a school bus, bus or vehicle transporting hazardous cargo, as they must stop at all times.) After a train passes, check for any additional trains before crossing. Make sure you can clear the tracks before starting to cross; never stop on the tracks. (Standard transmission - avoid shifting gears on the tracks.)

Trains cannot stop in time! You must protect yourself and your passengers at this high-risk intersection!



SAFETY TIPS

Never drive around lowered gates – it's illegal and deadly. Never race a train to the crossing – even if you tie, you lose. Do not get trapped on the tracks. Only proceed if you are sure you can cross completely without stopping (the train is three feet wider than the tracks on both sides). At a multiple track crossing, check for a train on the other tracks, approaching in either direction.



Glossary

Absolute speed limit The maximum or minimum posted speed.

Abstinence Voluntary resignation from drugs/alcohol.

Acceleration Increase in speed.

Acceleration lane A highway merge lane allows drivers entering to increase speed to blend with traffic.

Accelerator Pedal controls volume of air-fuel mixture entering engine (press harder, increase speed).

Active restraint device Passenger protective item that must be engaged to become effective; i.e. seat belts.

Actual cash value Amount of collision coverage based on vehicle real value.

Administrative laws Laws that regulate licenses, vehicle registration, financial responsibility, vehicle standards, and the general operation of the HTS.

Adverse driving conditions Driving when it is more difficult because of weather, light, etc. Special precautions must be used.

Advisory speed limit Speed limit set for special conditions such as sharp curves.

Air bag A passive restraint device that inflates with air to cushion the occupants in the event of a collision.

Air pollution Driving vehicles causes the emissions of carbon monoxide, particulates, and hydrocarbons.

Alert light Instrument panel lights that indicate a system is functioning and turn off after a short period of time.

Alternator A device to produce electricity, when the engine is operating, to operate electrical equipment in a vehicle and to recharge the battery.

Alternator warning light Light or gauge on dash panel that can indicate charge system abnormality.

Angle parking Parking a vehicle diagonally to the curb.

Antifreeze A chemical mixed with water to prevent freezing and corrosion in the cooling system.

Anti-lock braking system (ABS) Computer-controlled braking system that keeps the wheels from locking when the driver brakes hard. It allows for steering and braking actions to occur at the same time.

Assessment To judge the importance or worth of a situation.

Assigned risk Type of insurance that provides minimum bodily injury and property damage liability coverage to a high risk driver for a higher premium.

Atmospheric conditions Weather and light conditions that affect your ability to see and drive.

Automatic transmission A system that shifts through

the forward gears as the vehicle speed increases.

Axle The shaft connecting two wheels on opposite sides of a vehicle.

Back-up lights White lights (rear of vehicle) illuminated when transmission is in reverse (automatic/standard).

Banked curve The roadway slopes down toward the inside of the curve to help overcome inertia.

Basic speed law Law that states drivers should drive at a speed that is safe and prudent for existing traffic, roadway, visibility, and vehicle conditions.

Basic speed limit The speed, below the absolute limit, that is adequate to the existing conditions.

Battery A unit that stores electricity in chemical form to permit starting your vehicle. Clean connectors.

BGE setting Side mirror setting that eliminates the blind spots and eliminates mirror glare from the lights of vehicles following to the left or right at night. Mirrors are set 15 degrees to the outside for viewing side positions. This does not completely eliminate making a visual check when searching for open zones and space.

Bias-ply tires Tires with cord layers criss crossing under the exterior material.

Blind spots Areas outside the vehicle that are neither visible in the driver's forward field of vision nor in the rear-view mirrors, unless mirror position is moved to BGE setting.

Blood-alcohol concentration (BAC) Percentage of alcohol in blood as measured by a standard test.

Blood test Chemical test in which blood is taken from driver's finger to determine BAC or drug usage.

Blowout A rapid loss of tire air pressure while driving.

Blue-book price Average market value for a specific model and age of a used vehicle.

Brake fade A temporary loss of brake effectiveness due to overheating of the brake pads or shoes caused by long, continuous, and hard braking.

Brake pedal A foot control enabling the driver to reduce the vehicle speed.

Brake system An hydraulic system to slow or stop a moving vehicle. A mechanical system for parking and emergencies.

Braking distance The distance a vehicle travels from the time the driver applies the brake until it stops.

Breathalyzer test (Intoxilyzer) Chemical test in which a driver blows into a machine to determine BAC.

