

PURPOSE

The purpose of this activity is to give you the opportunity to explore the basic reference used by practitioners in this field, the *Traffic Signal Timing Manual*.

LEARNING OBJECTIVE

• Describe the content, scope, and organization of the Traffic Signal Timing Manual

REQUIRED RESOURCE

• Traffic Signal Timing Manual

DELIVERABLES

Prepare a document that includes

- Answers to the Critical Thinking Questions
- Completed Concept Map

LINK TO PRACTICE

Your instructor will assign a reading from the Traffic Signal Timing Manual.

CRITICAL THINKING QUESTIONS

When you have completed the reading, prepare answers to the following questions:

- 1. What is the purpose of the *Traffic Signal Timing Manual*?
- 2. List each of the chapters in the manual and briefly describe the purpose of each.

3. Which of the chapters do you think are most pertinent to the work that you will be doing during this class?

4. What is the difference between a policy and a standard?

5. What defines a signal timing policy?

6. Find the section of the *Traffic Signal Timing Manual* that deals with the signal timing design process. Target two aspects of the signal timing design process where your understanding could be strengthened. Write a critical thinking question for each of these two aspects. Provide answers to these questions.

7. What are some of the interesting or important findings of the National Signal Timing study and why do you find them interesting or important?

8. How does policy support the design of the traffic control system?

9. In addition to the examples of signal timing policy application described in your reading of the *Traffic Signal Timing Manual*, find one other example based on a search of the Internet. Briefly describe it and provide the URL.

10. What are some advanced traffic control concepts that are described in the *Traffic Signal Timing Manual*? List and define three of these concepts.

IN MY PRACTICE...

by Tom Urbanik

Traffic signal timing has several aspects ranging from a simple signalized intersection to traffic signals adjacent to railroad grade crossings. While the timing engineer may work regularly on isolated and coordinated intersections, occasionally a special problem may arise that the engineer has not worked on such as railroad preemption of a traffic signal. The *Traffic Signal Timing Manual* has practical guidance which the signal timing engineer can use to determine the requirements for operating the traffic signal. It should be noted that there may be situations that are too complex for the timing engineer to comfortably address. By referring to the *Traffic Signal Timing Manual*, the engineer may conclude that they are not comfortable with tackling the problem, but can become knowledgeable enough to seek the appropriate assistance to create a safe and efficient solution.

Concept Map	Terms and variables that should appear in your map are listed below.		
actuated control	detector	fixed time control	queue
controller	display	movement	user

Traffic Signal Systems C	Operations ar	nd Design: Isolo	ated Intersections
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