

MIS Evaluation Frameworks - A Comparative Analysis

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Abstract

Many major investment studies now being conducted are evaluating a range of multimodal transportation system alternatives. These evaluations must use a variety of cross-modal performance criteria to address project goals and objectives that, in some cases, may not be complementary. Mobility, accessibility, environmental and cost considerations must be evaluated across highway widening or new construction, HOV, local/express bus, light and/or heavy rail, and TSM/TDM alternatives. On top of this, alternative improvements need to be compatible with existing state, MPO and local land use and transportation plans.

Establishment of a comprehensive evaluation framework early in the MIS process has three primary benefits: first, it promotes cost-effectiveness by focusing the study team's efforts on only those analyses that are necessary to address the study's goals and objectives; second, it helps to establish how the evaluation results will be communicated to the public and decision-makers; and third, it compels the various stakeholders to "buy in" to the evaluation process early in the study.

This paper will compare and contrast multimodal evaluation frameworks that have been developed and applied for three major investment studies conducted within the Washington, DC metropolitan area. Initially, a description of the evaluation framework used for the I-270/US 15 Multimodal Corridor Study will be reviewed in the context of the goals, objectives and measures of effectiveness (MOEs) that were established to guide this two-stage MIS. This review will also include a discussion of the interactive process that was used to develop the framework and the issues that arose. Next, the differences and similarities of the I-270/ US 15 Study evaluation framework will be compared to the frameworks used by two other MIS projects, which are similar in scope to the I-270/US 15 Study. The purpose of this comparative analysis will be to identify strengths and weaknesses associated with each evaluation process in order to develop recommendations for multimodal MIS evaluation frameworks.