- Carbon monoxide** Colorless, odorless, tasteless and toxic gas contained in the exhaust fumes of gasoline engines (a byproduct of combustion).
- Carburetor** Engine component that mixes gas and air in the proper proportions and sends it as a fine mist to the engine cylinders (replaced by fuel injection).
- Car pooling** Several individuals sharing transportation to one or more destinations in a vehicle.
- Catalytic converter** Part of a vehicle emission system that reduces harmful exhaust emissions by means of a chemical reaction.
- Center of gravity** The point around which the weight of the vehicle is balanced.
- Central vision (conic)** Three degree, cone-shaped area in which you can see clearly while looking straight ahead. Read and identify objects.
- Certificate of title** Official document certifying ownership of a vehicle.
- Choke** Device restricts air flow and raises idle speed when engine is cold (older models). Facilitates cold starts.
- Closed zone or area** A space not open to you because of a restriction in your line of sight or intended path of travel (occupied by another vehicle).
- Clutch** Driver operated device permits dis-engaging the engine from the transmission (to shift or stop).
- Collateral** Object of value presented as security for a loan.
- Collision** A crash between any two or more objects.
- Collision insurance** Pays for the repair or replacement of one's own vehicle in a crash regardless of fault.
- Color blindness** Inability to distinguish (certain) colors.
- Color perception** Ability to distinguish color.
- Commentary driving** System of driver verbalizing as he/she searches the roadway and the reasons for speed and position adjustments.
- Comprehensive insurance** Protection against damage or loss due to theft, vandalism, storms, or fire.
- Compromising hazards** Risk involvement with a less serious hazard to avoid a more serious one.
- Console** Compartment mounted between the front seats of a vehicle.
- Contributory negligence** More than one individual is at fault.
- Controlled-access highway** High speed roadway that vehicles can enter and exit only at interchanges.
- Controlled intersection** A regulated cross-road - signal lights, yield, or stop signs.
- Cooling system** A system to remove excess heat and maintain engine operating temperature.
- Countersteering** Returning the steering wheel in the opposite direction after an initial steering input.
- Covering the brake** Putting the foot just above the brake pedal, ready to apply pressure if needed (reducing response time for brake application).
- Crankshaft** The shaft turned by the piston movements that transmits the power to the drive train.
- Crest** The highest culminating point of a hill.
- Crossbuck** Large, white x-shaped sign located just prior to a railroad crossing.
- Crosswalk** A path marked on and crossing the roadway to guide pedestrians.
- Crowned road** Road higher in the middle than at sides.
- Cruise control** Device that permits maintaining vehicle speed without pressing on the accelerator.
- Crumple zones** Areas of a vehicle designed to crush and absorb impact, thereby protecting occupants.
- Cylinders** Bored holes in the block that house pistons.
- Dashboard** An illuminated panel with gauges, lights, and indicators that inform the driver.
- Dead pedal** Area on the floorboard designed for the driver to place the left foot to maintain balance.
- Decide** Fourth step (decision) of SIPDE process.
- Deceleration lane** Extra lane at expressway exits allows drivers exiting highway to reduce speed prior to the off-ramp (without blocking vehicles on expressway).
- Deductible** The amount of money the insured must pay (reduces premium) before the insurance company pays (specified limit) in the event of a claim.
- Defogger** Electric wires to heat / clear the rear window.
- Depreciation** The value a vehicle loses due to age and wear and tear.
- Depressant** Drug that slows down or depresses the central nervous system.
- Depth perception** The three dimensional perception of distance (ability to judge distance).
- Designated driver** Person who decides ahead of time not to drink alcoholic beverage and is appointed to drive others who do drink.
- Destination drive** The process of giving the student a location he/she will drive to, without assistance, using the most direct, efficient, and safe route.
- Detour** A deviation from the normal route.
- Diagonal parking** Parking spaces arranged at an angle to the curb or other boundary.

Differential Gear system in power train that transmits rotation to the drive wheels while permitting them to turn at different speeds.

Dimmer switch A switch to select high or low beam headlights.

Disc brakes Brake units that slow/stop wheel rotation by squeezing a rotating disc.

Distributor An electrical unit controlling production and distribution of electrical surges to spark plugs.

Downshift To shift from a higher to a lower gear.

Drive belt A cogged, grooved or V belt that transmits rotation to other engine components in vehicles.

Drive train The components that transfer the engine power to the drive wheels.

Drive wheels The wheels that receive engine power to move the vehicle.

Driving record A file kept by the DPS that lists all traffic violations that a driver has committed. It is used by the courts and insurance companies.

Driving task All social, physical, legal, and mental skills required to drive.

DUI (Driving under the influence) Operating a motor vehicle while the blood alcohol concentration (BAC) is above the legal limit of .08% for adults or any trace whatsoever for minors, and/or while impaired by drugs - whether legal or otherwise.

DWI Driving while intoxicated.

Drum brakes Brake units that slow/stop wheel rotation by rubbing curved shoes (pads) against a drum.

Dry steering Turning the steering wheel while the vehicle is not moving. Prematurely wears out the steering, front suspension, and tires.

Edge lines Lines (white, yellow) painted on the pavement marking the limit of the roadway.

Electrical system A system to supply all the electrical needs of the vehicle.

Emergency brake The parking brake system.

Emergency flashers The hazard lights that activate all four turn signals to warn of danger or breakdown.

Emergency vehicle A police vehicle, fire department vehicle, ambulance, etc. which must be given the right-of-way by all road users when the siren or flashing lights are activated.

Emotion Strong feeling of any kind (anger, fear, joy).

EMS Emergency medical services.

EMT Emergency medical technician.

Endorsement License qualification needed to be legal to drive special vehicles (motorcycle endorsement).

Energy of motion See Kinetic energy.

Engine-management system Computerized system that monitors and adjusts the fuel, ignition, and emission systems.

Entrance ramp Roadway, often elevated, leading onto an expressway.

EPA Environmental protection agency.

Escape path A place to drive in case of unexpected conflict - an "OUT".

Euphoria False sense of well-being developed as a result of alcohol or other drug consumption.

Evaluate To examine and judge carefully. The first step of the EPE system in which drivers evaluate potential options before acting to adjust speed or position and communicate based on risk, habits, judgement, and experience.

Evasive action steering Emergency steering technique used to quickly steer around an object in your path and to move to an open travel path.

