# **6** Signal Timing Design In Practice



## PURPOSE

The purpose of this activity is to give you the opportunity to compare your design results with recommended practice from the *Traffic Signal Timing Manual*.

# LEARNING OBJECTIVE

• Compare your design results with values recommended for practice

# **REQUIRED RESOURCE**

• Traffic Signal Timing Manual

#### DELIVERABLE

• Prepare a document that includes your answers to the Critical Thinking Questions

#### LINK TO PRACTICE

Use the Traffic Signal Timing Manual to complete the tasks below.

#### INFORMATION

You have completed a comprehensive analysis of five of the fundamental timing parameters used in an actuated traffic control system. As a result of this analysis, you have selected values for these timing parameters. Comparing your results with those recommended in practice will provide you with a perspective on the work that you have completed and give you a better idea of how professionals consider these same design issues.

# Task 🔳

Review the discussions on minimum green time, maximum green time, passage time, yellow time, and red clearance time in the *Traffic Signal Timing Manual*.

# Task 🙎

Compare your design values for the timing parameters listed in Task 1 with the recommended practice from the *Traffic Signal Timing Manual*.

## **CRITICAL THINKING QUESTIONS**

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

1. Compare the signal timing process described in the *Traffic Signal Timing Manual* with the design process that you have just completed in this course. How is it the same? How is it different?

2. How do your design values compare to the recommended settings in the *Traffic Signal Timing Manual*? Describe why you think your values are different than (or similar to) those from the manual.

#### IN MY PRACTICE ...

by Tom Urbanik

Bill Kloos was the manager of the Signals and Street Lighting Division at the City of Portland, until his death in 2009. Bill was an innovative and inspirational leader in the field of traffic signal systems, and his opinions and wisdom were valued and used by practicing engineers throughout the world. Bill said:

"If you want to be outstanding in the field (of traffic signal control), you must be out standing in the field."

Our theory and models are only abstractions of reality. Each community and each intersection have their own peculiarities. These finer points can only be assessed by getting out to the intersection and observing.