

Curriculum Guide for Driver Education in Virginia

Senate Joint Resolution 378

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The Curriculum Guide for Driver Education in Virginia

§22.1-205 of the Code of Virginia authorizes the Virginia Board of Education to establish a standardized program of driver education for public, private, and commercial schools.

The Driver Education Standards of Learning and the Curriculum and Administrative Guide for Driver Education in Virginia prescribe the content and administrative requirements of a state-approved driver education program.

The Curriculum Guide for Driver Education in Virginia

- Is a Standards-Based Curriculum
(The SOLs identify what students should know and be able to do)
- Is divided into 11 Modules
- Includes lesson plans and other resources that align instruction with the SOL
- Has 450 (+) PowerPoint slides

The Curriculum Guide for Driver Education in Virginia

- Provides the scope and sequence for the SOL content.
- Has suggested methods of Assessment and sample quiz and test questions
- Includes sample workbook questions
- Has suggested Videos, Web sites and other Teacher Resources

Module One Transparencies

**Virginia Driver Responsibilities:
Licensing Responsibilities**

Topic 1 -- Goals of the Program

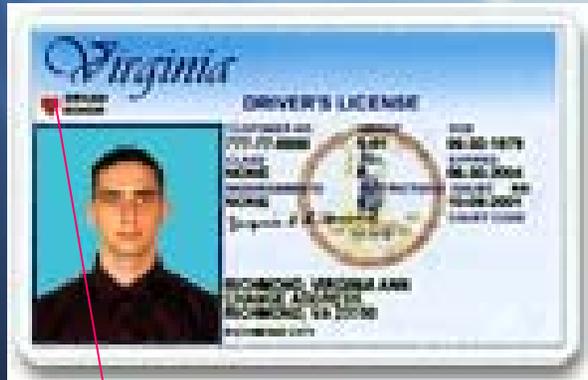
Topic 2 -- Your License to Drive

Topic 3 -- Right-of-Way Concepts

Topic 4 -- Traffic Control Devices

Virginia Licenses

Horizontal

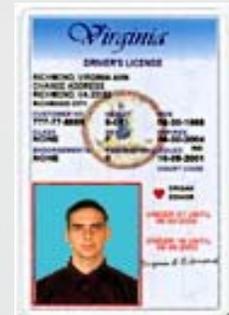


Virginia Driver's License for persons 21 years of age and older

Organ donation is denoted on the driver's license as a red heart followed by "Organ Donor" in black

- **Learner's Permit**
- **Driver's License**
- **Motorcycle License**
- **Commercial Driver's License (CDL)**

Vertical



Virginia Driver's License for persons under 21 years of age

Module Two

**Virginia Driver Responsibilities:
Preparing to Operate a Vehicle**

Topic 1 -- Driver Preparation Procedures

Topic 2 -- Identifying Vehicle Control Devices

Topic 3 -- Operating Vehicle Control Devices

Topic 4 -- Vehicle Balance Considerations

Topic 5 -- Standard Vehicle Reference Points

Vehicle Control

Vehicle Direction / Speed Requirements

Changing Vehicle Load from Front to Rear (Pitch)

- Light accelerator pressure
- Releasing the brake
- Progressive accelerator pressure
- Thrust accelerator pressure



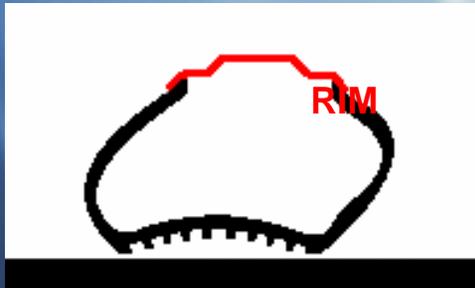
Changing Vehicle Load from Rear to Front (Pitch)

- Releasing the accelerator
- Controlled braking (Squeeze on)
- Threshold braking
- Trail braking (Squeeze off)



Vehicle Control

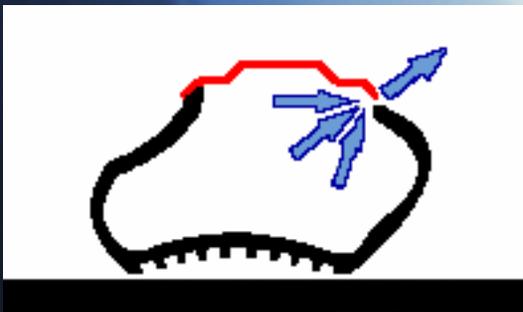
When cornering, tires tend to flex.



