

# Emerging Opportunities for Probe Data

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## Abstract

Historically, performance metrics have been created on an agency by agency basis, with very little consistency between data collection frequency and quality. In recent years, crowd sourced data have developed into a high-fidelity data source, which can be used to develop spatially oriented performance measures that can scale nationwide.

This talk identifies the emerging opportunities in the rapidly evolving probe vehicle data field and proposes a series of performance measures to characterize the temporal and spatial aspects of congestion in a graphical manner that decision makers may use to evaluate the impact of past investments and prioritize future investments. The methodologies are illustrated using selected Indiana corridors adjacent to Chicago. The paper concludes by discussing how these techniques can be extended on a national scale to rank and prioritize investment opportunities along corridors such as I-80 (4600km) from New York to California.