Evasive or bump-to-bump steering Without leaving go of the steering wheel, turn until wrists bump each other, then turn in the opposite direction until arms touch. Then return to center position.

Execute The final step of the SIPDE process in which a driver inputs proper vehicle control responses to avoid conflicts or reduce risk.

Exhaust manifold A collector pipe with passages through which exhaust gases exit combustion chambers and enter the exhaust piping system.

Exhaust system Collects burned gases from each cylinder, directs the harmful gases and heat through pipes to release them behind the vehicle.

Exit ramp Roadway, often elevated, to exit expressway.

Expressway A controlled-access, divided highway with more than one lane in each direction intended for high speed driving (freeway).

Fatigue Temporary physical or mental exhaustion due to lack of rest or sleep.

Field of vision The area that the eyes can perceive without moving the eyes or head; approx. 180°.

Field sobriety test Series of on-the-spot tests that help an officer detect impairment of a driver suspected of DUI or DWI.

Financial responsibility Law requiring proof of the

ability to pay claims resulting from collisions before issuing registration/plates for a vehicle.

First aid Emergency treatment given to an injured person before medical professionals arrive.

Focus vision (foveal) That part of the field of vision which allows the driver to read signs and make distinctions between vehicles and objects (often measured as visual acuity).

Flywheel A metal disc attached to crankshaft to balance engine rotation, transmit power to the drive train, and is turned by the starter motor to crank engine.

Following distance The space that a driver maintains from the preceding vehicle in his/her travel path.

Following (interval) time Recommended time interval (3 or 4 seconds) to follow another vehicle in your lane. Calculated by using a fixed reference point, as the vehicle ahead passes, start counting "one thousand and one," "one thousand and two," etc., until the front of your vehicle reaches that point.

Force of impact The energy with which a moving vehicle collides with an object; varies according to speed, weight, and distance between impact and stop (based on forces of inertia and momentum).

Foresight The act of foreseeing. The thoughtful regard or provision for the future; prudent forethought.

Four wheel traction loss The driver has no vehicle control (all tires have lost contact with the road).

Fresh green light A traffic signal light that has just changed from red to green.

Friction The resistance to motion between two objects in contact (each tire and the road).

Friction point The clutch position when the engine begins to move the transmission and the vehicle.

Fringe vision Wide area (peripheral) used to judge depth and position without the clear focusing ability of central vision.

Fuel-injection system System (replaces the carburetor) that pumps vaporized fuel to the cylinders.

Fuel system The system that stores fuel and supplies the correct fuel-air mixture to operate the engine.

Fuse A device designed to open a circuit when the current is excessive, to protect equipment in the circuit. A "burned" fuse must be replaced.

Gap Distance, between approaching vehicles, which a driver can utilize to cross or merge with traffic.

Gear Toothed wheel that meshes with others of varying

sizes to transmit (the same, increased or decreased) rotation thereby increasing speed or power.

Gear selector lever The driver control permitting choice of gear position (automatic transmission).

Gearshift lever The driver control that permits choosing a gear position (standard transmission).

Glare recovery time The time required to regain clear vision after having been temporarily blinded by strong headlights of oncoming vehicles.

Glow Plug Unit to preheat combustion chamber (diesel).

Graduated driver licensing program A system requiring young drivers to progress through a series of licensing stages with various restrictions.

Gravity The force that pulls objects toward the center of the earth.

Green driver A driver that properly maintains a vehicle with scheduled servicing, recycles oil, and conserves fuel (reduces speed, smooth acceleration).

Ground viewing habit Scanning near the pavement to determine position of other vehicle's wheels and to notice any signs that warn of vehicle movement.

Guide sign Informational sign giving distance, services, points of interest, and directions.

Habitual offender A driver who commits a number of serious driving offenses.

Hallucinogen A mind-altering drug that affects the senses and distorts vision/perception.

Hand-over-hand steering A technique to turn the steering by crossing one hand over the other to provide smooth, consistent steering input.

Hand position Placement of hands at "9 and 3" or "8 and 4" on the steering wheel for best balance based on the vehicle steering wheel and input.

Hand signals Arm motions that warn others (communicate) of your intention to slow, stop or turn.

Hand-to-hand steering Pushing with one hand while pulling with the other hand on the opposite side of the steering wheel using positions at 10-7 on the left and 2-5 on the right. Used to input steering control with impending air bag deployment.

Hazard lights A signaling device that activates all four turn signals to warn of danger or breakdowns.

Hazardous materials Items (inflammable, explosive or toxic), often transported in tanker trucks.

Headlights White lights mounted on the front of the vehicle that should be illuminated when driving.

Headrest Restraint device attached to the top of the seat to cushion the head in collisions. Often adjustable.

High beams Brighter white lights on the front of the vehicle to see further than low beams.

Higher learning center Area of the brain, where decision-making starts, affected first by alcohol

Highway hypnosis Drowsy or trancelike condition (reduced attention to the driving task) brought on by long periods of high speed driving.

Highway transportation system (HTS) A complex system made up of people, vehicles, and roadways.

HOV lane High occupancy vehicle lane reserved for vehicles transporting more people (van or car pools, buses).

Hydraulic pressure Pressure exerted on a fluid is transmitted by the fluid.

Hydroplaning A layer of water between the tire and the road eliminating traction.