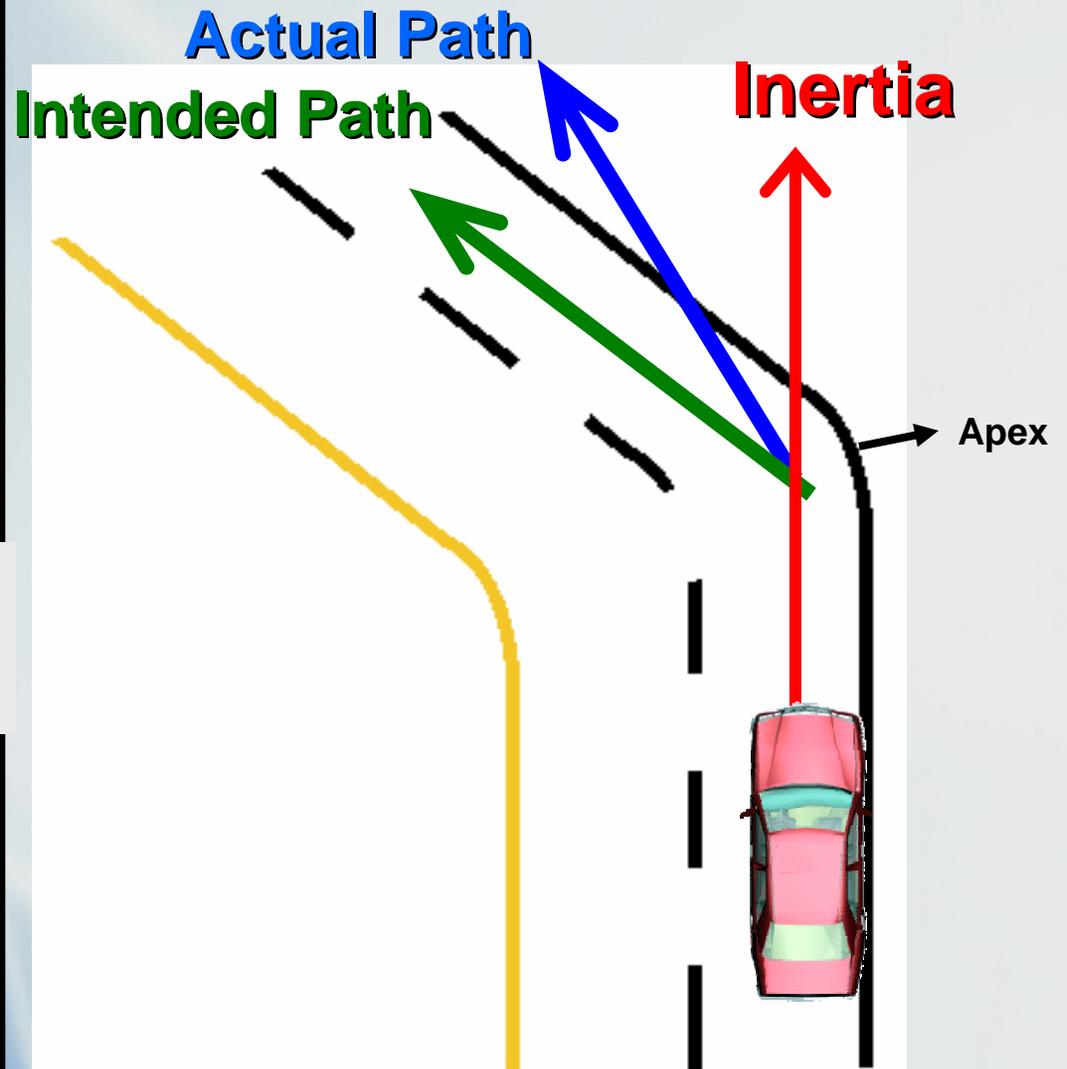
Tires turning left

If the tires are under inflated, the contact with the rim may be lost.

AIR LOSS WILL OCCUR.



Excessive tire flexion increases tire heat and may result in a blowout.



