Handbook and Summary Report

Assess Caltrans Road Weather Information Systems Devices and Related Sensors

Program report for

Caltrans New Technology and
Research Program
P.O. Box 942873
Sacramento, CA
94873-0001

July 17, 2002

Prepared by

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August 2002

I am pleased to present the final report of the Road Weather Information System (RWIS) Assessment Project. The project represents a 12-month cooperative effort between the California Department of Transportation (Department) and the Western Transportation Institute at Montana State University.

RWIS, when fully implemented, will enhance the safety and mobility of the transportation user. The purpose of RWIS is to sense and forecast weather on the transportation network. The data and forecasts can be used to advise travelers of impending changeable weather conditions, and to improve highway maintenance operations by making the Department smarter and safer when snow, ice, heavy rain or blizzard conditions threaten.

The purpose of the project is to assess how far the Department has come in implementing RWIS, what remains to be done, and to find out what other states' experiences are in rolling out RWIS. Clearly much more needs to be invested in RWIS to make it a statewide, fully networked system. Doing so will make the sharing of weather data and forecasts efficient and timely to motorists, the Department's partners and within the Department. This project is a valuable needs assessment and makes sound recommendations on how to proceed to build an open architecture system. I endorse its findings wholeheartedly.

Sincerely,

Thom Niesen

THOM NIESEN
Acting Deputy Director
Maintenance and Operations

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Revision History

Date	Location	Source	Description
7/17/2002			*Preliminary Final Document*
8/16/2002			*Final Document - changes from Preliminary Final listed in following rows*
	v	S Campbell	Fix page link for Figure 3-1
	pg 1-2 Figure 1-1	R Wenham	Change figure caption
	pg 1-5 8th bullet	S Campbell	Typo – "Knowledge"
	pg 3-2 para 2	S Campbell	Typo – three instead of two other methods; Davis Weather Stations for District 1 only.
	pg 3-7 para 4		Clarify that Davis Weather Stations are not automatically connected to CMS.
	pg 3-7, 3-9, 3-17, 3-19, 3-21, 3-23, 3-26, 3-29, 3-30, D-26, D-27, D-28, D-29, D-40, D-44, D-47	S Campbell L Ballard	Consistent terminology - use "DTN (Meteorlogix)"
	pg 3-8 para 2	R Wenham	Correct information about CCTV units
	pg 3-10 para 1&2	R Wenham	Incorporate mention of wind warning system
	pg 3-10 para 5	S Campbell	Include information about CCTV's at RWIS locations.
	pg 3-11 para 2	R Wenham, S Campbell	Typo – fix District Number
	pg 3-23 1st bullet	S Campbell	Remove quake web site
	pg 3-26 para 2	S Campbell	Typo – fix District Number
	pg 5-2 last para	R Wenham	Incorporate goal of ITS Technician
	pg 7-13 para 1	R Wenham, J Varney	Clarify language related to TCP/IP compatibility
	pg 8-9 9th bullet		Clarify language related to TCP/IP compatibility
	pg A-3	R Wenham	Typo – fix District numbers for District 2 staff
	App B	L Ballard	Fix header information to correctly reflect appendix name
	pg B-1	L Ballard	Add inventory data descriptions
	pg B-2, B-4 District 3 data	L Ballard	Data for District 3 offset – move to correct column
	pg D-5 para 1	L Ballard	Typo – corrected "Wenham"
	pg D-5 – D-10	L Ballard	Text shifted between pages
	pg D-8 table	R Wenham	Typo – correct contact information for Wally Snell

Date	Location	Source	Description
	pg D-10 para 6	R Wenham	Incorporate desired skills for ITS Maintenance Technician suggested by District 2
	pg D-43	A Khant	Correct contact information for A Khant
	pg D-46	A Khant	Correct contact information for A Khant

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