Identify The second step of the SIPDE process in which the driver, using selective seeing, selects hazards.

Idle Engine speed when operating without any pressure on the accelerator.

Ignition switch The control to activate/deactivate the vehicle electrical systems and to crank the engine.

Ignition system Components that produce, control and distribute the spark that initiates combustion.

Implied consent law A state law that, upon receiving a license, a driver agrees to take a chemical test for intoxication if arrested on suspicion of driving under the influence or give up his/her license.

Inertia The tendency of an object in motion to stay in motion in a straight line and for an object at rest to remain at rest.

Inhibitions Inner forces of personality that restrain or hold back impulsive behavior.

Internal factors Attitudes, values, emotions, maturity, motivation and peer influence affecting driver performance.

International signs Symbolic (message without using words) road signs used in many countries.

Intersection A place where two or more highways meet. Caution must be exercised due to closed sightlines.

Intervention strategies Activities to change the status quo; re alcohol, responsible decision making, resiliency skills, alternatives, letter writing, designated driver and community support.

Intoxicated Under the influence of alcohol or drugs. Driving while intoxicated is a very dangerous and serious offense.

Intoxilyzer Chemical test in which a driver blows into a machine to determine BAC.

Jack A hand operated device for lifting one corner of the vehicle, generally used when changing a tire.

Jaywalking The pedestrian practice of crossing a roadway without regard for rules or signals.

Jump starting Using another vehicle to boost a "dead" battery.

Kinetic energy The energy of motion or the energy an object acquires because it is in motion.

Knowledge test A test on signs, signals, road markings and rules of the road at the Driver License Office to acquire an instruction permit or driver's license.

Laboratory sessions Behind the wheel, simulation, and multiple-car range practice sessions.

Lane change Moving the vehicle from one lane of traffic to another using proper space management procedures.

Lane changer device Use of the turn signal by hooking thumb on steering wheel and pushing signal lever halfway just to activate the signal so that release of lever will deactivate signal.

Lane position Location of the vehicle within confines of the lane of traffic using reference points.

Lane-use signals Lights mounted above lanes to control the flow and direction of traffic in the lane.

Leasing Long term rental contract, alternative to purchasing a vehicle.

Legal limit The amount of alcohol legally allowed in a driver's bloodstream in Texas = .08 for adults and 0 for those under 21.

Legend Key explaining symbols/markings used on a map.

Liability insurance Protection from financial loss due to a collision when the insured party is responsible.

Low beams The normal headlight setting.

Lubrication system The components that supply oil to the moving parts to prevent damage/overheating.

Lug nuts Devices that attach the wheel to the vehicle.

Mass transportation Vehicles or devices that move large numbers of people from place to place at the same time (public transportation).

Maintenance Checkups, service and repairs required to keep a vehicle in proper operating condition.

Maneuverability Ability to maneuver or change

direction of a vehicle.

Manslaughter Accidental killing caused while driving a motor vehicle.

Margin of safety See safety cushion

Master cylinder Unit in the brake system where fluid is stored and pressurized to activate the brakes (pressure sent to wheel cylinders). Most vehicles have dual system to eliminate brake failures.

Median A width of space (area of ground) that separates traffic moving in opposite directions.

Medical payments insurance Insurance that covers the cost of hospitalization and treatments for injuries incurred during a collision.

Merging area The section of roadway at the end of an acceleration lane (expressway) where vehicles must join the flow of traffic.

Minimizing hazards Reducing risk of a collision from a hazard by adjusting speed, lane position or both.

Minimum speed limit Lowest legal speed a vehicle may travel (under normal conditions) on certain roadways to prevent wide differences in speed among vehicles.

MIP (Minor in possession) Anyone under age 21 in possession of alcohol.

Moped Two-wheeled vehicle that can be driven with either a motor or pedal.

Motor scooter Low-powered, two-wheeled vehicle that is more powerful than a moped.

Muffler A device in the exhaust system to minimize noise. A leaky muffler can be noisy and dangerous because of poisonous exhaust fumes.

Multifunction lever A lever next to the steering wheel having many functions.

Multilane A road with two or more lanes in each direction.

Narcotic drug An illegal drug that is used to change the way a driver feels and acts.

Navigating Following a route by reading a map or a Global Positioning System (GPS) device.

Neutral A transmission position in which the gears are not engaged and cannot transmit power. Used when starting a manual transmission.

Night blindness Condition of not being able to see well at night.

Night vision The ability to see clearly, judge depth perception, and recover from glare in the dark.

No-fault insurance Insurance that pays claims to the insured up to specific limits regardless of fault.

No-zones Large mirror blind spots where truck drivers cannot see other vehicles (front, sides, or rear).

Nystagmus Involuntary jerking of the eyes as a person gazes to the side. Part of the field sobriety test is called gaze nystagmus.

Odometer Device that indicates the total distance a vehicle has been driven.

Oil filter Device in the lubrication system that removes dirt from the oil.

Oil pressure gauge Light or indicator that shows the pressure at which the oil is circulating through the engine.

Oil pump Device forces oil to all engine moving parts.

Open zone or area Space where the driver can move without a restriction to his/her line of sight or path of travel.

Overdrive A gear that permits the vehicle to cruise efficiently at high speed. Saves fuel.

Overdriving the headlights Driving at such a high speed at night that your stopping distance exceeds the area illuminated by the headlights.

