
3.0 Evaluation Objectives

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The goals and objectives of conducting the evaluation of ramp meter effectiveness in the Twin Cities Metropolitan Region were designed to meet the mandate of the legislature's bill. Three evaluation goals for the Ramp Meter Study were identified including:

1. Evaluate whether the benefits of ramp metering outweigh the impacts and associated costs;
2. Identify other ramp metering impacts on surface streets and transit operations; and
3. Identify how the Twin Cities' ramp metering system compares and contrasts with other national and international ramp meter systems in terms of ramp meter operation strategy employed and ramp configuration strategy.

For each of the broad evaluation goals, several detailed evaluation objectives were identified. These evaluation objectives provide the framework for conducting the evaluation. Table 3.1 presents the evaluation objectives as they relate to each of the evaluation goals.

The following sections describe in greater detail the tasks required to fulfill each of the evaluation's three main goals and associated objectives.

Table 3.1 Evaluation Goals and Objectives

Evaluation Goal	Evaluation Objective
Evaluate whether the benefits of ramp metering outweigh the impacts and associated costs.	<ul style="list-style-type: none"> • Quantify ramp metering safety impacts/benefits (positive and negative) for selected corridors. • Quantify ramp metering traffic flow impacts/benefits (positive and negative) for selected corridors. • Extrapolate ramp metering safety impacts/benefits (positive and negative) to the entire system. • Estimate ramp metering impacts/benefits (positive and negative) on energy consumption and the environment. • Extrapolate ramp metering traffic flow impacts/benefits (positive and negative) for the entire system. • Compare the systemwide ramp metering benefits with the associated impacts and costs. • Identify (both quantitatively and qualitatively) public attitudes toward ramp metering for both the selected corridors and the region as a whole.
Identify other ramp metering impacts on surface streets and transit operations.	<ul style="list-style-type: none"> • Identify ramp metering impacts on local streets. • Identify ramp metering impacts on transit operations. • Document additional ramp metering benefits/impacts observed during the study.
Identify how the Twin Cities' ramp metering system compares and contrasts with other national and international ramp meter systems.	<ul style="list-style-type: none"> • Identify similarities and differences between the Twin Cities' ramp metering system and other metropolitan areas in terms of ramp meter operation strategy employed and ramp configuration strategy. • Identify national and international trends regarding the use of ramp metering as a traffic management strategy. • Identify benefits/impacts of ramp metering systems documented in other national and international studies.