STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
TECHNICAL REPORT DOCUMENTATION PAGE
TR0003 (REV. 10/98)

1. REPORT NUMBER	2. GOVERNMENT ASSOCIATION NUMBER	3. RECIPIENT'S CATALOG NUMBER
CA11-0975		

4. TITLE AND SUBTITLE	5. REPORT DATE
Transportation Management Center (TMC) Performance Measurement System	12/16/2010
	6. PERFORMING ORGANIZATION CODE
	None

7. AUTHOR(S)	8. PERFORMING ORGANIZATION REPORT NO.
Will Recker, Craig Rindt	None

9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. WORK UNIT NUMBER
Institute of Transportation Studies University of California, Irvine Irvine, CA 92697-3600	3763
	11. CONTRACT OR GRANT NUMBER
	65A0252 *(Project ID#: 00-0000-0582)*

12. SPONSORING AGENCY AND ADDRESS	13. TYPE OF REPORT AND PERIOD COVERED
California Department of Transportation Division of Research and Innovation, MS-83 1227 O Street; Sacramento CA 95814	Final Report
	14. SPONSORING AGENCY CODE

15. SUPPLEMENTAL NOTES
None

16. ABSTRACT

This project developed a web-based application that addresses the problem of identifying the value of the TMC in managing disruptions to the transportation system by quantifying the delay savings that can be attributed directly to TMC actions. Using event data from TMC activity logs and traffic state data from the PeMS database, the system identifies the time-space impact of events in the activity database using a mathematical-programming formulation to match evidence of disruption to computed time-space bounds. Given this boundary, the actual delay associated with the impacted region is calculated. To compute the savings attributable to the TMC, the activity logs are used to identify when the direct disruption by the event is removed (e.g., when an accident is cleared) and models the increased delay that would occur if this clearance was delayed. Given these calculations, the system allows TMC managers to evaluate the performance of various bundles of TMC technologies and operational policies by mapping their effects onto events in the system that can be measured using existing surveillance systems and daily activity logs. The system is deployed atop the CTMLabs service-oriented architecture and is available as a application on the CTMLabs website for use by authenticated users.

17. KEY WORDS	18. DISTRIBUTION STATEMENT
Traffic Management Center, Performance Measurement, Delay Estimation	No restrictions. This document is available to the public through the National Technical Information Service, Springfield, VA 22161

19. SECURITY CLASSIFICATION (of this report)	20. NUMBER OF PAGES	21. PRICE
None	82	Not Applicable

Reproduction of completed page authorized