

## Document Summary

# GUIDE TO EFFECTIVE FREEWAY PERFORMANCE MEASUREMENT: FINAL REPORT AND GUIDEBOOK

Parsons Brinckerhoff

**August 2006**

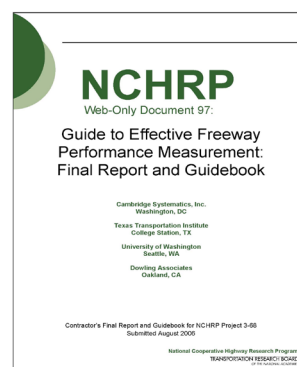
## Summary of the Work

The document reviewed includes both a summary report and a detailed guidebook on effective freeway performance measurement. The focus of this guidebook and supporting work is on congestion/mobility performance of freeways. This is defined as “quality of traffic flow or traffic conditions as experienced by users of the freeway.” Reliability measures are an important component in this process. This category includes measures related to typical congestion levels, travel time reliability, and throughput. It also includes supporting measures on the nature of roadway “events” that impede traffic flow: incidents, weather, and work zones. Most of the research conducted in preparing the guidebook shows how these measures are developed from data and other analytic methods. Specific areas covered in the guidebook include rationale for performance measures, context, definition and description of performance measures, supporting data and methods, presentation and communication, and use in decision-making.

Other aspects of freeway performance also are covered, but not with the same level of detail. The measures for each category are identified and methods for integrating them into a comprehensive freeway performance measurement program are presented, including their use in applications and decision-making. In some cases, these other performance aspects have or are developing their own performance measures, usually applied on an area-wide basis.

These additional aspects of freeway performance are:

- Freeway Safety – Especially safety aspects that are under the direct control of transportation agencies. Safety performance measures are now being considered as part of the recent emphasis on comprehensive highway safety plans.
- Operational Efficiency – Measures that relate to the activities and equipment used in freeway management.
- Ride Quality – Especially as it relates to the quality of traffic flow. Asset management information systems have long history of ride quality performance measures.



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