Oversteer When the rear tires lose traction causing a spinning effect around the vehicle's center of gravity (yaw). The vehicle has a tendency to spin (left or right) even though the driver is not turning the steering wheel.

Over-the-counter drug (OTC drug) Drug that can be legally purchased without a doctor's prescription.

Owner's manual Manufacturer's booklet providing detailed information about the vehicle, its operation and recommended service/maintenance.

Oxidation The way the body eliminates (or burns) alcohol by the action of the liver.

Parallel parking Parking with the vehicle lined up parallel with the curb. The vehicle must be from 6 to 18 inches of the curb in Texas.

Parking brake A mechanical unit that acts on the rear wheels to keep them from moving when parked. Also used to slow /stop if the hydraulic brake system fails.

Passive restraints Safety devices that act without requiring any action by the user. (Air bags, some safety belts)

Pedestrian An HTS user on foot.

Pedestrian signal Traffic signal/symbol controlling pedestrian movement.

Peer education Process in which young people help other young people make decisions and determine goals.

Peer pressure Mental and social influence of others of a similar age on decision-making skills.

Perception distance The distance a vehicle travels during the time a driver sees and identifies an object or situation ahead.

Peripheral vision The portion of the field of vision around the central conic vision.

Perpendicular parking Parking at a 90° angle to the curb or boundary.

Personal injury protection (PIP coverage) Insurance that covers medical expenses and loss of income for the driver and passengers.

Personal reference point Adapting the standard reference points to the vehicle used by the driver.

Pitch of the vehicle A suspension change to the front or rear that affects the tire patch contacting the road surface; initiated by driver actions of braking or accelerating. Sudden or excessive pitch changes may cause traction loss.

Point of no-return Point beyond which a driver can no longer stop safely without entering intersection.

Policy Contract between a vehicle owner and an insurance company specifying the amount and type of insurance coverage for which a premium is paid.

Position Location of vehicle in relation to environment and other vehicles.

Piston A cylindrical-shaped component that moves up and down in the cylinders.

Power brakes A system that facilitates stopping the vehicle by increasing pressure applied by the driver.

Power steering A system that facilitates steering by using hydraulic pressure supplied by a pump.

Power train Components that transmit engine power to the drive wheels.

Predict Third step of the SIPDE process in which driver, after identifying a hazard, predicts what might happen.

Premium The sum an individual pays the insurance company for insurance coverage - the policy fee.

Prescription medicine Drug that can be purchased legally only when ordered by a doctor.

Preventive maintenance Routine care and attention to your vehicle to keep in proper working order.

Probationary license A temporary license that allows driving for specific purposes (to school/work).

Progressive acceleration Gradual increase in pressure on the accelerator to increase speed and shift vehicle weight toward the rear.

Proof Rating of alcohol content in a beverage equal to doubling the percentage (100 proof = 50%).

Property damage liability Insurance coverage that pays for property damage to others during a collision caused by the insured.

Protected left turn Left turn made on a left-turn light, green arrow, or delayed green light while oncoming traffic is stopped.

Pull-out area Additional right lane on narrow mountain roadways for slower-moving vehicles.

Push-pull steering Using the hand-to-hand steering technique (see hand-to-hand).

Pumping the brake Applying pressure on the brake pedal, releasing the pressure sufficiently to allow the tires to roll and then re-applying.

Radial tires Tires with the plies straight across the tire parallel to each other encircled by a steel belt.

Radiator A heat exchange unit that stores and cools the engine coolant before it circulates in the engine.

Ramp meters Stop and go signals at the entrance to freeways controlling traffic entering.

Reaction time The time it takes a driver to input vehicle control actions once a course of action is decided upon.

Reckless driving Driving in a very careless manner that endangers the lives of others.

Recreational vehicle (RV) Large vehicle used mainly for pleasure and travel (van, motor home, camper).

Reference points Positions (points of reference) on the vehicle that relate to the roadway and help the driver in vehicle positioning with respect to the environment and maneuvering (when to input).

Reflexes An automatic response of the body to a signal it receives.

Regulatory sign A sign that controls the flow of traffic at a given location.

Release form Paper signed by the person who has been injured or who has property damage stating that he/she is not going to hold someone responsible.