Cornering

Module Three

**Basic Maneuvering Tasks:
Low Risk Environment**

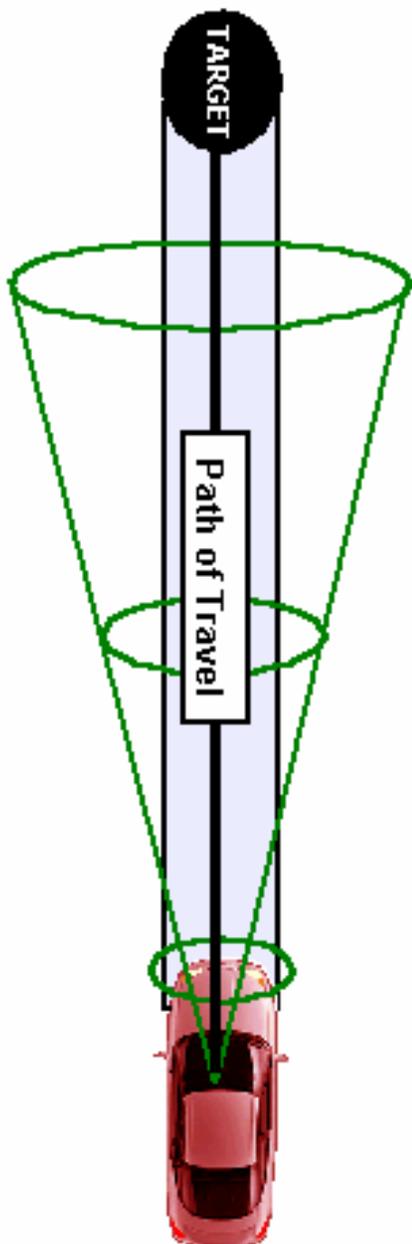
Topic 1 -- Basic Maneuvers

Topic 2 -- Vision and Perception

Topic 3 -- Controlling Risk Using a Space Management System

Topic 4 -- Developing Good Driving Habits

Vision and Perception Requirements



- **Targeting**, Line of Sight, Path of Travel
- **Referencing Vehicle to Path of Travel**
- **Using Visual References**
- **Using Turning Points to Start the Turning Process**
 - **Forward visual turning points**
 - **Rear visual turning points**

Approach to Intersection

Step 1 (Search)

- Identify Intersection
- Identify Controls
- Check Rear Areas
- Search for Intersection Risks

Step 2 (Evaluate)

- Scan Open Side Areas First
- Scan Closed Side Areas
- Look for Closed or Changing Frontal Areas

Step 3 (Execute)

- Adjust Speed
- Maintain Lane Position or Stop Behind Crosswalk
- Proceed Through Open Space Area or Stop Behind the Crosswalk



Module Four

Basic Maneuvering Tasks:

Moderate Risk Driving Environment

Topic 1 -- Risk

Topic 2 -- Space Management System

Topic 3 -- Lane Changes

Topic 4 -- Turnabouts

Topic 5 -- Parking

Reduced Risk Driving

- Three principles for reducing risks
 - Never risk more than you can afford to lose
 - Do not risk large consequences for a small reward
 - Consider the odds and your situation



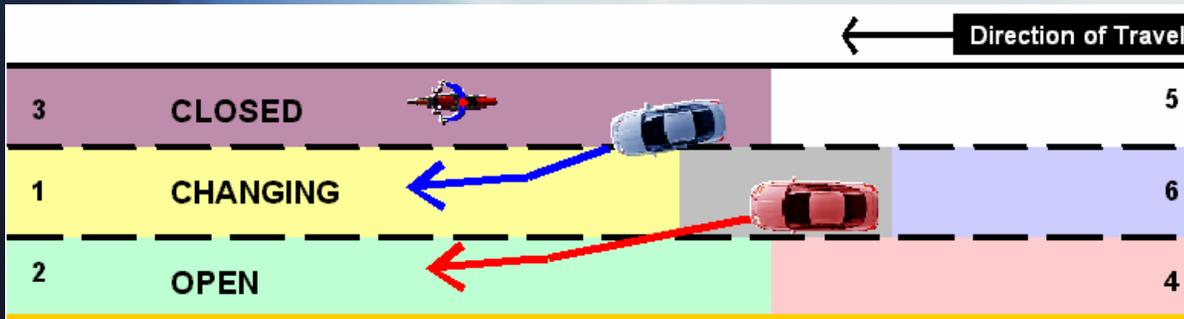
Space Management Basics

Executing Decisions:

