

Innovative Approaches to Real-Time System Management Information

California Division Office

Cove at Julia Pfeiffer Burns State Park

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U.S. Department of Transportation
Federal Highway Administration

Outline

California Division Office

Cove at Julia Pfeiffer Burns State Park

- Background
- Accuracy
- Availability
- Routes of Significance



Background

Cove at Julia Pfeiffer Burns State Park

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- Past (1960s):
 - Hourly teleprinter reports to subscribers
 - State and Federal agencies, AAA, and Chambers of Commerce,
 - No direct to public feed.
- Present:
 - Actively working on RTSMIP for 1 year prior to kick off
 - Resource Center kick off April 2014



Background

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Cove at Julia Pfeiffer Burns State Park

- 2,457 miles of interstate
 - 25 numbered routes
- 6 MSAs over 1 Million
 - Los Angeles-Long Beach-Santa Ana
 - Riverside-San Bernardino-Ontario
 - Sacramento-Arden-Arcade-Roseville
 - San Diego-Carlsbad-San Marcos
 - San Francisco-Oakland-Fremont
 - San Jose-Sunnyvale-Santa Clara



Caltrans Districts and Planning Agencies

Cove at Julia Pfeiffer Burns State Park

California Division Office



Courtesy of Caltrans



Courtesy of Caltrans



TMC Configuration

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TMC Configurations

- **Regional**
 - Sacramento, Oakland, LA
- **Urban**
 - San Diego, Orange County, San Bernardino, Fresno, Stockton
- **Satellites**
 - Redding, Eureka, Bishop,
 - San Luis Obispo, Kingvale
- **24/7 Co-located w/CHP Call Centers**
 - D-3 Sacramento
 - D-7 Los Angeles
 - D-11 San Diego
 - D-12 Orange County
 - D-8 San Bernardino (2011)
- **24/7**
 - D-4 Oakland
 - D-6 Fresno
 - D-10 Stockton
- **Weekday**
 - D-1 Eureka
 - D-2 Redding
 - D-5 San Luis Obispo
 - D-9 Bishop
 - Kingvale - Seasonal



Accuracy

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Cove at Julia Pfeiffer Burns State Park

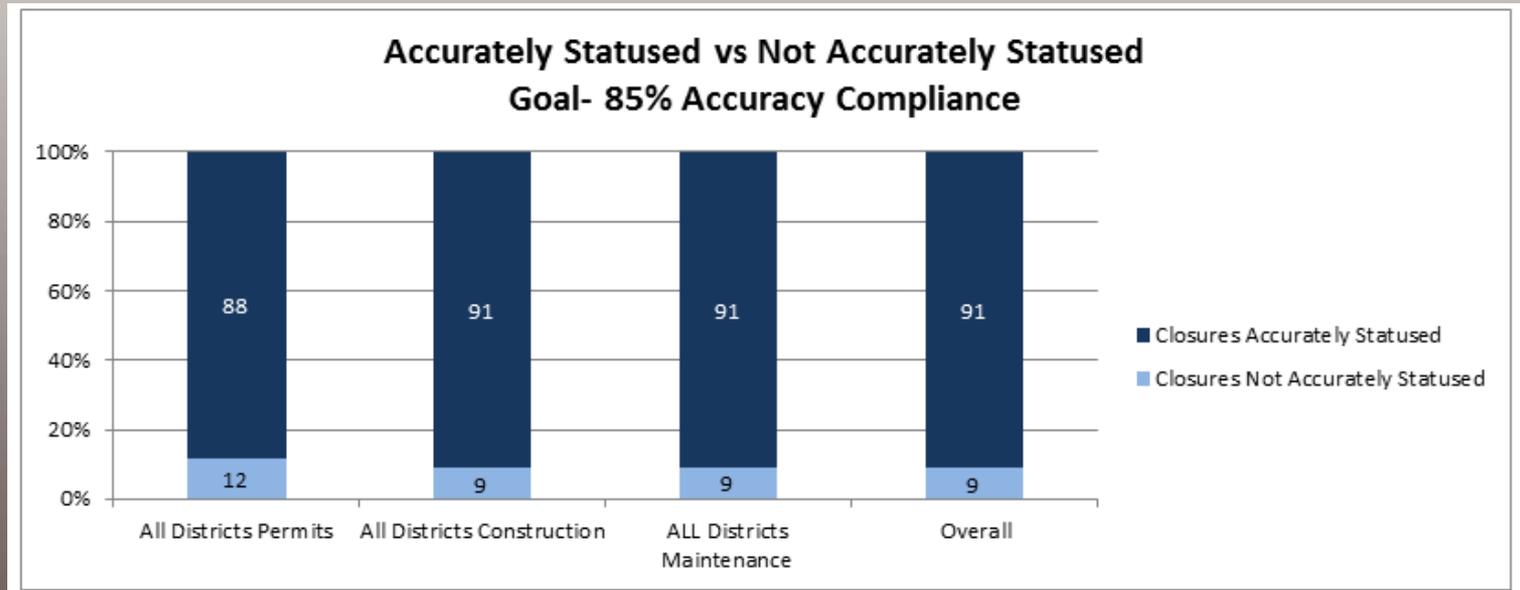
- Proposed Planned lane closures not real time
- Assess accuracy of data the public sees
 - Online and on highway
- 1097 “event start”
- 1098 “event end”



Example: Construction Accuracy

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Example: Construction Accuracy

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FHWA Accuracy Compliance Report- Planned Closures Statewide - April 2014
(Interstate Routes only)

Function	Total Closures Stated	Closures Accurately Stated	Closures Not Accurately Stated		Total Closures Not Accurately Stated	Closures Accurately Stated (%)	Closures Not Accurately Stated (%)
		1097 & 1098	1097 Only	1098 Only			
	(A+B+C)	A	B	C	(B+C)	D*	E**
All Districts Permits	190	168	20	2	22	88	12
All Districts Construction	3758	3424	191	143	334	91	9
ALL Districts Maintenance	519	471	30	18	48	91	9
Overall	4467	4063	241	163	404	91	9

$$Accuracy = \frac{A}{(A+B+C)} = \frac{4063}{(4063+241+163)} = 0.9095 \times 100 = 91\%$$

$$Error = \frac{(B+C)}{(A+B+C)} = \frac{(241+163)}{(4063+241+163)} = 0.0904 \times 100 = 9\%$$

1097 event start
1098 event end



Availability

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- 8 of 12 TMCs are 24/7
 - 24-hour TMCs cover other districts overnight
 - Data stream is 24/7
 - Storage system: Commercial Wholesale Web Portal (CWWP)
 - Redundant servers
 - Collection system: 15 minutes daily
 - Daily maintenance downtime



Routes of Significance

Cove at Julia Pfeiffer Burns State Park

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May 30,
2014

- Provide contact information of the individual/individuals that will assume responsibilities regarding ROS

Sept. 30,
2014

- Provide a list of your proposed ROS and demonstrate how each ROS meets or will meet the criteria

June 30,
2015

- If the criteria for proposed ROS cannot be met prior to date, then the roadway will not be given consideration.

June 1,
2016

- Local or regional agency must share the strategic plan for Accuracy and Availability with Caltrans

Nov. 8,
2016

- Provide Traveler Information for identified ROS approved by the Federal Highway Administration



Summary

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Questions

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