- Reverse** Gear position used to move a vehicle backwards.
- Reversible lane** A lane in which the direction of the traffic flow changes at specific times.
- Revocation** Cancellation of driver's license (at least one year) for serious driving violations (DUI, manslaughter, etc.).
- Rheostat** A device regulating the intensity of light in the instrument panel.
- Right-of-way** Traffic rules determine who should yield to other road users in given situations.
- Right turn on red** Turning right after a stop when the signal is red unless specifically prohibited.
- Risk** The possibility of a conflict that results in a crash or collision with another vehicle or road user.
- Risk-taking behavior** Taking chances when the consequences can be dangerous.
- Rocking a vehicle** Repeating the sequence of driving forward a little and then backing a little to move your vehicle out of deep snow, mud, or sand.
- Roll of the vehicle** A suspension change to the left or right side that affects the tire patch contacting the road surface; initiated by driver action of steering the vehicle. Sudden or excessive roll changes may cause traction loss.
- Rumble strips** Sections of rough or grooved pavement intended to alert drivers of a change in roadway conditions ahead (tollbooth, construction, etc.).
- Runaway vehicle ramp** Place on mountain roads for vehicles to safely get out of traffic and stop when their brakes are no longer effective.
- Running start** The point, behind the vehicle to be passed, where the driver begins to create a speed superiority prior to moving into the passing lane.
- Safety belt** A restraint device (anchored to vehicle) designed to prevent occupants from striking the interior of the vehicle - seat belts.
- Safety chains** Extra connection for a trailer used as a backup in case a trailer hitch fails.
- School safety patrol** Person(s) designated by school to assist children across intersections. Vests or special belts identify them. Drivers must obey stop signal.
- School zone** Area of roadway near a school that is subject to special speed limits set by state/local law.
- Searching** The visual skill of searching the area around and ahead of the vehicle in an orderly search pattern. The first step of the SIPDE process.
- Selector lever** Device in an automatic transmission vehicle used to select gears.
- Selective seeing** Searching only for those clues and events that restrict your line of sight, require you to change your path of travel, or adjust to a specific regulation (signs, signals, etc.).
- Separating hazards** The technique of dealing with multiple hazards one at a time.
- Shared left-turn lane** Center lane on a busy street that helps drivers make safer mid-block left turns into business areas from both directions.
- Shock absorbers** Devices that limit and stop the bouncing action of the vehicle springs.
- Shoulder** The strip along the sides of a roadway (may or may not be paved) intended for emergency use.
- Sight distance** Distance a person can see.
- Sightline** An area in which you can see; used as a basis for steering and speed adjustments.
- Simulation** Laboratory exercise similar to driving.
- SIPDE system** Five step driving strategy (search, identify, predict, decide and execute) to process information and evade potential danger in organized manner.
- Skid** When tire patches lose part or all of their traction with the road surface due to abrupt suspension balance changes or roadway surface conditions.
- Slide-hand or Shuffle steer** Turning the steering with a sliding hand or a push-pull movement.
- Smith System** Systematic approach to defensive driving, which includes: (1) Aim high in steering, (2) Keep your eyes moving, (3) Get the big picture, (4) Make sure they see you, (5) Leave yourself an out.
- Space areas** Designated positions around the vehicle to identify relationships to the environment or objects or other road users.
- Space cushion** A open area around the vehicle that a driver should maintain to have room to maneuver.
- Space management** Five step process (SIPDE) that can serve to change a driver's awareness from the procedural habit level to the process judgement level of driving.
- Spark plug** An ignition component that supplies the spark to initiate engine combustion.
- Speed superiority** Represents a safe difference in speed (10 to 15 mph) of a passing vehicle over the vehicle being passed in order to complete the pass in a designated time period.
- Staggered stop** Stopping before the stop line to

- maintain front space control and diminish risk of a collision (space for left-turning vehicles).
- Stale green light** A traffic signal light that has been green for some time and is likely to change to yellow.
- Standard transmission** A system in which the gears are shifted by the driver.
- Steering control** Driver inputs appropriate steering techniques and movements.
- Stimulant** Drug speeds up the central nervous system.
- Stopped position** Stopping behind a vehicle (to see the back tires) in a position that allows the driver space to steer around the vehicle to avoid a stalled, turning, or backing vehicle. (Also to avoid carjacking problems in heavy traffic.)
- Substance abuse** Excessive use of alcohol and/or drugs.
- Suspension** The withdrawal of a driver's license for a period of 90 days, 6 months or 1 year due to many traffic violations or a serious driving offense.
- Suspension control** Adjusting vehicle balance at the strut or shock absorber (using fluid or air pressure) to dampen forces when weight transfer occurs.
- Suspension system** Components support vehicle weight in a flexible manner while absorbing road shocks.
- Switchbacks** Sharp turns on mountain roads, similar to a U-turn, that allow the road to climb a steep slope.
- Synthesizing** Combining elements so as to form a new complex product.
- Tachometer** A gauge indicating the engine revolutions per minute (RPM) to inform the driver.
- Tailgate** Driving too closely behind another vehicle.
- Target area** A fixed location in the center of the travel path you intend to follow.
- Temperature gauge** An indicator light or gauge that indicates the engine operating temperature.
- Thermostat** A device that regulates the engine temperature by controlling the flow of the engine coolant to the radiator.
- Threshold braking** A braking technique in which the driver applies brakes just short of wheel lock-up.
- Thrust acceleration** Pushing down on the accelerator sharply in order to increase speed to avoid a collision. Also used in passing and when entering expressway (kickdown). Shifts weight to rear wheels.
- Title** Legal proof of vehicle ownership (certificate of title).
- Tolerance** The manner in which the body responds to alcohol/drugs; dependent upon individual weight and experience with alcohol or drugs.
- Tort Law** Wrongful act or damage (not involving breach of contract) for which a civil action can be brought.
- Tort liability** Civil rules imposed by government concerning government, people's property or any damage or injury that you are liable for.
- Total stopping distance** The total distance required to stop a vehicle that is in motion.
- Towing insurance** Optional coverage that protects against the cost of on-the-road repairs and towing.
- Traction** The friction between the vehicle tire patches and the road surface.
- Traction control system (TCS)** Device that allows acceleration inputs without traction loss.
- Traffic circle** Intersection formed by several roadways meeting at a circle.
- Traffic control device** Any light, sign or pavement marking used to tell road users what to do.
- Trail braking** Controlled braking pressure that does not change the speed, but maintains vehicle balance and control while turning.
- Transverse** Perpendicular to your path of travel. Lines across the road to direct vehicles and pedestrians into and through intersections.
- Travel path** Actual or potential path a vehicle might be going; a combination of targeting, sightlines, visual references, and experience.
- Tread** The raised pattern on the outer surface of a tire that grips the road and provides a channeling action for water on the roadway.
- Tread wear indicator** Bars that appear in tire grooves when they are less than 1/16 of an inch deep.
- Trip odometer** An indicator that registers mileage a vehicle travelled since it was reset to zero.
- Tunnel vision** Very narrow field of vision (standard of 140° or less) with little peripheral ability.
- Turnabout** A turning maneuver to travel in the opposite direction.
- Turning bay** A special turn lane found on multiple-lane highways, two-way roads, and at some city intersections.
- Turn signal** Lights activated by the driver to warn of his/her intentions (communicate). Also hand signals.
- Two second rule** Technique for calculating and maintaining a minimum following distance under ideal driving conditions. A three or four second minimum count is highly recommended.