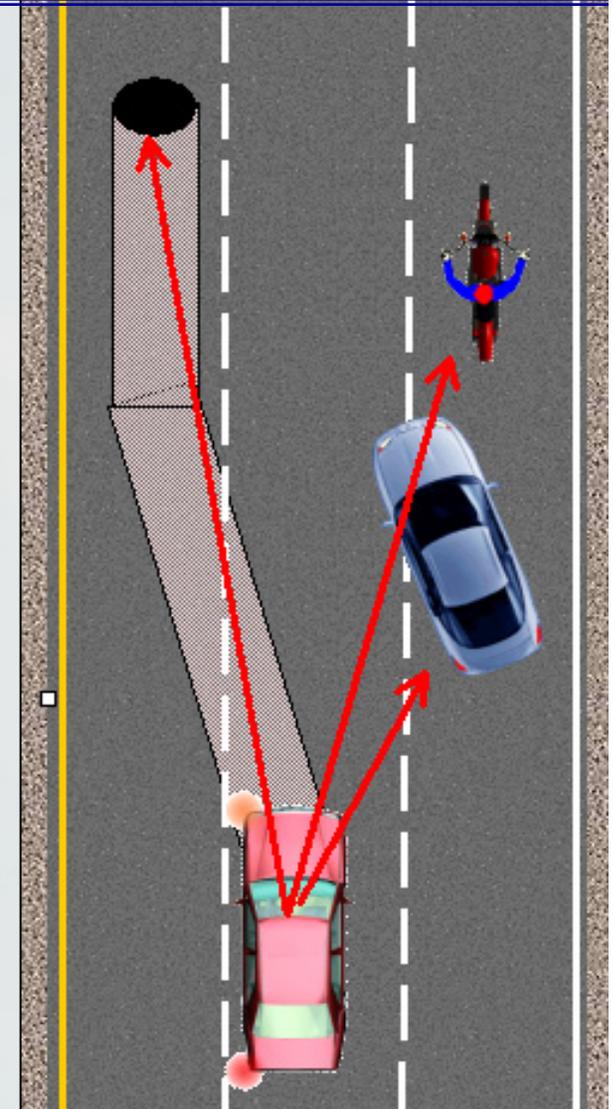
- Change speed while maintaining vehicle balance
- Change position while maintaining vehicle balance

Risk Reduction:

- Control the Target Area, Line of Sight and Path of Travel by:
 - speed changes;
 - position changes; and
 - effective communication.



What is the best decision and action for the driver of the RED car?



Module Five

**Information Processing:
Moderate Risk Driving Environment**

Topic 1 -- Processing Information

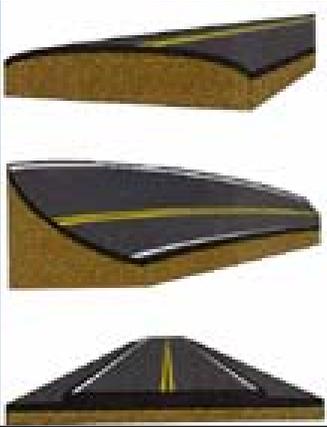
Topic 2 -- Intersections, Curves, and Hills

