

PURPOSE

To help you understand the concepts related to the characteristics of rural highways design and safety requirements.

LEARNING OBJECTIVE

- Be able to identify the difference in rural and urban highway design
- Be able to identify factors causing vehicle accidents on rural highways
- Be able to identify design features that can reduce accidents on rural highways

REQUIRED RESOURCES

- The assigned reading materials
- Answer sheet for the Critical Thinking Questions

CRITICAL THINKING QUESTIONS

1. What factors cause vehicle crashes on highways?
2. Why rural highways have higher fatality rates than urban highways?
3. What are the differences in the design features of rural and urban highways?
4. What are some effective countermeasures for crash reduction on highways?
5. What kind of geometric and operational features can be used in rural highways to reduce fatality rates on rural highways?

TASKS

Read the assigned reading material. Write down your answers to the Critical Thinking Questions. Prepare to discuss your thoughts in class.

DELIVERABLE

The completed answer sheet to the Critical Thinking Questions.

INFORMATION

Two articles are selected for this reading activity. The first one is a news article from USA Today, titled: *Roads are safer in urban areas*. The article was published on January 25 of 2011, drawing its conclusions that urban roads are safer than rural ones based on 2010 traffic accident data. The second article, *Rural/Urban Comparison*, was published by the National Highway Traffic Safety Administration (NHTSA). The article examines highway accident data from 1998 to 2007. It shows that accident fatality rates on rural highways are consistently higher than urban roads throughout the years. You are also encouraged to search on the Internet for the most up-to-date US auto accident data or additional information to enhance your understanding on the subject.

Read the two articles carefully and try to relate the accident statistics to your own personal driving experience in urban and rural roadways. Think about what the answers to the Critical Thinking Questions are.

