## Idaho Driver Education and Training

## Strategies for Interstates/Freeways

Part I


# What is an Interstate? 

An Interstate is a system of roadways covering the 48 contiguous states

## INTERSTATE



## Freeway vs Expressway

## Freeway = Interstate system with no toll

Expressway = Interstate system usually requiring a toll

## Map of US Interstates

## https://www.thoughtco.com/thmb/ Bzpzdn-n52nj7QAJVniMcF7PRiw =/1500x0/filters:no upscale():max bytes(150000):strip icc()/Gettyl mages-153677569-d929e5f7b938 4c72a7d43d0b9f526c62.jpg

## Introduction to Controlled Access Highways

- Plans for the "Interstate System," began in the late 1930s
- The system was created in 1956 and named for President Dwight Eisenhower
- Without a system of interstate highways, life in America would be far different
- It would be more risky, less prosperous, and lacking in the efficiency and comfort that Americans now enjoy and take for granted


## Characteristics

1. Travel on these roadways is limited to motor vehicles
2. Drivers are limited as to where they can enter and exit
3. Drivers have minimum and maximum speed limits a. Maximum $75 \mathrm{mph}(80 \mathrm{mph}$ some areas), Minimum 45 mph
4. Opposing traffic has some type of barrier (median grass strip, guardrail, concrete wall, etc.)
5. There are multiple lanes in both directions
6. They are designed to carry lots of traffic quickly and efficiently
7. Distance between entrance and exit locations may only be a mile apart or many miles apart

## Pocatello/Chubbuck Exits

1. Center/Clark St Exit \#69
2. 5th Ave Exit \#67
3. Pocatello Creek Rd. Exit \#71
4. Chubbuck/Yellowstone Exit
5. Northgate Exit \#73
6. West Pocatello Exit
7. Portneuf Exit \#63

## BENEFITS

- The U.S. Interstate System has enriched the quality of life for every American
- It provides virtually all Americans with the ability to move quickly to any destination within their communities and to travel throughout the nation, inexpensively, and at whatever time or date they desire



## Emergency Crossovers

- Emergency crossovers on limited access roadways are restricted to emergency or law enforcement vehicles only
- Driving in these restricted areas can result in a large fine



## Toll Roads and Bridges

- Roads and bridges are generally paid for with fuel taxes
- From 1864 to 1872 Idaho was completely dependent on toll roads and bridges
- Idaho chartered toll companies to build and maintain roads and bridges
- There were so many toll roads and bridges, The Legislature received complaints that tolls were seriously eating into their profits
- The system was abolished in 1872
- Yankee Jim's National Park Toll Road in Park County was the last toll road in Idaho


The Snowden Bridge over the Missouri River charged tolls until 1956

## High Occupancy Vehicle (HOV) Lanes

- High-Occupancy Vehicle (HOV) lanes allow vehicles with two or more people to use diamond and express lanes
- The goal of HOV lanes is to use the current freeway system more efficiently and to provide a quicker, more reliable trip to those who car pool.



## ADVANTAGES OF INTERSTATES

- Collision and fatality rates are lower
- Cross traffic is not present
- Opposing traffic is separated by a barrier
- There are no stops
- Signs are large and placed well in advance
- Higher speed limits allow for fast, efficient travel



## DISADVANTAGES OF INTERSTATES/FREEWAYS

- Take up lots of space
- Expensive to build
- Lane selection is critical
- Increased stopping distance
- Sudden stops can be dangerous
- Small driving errors can be disastrous

- Rush hour congestion


## Highway Hypnosis

- Drowsiness brought on by monotony and the drone of wind and tires
- Can turn into drowsy driving
- Keep shifting eyes from
 one area of road to another

> -Plan breaks and rest stops to combat highway hypnosis
> •Pull to a safe area for rest and sleep when tired

## Velocitation

- Unknowingly accelerating to a higher speed while driving is known as velocitation
- When driving at faster speeds for a period of time the body adjusts and causes the driver to think the vehicle is going slower than it actually is


Photo courtesy of AAA Foundation

## CLOVERLEAF INTERCHANGE

Allows for interchange of two expressways or major roadways

Allows minimal disruption of speed or movement

## DIAMOND INTERCHANGE

Allows for interchange of a major roadway with a secondary dual or multiple lane roadway

Little room available for left turns onto freeway

Traffic can build up on the ramps creating congestion

## SAFETY DESIGNS



- Pedestrians, animals, non-motorized vehicles, and slow moving vehicles are prohibited
- Fences restrict pedestrian and animal traffic
- Wide shoulders and underpasses
- Curves are banked
- Sharp curves and steep grades are reduced or eliminated


## SAFETY DESIGNS

- Breakaway support on signs and light poles are designed to break when struck by a vehicle
- Lessening the damage to the vehicle and injury to the occupants


Photo courtesy of
http://www.aaroads.com

- Rumble Strips are corrugated road sections used to alert the driver through the noise tires make when driven over them
- Warn of approaching hazards
- Alert the driver that they are leaving the lane



## SAFETY DESIGNS

- Guardrails prevent vehicles that - Crash barrels lessen the impact leave the roadway from impact with retaining walls, fences, or other vehicles
if a vehicle collides with a bridge or overpass support



## SAFETY DESIGNS

- Changeable message signs warn drivers of traffic accidents, stalled vehicles, or other traffic problems



## INTERSTATES IN Idaho



## INTERSTATE SIGNS

## Interstate sign

## Guide sign



Warning sign


## Speed limit



## INTERSTATE HIGHWAY NUMBERS

- Even numbers go east-west (I-90, 1-94)
- Odd numbers go north-south ( $\mathrm{I}-15$ )
- Numbers begin in the west and get larger as they move east
- Alternate routes are usually three-digit



## INTERSTATE HIGHWAY NUMBERS

- If the first digit is even, the alternate route goes around the city
- If it is odd, it leads into the city (l-184)



## Lane Markings

- Lane markings on expressways mean the same as on any other roadway
- The HOV marking is unique to high occupant vehicles



## SPEED LIMITS

- The speed limit on interstates/freeways in Idaho is 80 mph outside urban areas of 50,000 population and 65 mph within urban areas of 50,000 population
- These fixed speed limits are based on optimal road/weather conditions


## MILE MARKERS

- Usually green or white and have the word MILE along with a number some just have the number
- Mile markers show the number of miles from where the Interstate route entered a state
- The counting always begins at the state line in the south (for north-south routes) and in the west (for east-west routes)
- Mile marker numbers always get larger as drivers travel east or north



## MILE MARKERS

- Knowing how to read mile markers can help drivers know exactly where they are in their destination
- Watching these numbers will be useful if a driver needs to call for assistance by giving an exact location
- Exit numbers will be the same number as the mile marker as shown in the two pictures
- Mile markers on roads off the Interstate system exist, however, the numbering system may be different from state to state-or even county to county


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