Uncontrolled intersection An intersection at which there is no traffic control signal, sign or roadway marking to regulate traffic (including railroad crossings that do not have flashing red lights or crossing gates).

Uncontrolled railroad crossing Level crossing at which there are no signals/bells/crossing gates regulating the flow of traffic.

Understeer When the front tire patches lose varying degrees of traction and the rear tire patches have more traction causing a pushing effect on the vehicle due to momentum and inertia forces. The vehicle has a tendency to continue straight even if the steering wheel is turned.

Uninsured motorist insurance Protection from financial loss due to a collision caused by a driver without insurance coverage or a hit and run, as well as any amount that may exceed the other party's coverage.

Universal joint Connectors that permit a change of angle while transmitting power (part of power train).

Unprotected left turn Left turn at a signal-controlled intersection without a special left-turn light.

Urine test A chemical test that uses the driver's urine to determine the amount of alcohol or the presence of drugs in the driver's system.

U-turn A turnabout (without reversing) maneuver performed by turning sharply left.

Van pooling Several individuals sharing transportation to one or more destinations in a van.

Variable message signs Signs that post messages to inform drivers of road conditions ahead.

Vapor lock Fuel vaporizes in the fuel lines and the fuel system cannot pump it into the injectors.

Vehicle balance Transfer of weight of the vehicle (from center of gravity) to different points on the vehicle (chassis or frame).

Vehicle balance sensitive The shoulder belt locks when the brakes are applied and the balance of the vehicle leans one into the shoulder belt.

Vehicle code Federal and state laws that regulate the highway transportation system (HTS).

Vehicle registration A form that must be carried in the vehicle to prove who owns it, that it is licensed, and that the vehicle taxes have been paid.

Velocitation The improper sensation of vehicle speed.

After high speed driving, the sensation of moving more slowly than the vehicle actually is, resulting in driving too fast unconsciously.

Visual acuity The ability to see details up close and from afar.

Visual eye-lead-time The time (and distance) that the driver's visual search precedes the vehicle.

Visual referencing Points on the vehicle that are used to assist the driver in positioning the vehicle with respect to curbs, lines, lane positions and control input timing for maneuvers.

Visual tracking Aiming and steering in the desired travel path of the vehicle.

Warning lights and gauges Dashboard indicators to inform the driver of the condition of the vehicle systems and warn when problems occur.

Warning signs Traffic signs that warn of danger ahead.

Warranty A written guaranty from the manufacturer to repair or replace defective components for a limited time or mileage.

Water pump A device that circulates the engine coolant under pressure.

Weave lane When an entrance and an exit use a common extra lane (for acceleration as well as deceleration) on a freeway or expressway.

Weaver A person who moves their vehicle back and forth between lanes. This often results in collisions.

Weight transfer Moving the concentration of weight from one point of the vehicle to another caused by acceleration, deceleration and cornering forces.

Wheel alignment Mechanical adjustment of the steering system components to vehicle specifications.

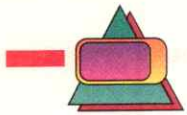
Wolf pack Group of vehicles traveling together in a bunch on an expressway.

Yaw The spinning effect of a vehicle around its center of gravity (oversteer).

Yield To give another road user the right-of-way. Allowing another to proceed first.

Zero tolerance law Law stating it is illegal for persons under the age of 21 to drive with any measurable amount of alcohol in the blood.

Zone One of six areas of space around a vehicle that is at least the width of a lane and extends as far as the driver can see to the front, side, or rear.



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Date: ____/____/____

Name: _____

VOCABULARY MATCHING EXERCISE

SESSION 1 - CHAPTERS 1 & 2

Match the description in Column B with the term(s) in Column A. Write the letter in the space provided.