Topic 3 -- Passing

Processing Highway Conditions

Roadway Structure

- Width
- Curbing
- Curves
- Slopes



Roadway Surface

- Roughness
- Slick
- Wet Leaves
- Mud
- Sand



Atmosphere

- Illumination
- Glare
- Precipitation
- Wind/Noise



Highway Conditions

Intersections

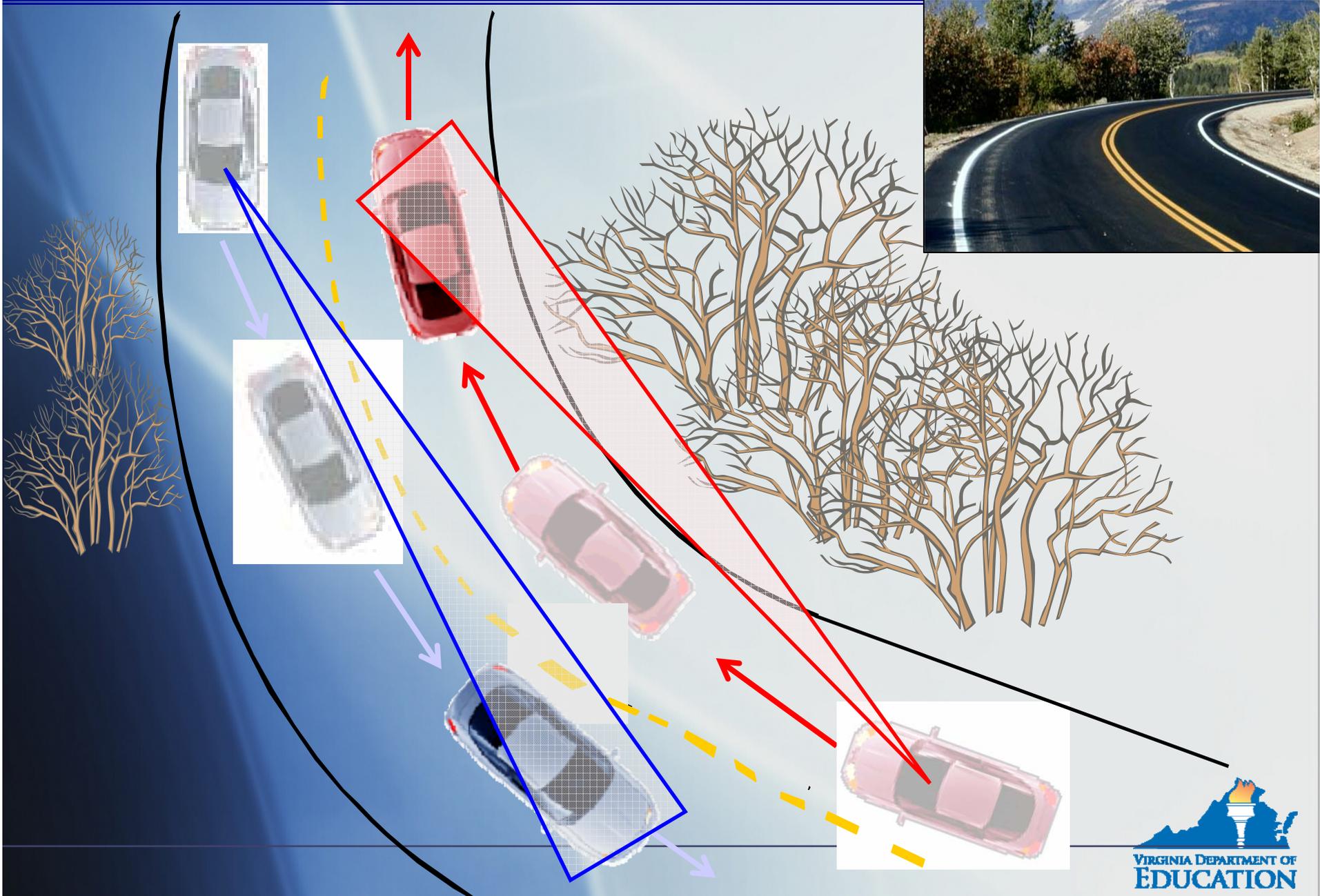


Roadway Features

- Shoulders
- Affixed Objects
- Adjacent Buildings



Limited Line of Sight Through Curves



Module Six

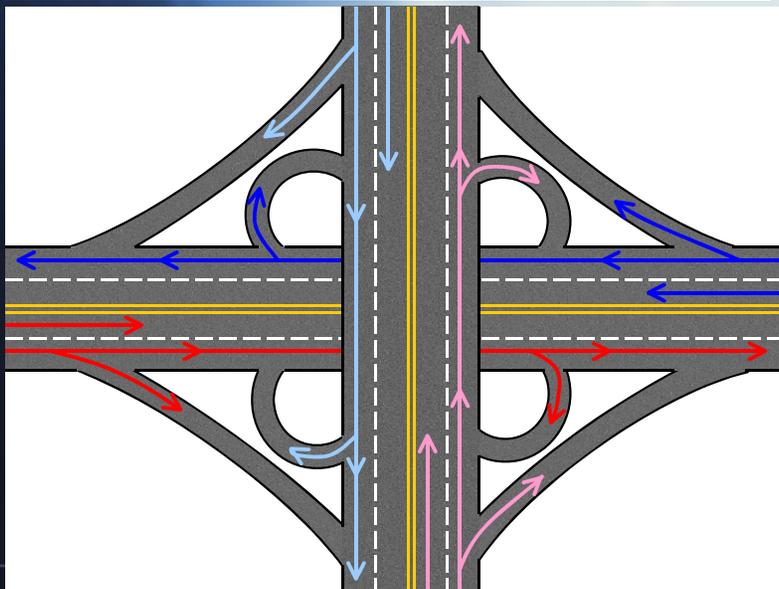
**Information Processing:
Complex Risk Environments**

Topic 1 -- Characteristics of Expressways

Topic 2 -- Entering, Changing Lanes, and Exiting

Topic 3 -- High Speed Considerations

Cloverleaf Interchange



A **cloverleaf interchange** has a series of entrance and exit ramps that resemble the outline of a four leaf clover.

This design

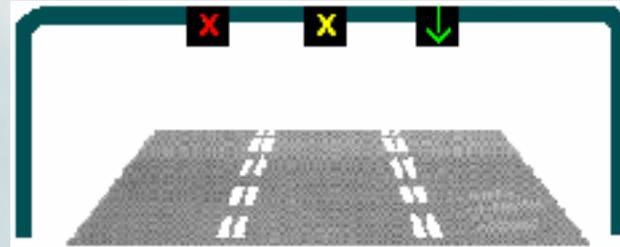
- allows for the interchange of two expressways or major roadways.
- has shared entrance and exit weave lanes.

