

Highway Transportation System

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HED 302s – Driver Task Analysis
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Driving Takes Place in the Highway Transportation System

We Invent and use many SYSTEMS

To satisfy our needs

To achieve our goals

To make for a better life

What are some systems that we have in our daily lives? Write about 2 such systems and send them to your instructor.

The Purpose of the Highway Transportation System

Safe, efficient, and convenient movement of people and goods from one place to another

The Highway Transportation System is:

An IMPORTANT System

.... to our way of life

.... to our economy

A COMPLEX System

.... many various elements

.... many interactions

Importance of HTS to our present way of life

- 1. personal and individual transportation**
- 2. freedom to come and go as we wish**
- 3. for going to work, to shop, to school**
- 4. social and recreation activities
choice and length of vacations**

Importance of HTS to the economy of our nation

- 1. manufacture of motor vehicles**
- 2. building and maintenance of highways**
- 3. motor truck as carrier of goods gasoline and tire industries**
- 4. travel and recreation business**
- 5. automobile maintenance and repair business**

HTS Complexity

Major HTS Elements and their interaction

- 1. Traffic units**
- 2. Highways**
- 3. Traffic Controls**

HTS Complexity

Traffic controls

**Signs, signals, roadway
markings**

Highways

Pavement, ditches, etc.

Traffic Units

**vehicles/drivers, pedestrians,
bicycles/riders, animals**

HTS Complexity - Traffic Units

drivers

passengers

age

mental ability

physical ability

emotions

training

conditions

goals

age

sex

knowledge

activity

HTS Complexity - Traffic Units

Motor Vehicles

Passengers Cars

Trucks

Buses

Motorcycles

Tractors

Recreational Vehicles

HTS Complexity - Traffic Units

Motor Vehicles

Capabilities

handling
braking
speed control
performance

Condition

equipment
maintenance
age

HTS Complexity - Highways

settings

design

conditions

residential	lane width	surface
business	shoulders	wet/dry
rural	medians	gravel
controlled	curbs	Maintenance
	intersections	weather
	interchange	lighting
	sight dist.	

HTS Complexity - Traffic Controls

Traffic Signs

Traffic Signals

Roadway Markings

Traffic Laws

The topic, Motor Vehicle Laws, Regulations, and their Application, will deal with the details of traffic controls.