Column A

- ___ 1. HTS
- ___ 2. Instruction Permit
- ___ 3. Student driving log
- ___ 4. Provisional license
- ___ 5. License restriction
- ___ 6. Inoperative traffic signals
- ___ 7. LCM crash
- ___ 8. Traffic circle
- ___ 9. Emergency vehicle
- ___ 10. Crossbuck

Column B

- A. A reasonable limitation placed on a driver's license to improve the safety of a person's driving. A code letter designating the limitation is printed on the license.
- B. License, valid for one year or until the person's next date of birth, issued to a person under 18 years of age in a vertical format with a purple title.
- C. Record of practice driving with a parent or other mature adult following the procedures that have been established for practice by the TSE program.
- D. Highway Transportation System
- E. Issued without a photograph for the purpose of allowing a student driver to legally practice driving when accompanied by an adult licensed driver who has at least one year of driving experience.
- F. All drivers approaching from any direction must stop, and apply the same right-of-way rules as at a four-way stop intersection due to a power failure or other electrical malfunction.
- G. One of 630,000 crashes that cause 225 fatalities annually when driver perform a lane change or merge maneuver nationwide.
- H. Any location where two or more highways cross or join in a junction that has an island in the middle and traffic proceeds around the island to enter the flow of traffic on another road.
- I. Police, fire or ambulance vehicle that has its siren operating and/or its lights flashing must be given the right-of-way.
- J. A sign in the form of a white X posted near railroad crossings.



Date: ____/____/____

Name: _____

FILL-IN THE BLANKS EXERCISE

SESSION 1 - CHAPTERS 1 & 2

Fill-in the blanks in the spaces provided below.

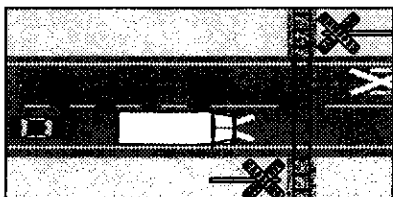
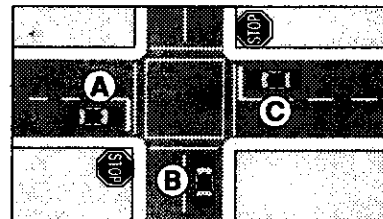
1. To qualify for an instruction permit, you must be at least **15** years of age and be enrolled in a _____ program (parent or school).
2. The Texas Education Agency has developed an _____ certification form (VOE) that you must obtain from your school, and then present it to the Drivers License personnel when _____ or _____ your driver's license.
3. If you pass the _____ at the Drivers License Office, an instruction permit will be issued. It will be valid for _____, or until your _____ (whichever occurs first).
4. An instruction permit allows you to legally practice driving to acquire the _____ and _____ required to operate a motor vehicle. You must be accompanied by a licensed driver occupying the front seat beside you; who is at least _____ years of age with at least _____ of driving experience.
5. Traffic _____ govern the behavior of all road _____ and assist in _____ what others will do. They include basic driving _____, rules of _____, and speed _____.
6. Obey all posted, official traffic control _____ and _____, unless: otherwise directed by a traffic or _____ officer, or operating an authorized _____ vehicle.
7. You may not back your vehicle _____ the movement can be made _____ without _____ with other traffic. It is illegal to back on the _____ or roadway of a limited or _____ access highway.
8. Right-of-way is the _____ of the _____ use of the roadway, and is determined by a set of rules and guidelines as listed for _____, _____, and _____ conditions.



Session I Review Test**Chapters I and 2**

Circle the the letter that best answers or completes each question or statement.

1. **Despite the efforts of many safety professionals, the safe operation of the HTS depends on:**
 - A) the attitude and behavior of each road user.
 - B) the vigilance with which the police patrol the HTS.
 - C) the severity of court penalties for infractions.
 - D) all of these.
2. **If a person is under 18 years of age, their license expires:**
 - A) every six years on their date of birth.
 - B) on their eighteenth birthday.
 - C) every year on their date of birth.
 - D) every second year on their date of birth.
3. **If you don't receive a renewal notice card reminding you that your driver's license is about to expire, you should:**
 - A) renew it in person at the Department of Public Safety.
 - B) renew it in person at a Driver's License Office.
 - C) write to the Department of Public Safety.
 - D) write to a Driver's License Office.
4. **The minimum auto insurance liability coverage required by Texas law is:**
 - A) \$20,000 per person.
 - B) \$40,000 per collision (injuries).
 - C) \$15,000 for property damage.
 - D) all of these.
5. **By Texas law, you are required to show proof of financial responsibility when:**
 - A) you are applying for a driver's license.
 - B) you take your vehicle for its annual inspection.
 - C) you are involved in a collision.
 - D) all of these.
6. **You must always drive on the right half of the roadway, unless:**
 - A) you are passing another vehicle, and you are doing so in complete safety.
 - B) an obstruction obliges you to move to the left, and you do so safely.
 - C) you are driving on a multi-lane or one-way roadway.
 - D) all of these.
7. **Approaching an intersection where the traffic signal lights are inoperative, you should:**
 - A) accelerate to clear the intersection more quickly.
 - B) reduce speed, check the space areas then proceed.
 - C) stop and apply the same procedures as a four-way stop.
 - D) maintain speed and proceed through the intersection.
8. **When you see an emergency vehicle with lights and/or siren operating, you should:**
 - A) maintain your speed and position.
 - B) accelerate to move away from the emergency vehicle.
 - C) cooperate and clear the way within the limits of safety.
 - D) all of these.
9. **In the diagram, if all the vehicles arrive at the intersection simultaneously and intend to continue straight ahead, which vehicle should be given the right-of-way?**
 - A) Vehicle A.
 - B) Vehicle B.
 - C) Vehicle C.
 - D) It does not matter.



10. **When approaching a railroad crossing following a school bus, you should:**

- ☒ A) be prepared to stop behind the bus.
- B) maintain speed, check, then proceed.
- C) accelerate to pass the school bus.
- D) reduce speed and proceed cautiously.