Traffic is permitted to move **ONLY** in the direction indicated by the arrows.



Common Expressway Signals

Lane Signals



Reversible
lane signals



A **GREEN arrow** over a lane — the lane is open for travel.



A **RED "X"** over a lane — travel in that lane is closed or prohibited.



A **YELLOW "X"** over a lane — travel in that lane is about to change or close.

Module Seven

Driver Performance: Personal Factors

Topic 1 -- Introduction to Alcohol – Saying No

Topic 2 -- Nature of Alcohol-Related Crash Problems

Topic 3 -- Physiological and Psychological Effects of Alcohol

Topic 4 -- Effects of Alcohol and Other Drugs on the Driving Task

Topic 5 -- Dealing with Driver Fatigue

Topic 6 -- Preventing Road Rage

BAC Factors



Liquor

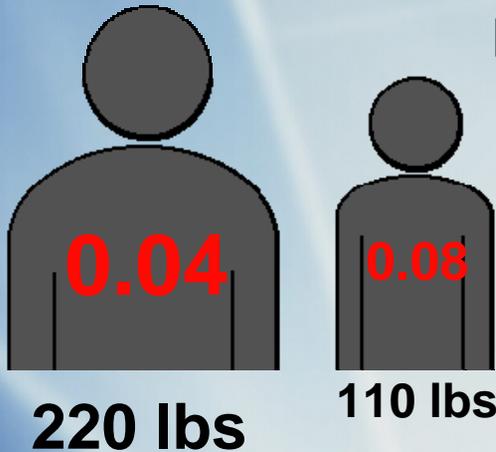


Wine



Beer

Weight



Heavier people have more blood and other body fluids to dilute alcohol consumed.

Their BAC level will be lower than the BAC of a smaller person who drank the same volume of alcohol.

Time Spent Drinking



On average, a person's BAC is oxidized at a rate of 0.015 per hour

- ✓ 90% of the alcohol detoxified is oxidized (burned up) by the liver
- ✓ 10% is eliminated in breath, urine, and sweat

NOTE: Alcohol is toxic to the liver and brain. Hence, the term intoxication denotes the toxic effect alcohol has on these organs.

Factors Leading to **Aggressive Driving & Road Rage**



- More Cars
- More Traffic Congestion
- More Frustration
- More Stress
- More Hostility
- More Violence



Module Eight

Driver Performance: Vehicle Function

Topic 1 – Visibility in Adverse Conditions

Topic 2 – Extreme Weather Conditions

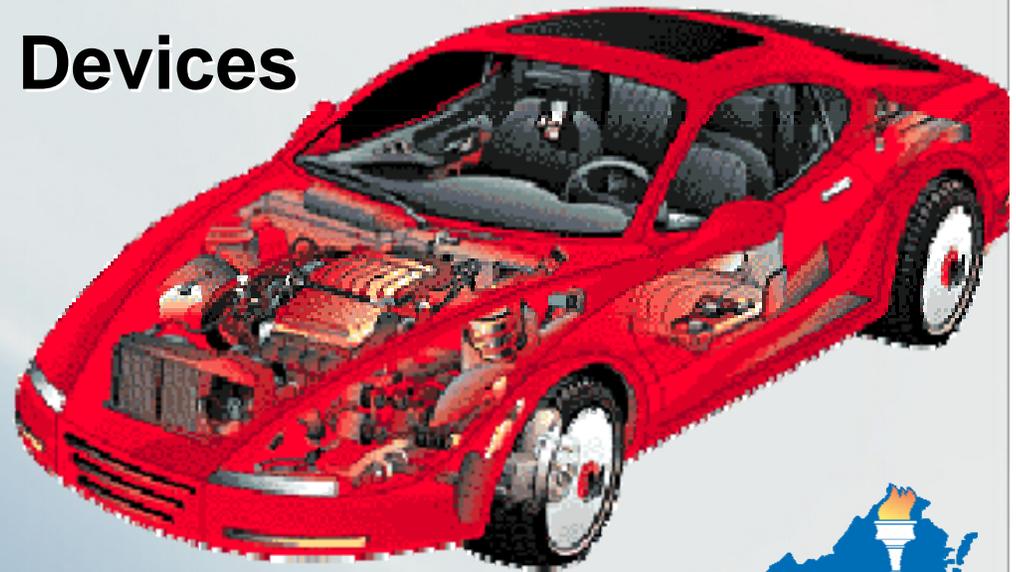
Topic 3 – Protecting Occupants

Topic 4 – Roadway and Vehicle Technology

Topic 5 – Traction Loss Conditions

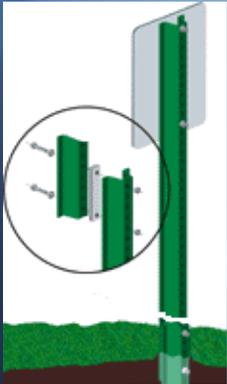
Automotive Technology

- ❖ **Anti-Lock Brakes**
- ❖ **Crush Zones**
- ❖ **Traction Control Devices**
- ❖ **Electronic Stability Program (ESP)**
- ❖ **Suspension Control Devices**
- ❖ **Door Latches**
- ❖ **Glass**
- ❖ **Headlights**



Highway Safety Design Features

Occupant Protection Highway Design Features Include



- Breakaway sign support posts



- New design guard rails with ends angled away from roadway and buried



- Crash attenuators such as vinyl liquid or sand filled drums

Module Nine

Driver Responsibilities: Vehicle Functions

Topic 1 -- Vehicle Functions/Malfunctions

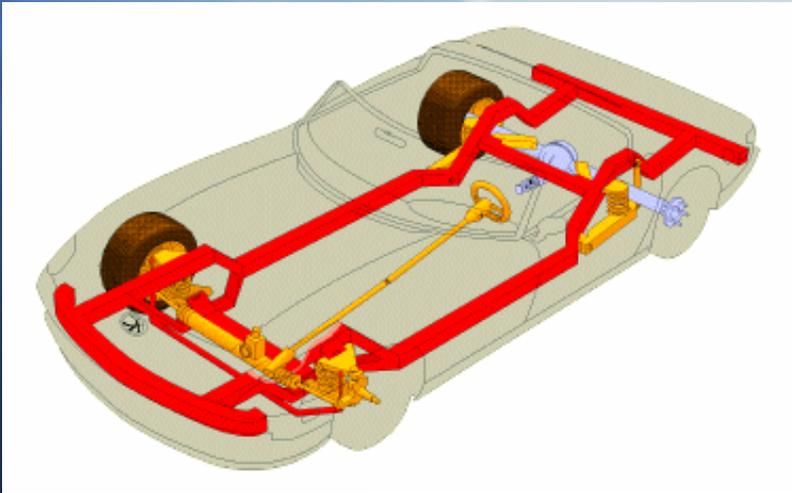
Topic 2 -- Anti-Lock Braking Systems

Topic 3 -- Vehicle Performance

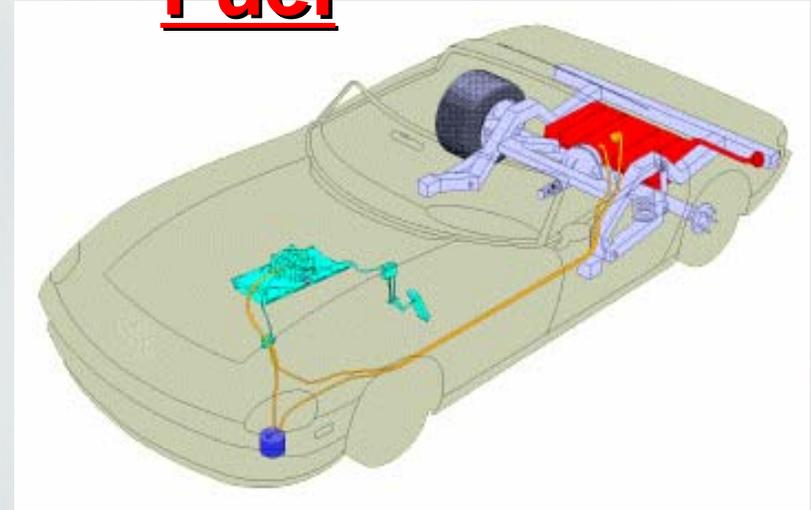
Topic 4 -- Highway Transportation System Agencies

Vehicle Systems

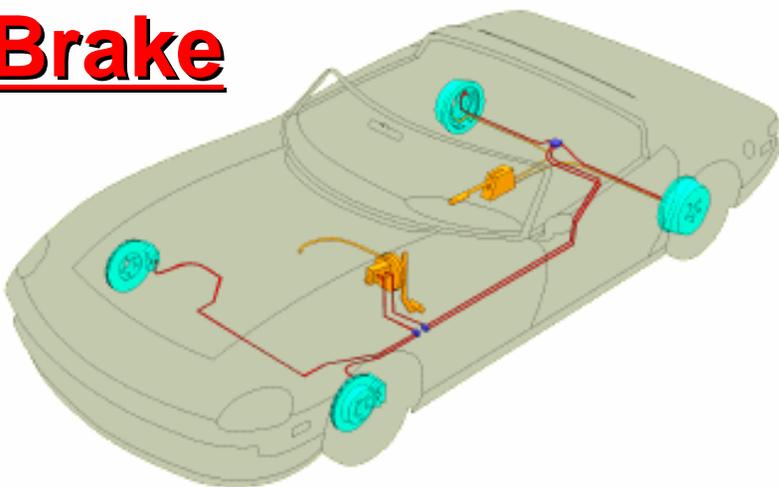
Steering and Suspension



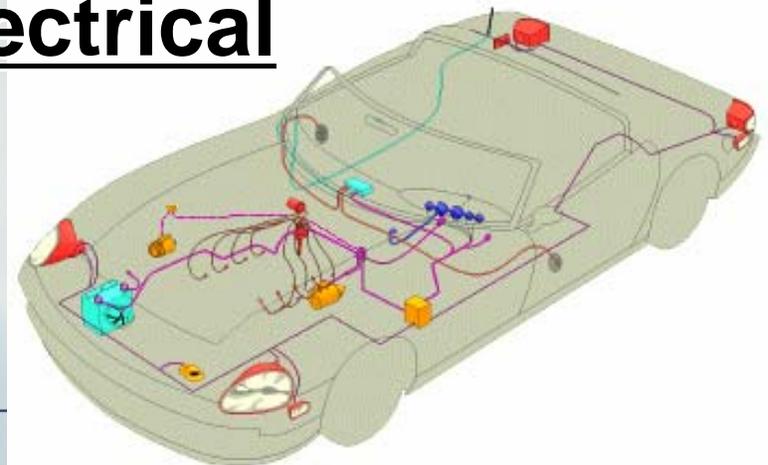
Fuel



Brake



Electrical



Vehicle Performance

- Bicycles, Mopeds, Scooters
- Construction Vehicles
- Oversize Vehicles
- Farm Machinery
- Horse-drawn Vehicles



Module Ten

Driver Responsibilities: Making Informed Choices

Topic 1 -- Insuring Vehicle

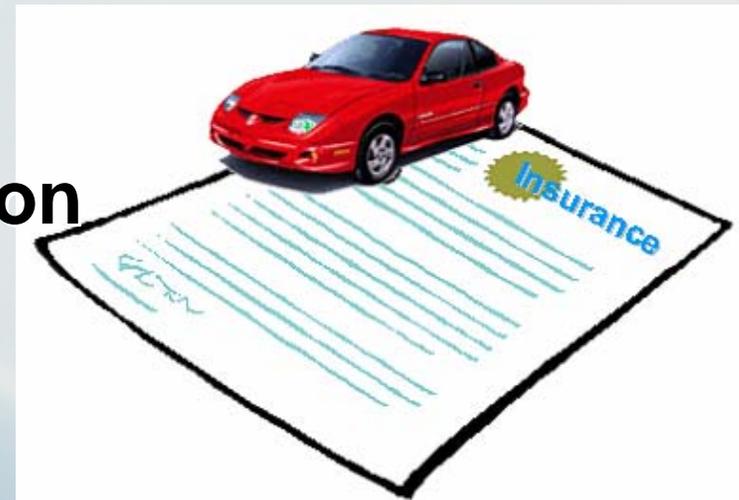
Topic 2 -- Purchasing Vehicle

Topic 3 -- Trip Planning

Topic 4 – Virginia's Conservation Concerns

Insuring a Car

- ✓ **VA Law requires you to provide proof of financial responsibility**
- ✓ **Your parents' policy covers you while you have a learner's permit**
- ✓ **If you still owe money on your car, your lender may require collision insurance**



Conserving Virginia's Natural Resources



When operating your vehicle

- ✓ Accelerate smoothly.
- ✓ Drive at moderate speeds.
- ✓ Avoid unnecessary braking and try to anticipate the traffic ahead.
- ✓ Avoid excessive idling.
- ✓ Join a car pool for commuting to and from school or work.
- ✓ Keep your vehicle in good working order.
- ✓ Recycle old oil and fluids.
- ✓ Recycle old vehicle parts.



Module Eleven

Behind-the-Wheel and In-Car Observation

- ✓ List of in-car skills
- ✓ Sample in-car lessons
- ✓ Route plan
- ✓ Final road skills test

Any Questions?

