

2010 Best of Rural ITS Award

Best Innovative Product, Service or Application

Responder System

August 1, 2010

Mandy Chu
Project Manager
Caltrans

Research & Innovation
Mandy_Chu@dot.ca.gov

Ian Turnbull
Project Champion
Caltrans District 2

ITS Engineering & Support
Ian_Turnbull@dot.ca.gov

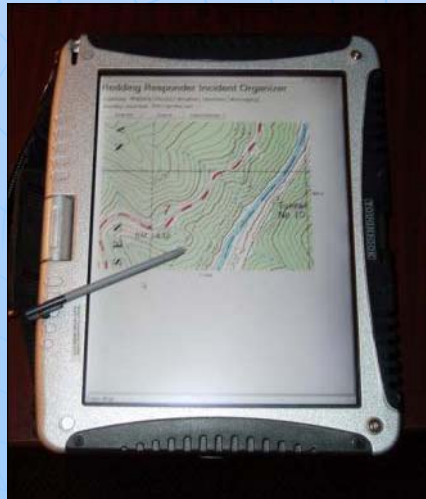
Douglas Galarus
Principal Investigator
Western Transportation Institute

Montana State University
dgalarus@coe.montana.edu



Responder System -

A communication tool for first responders
anywhere, anytime



Tablet PC

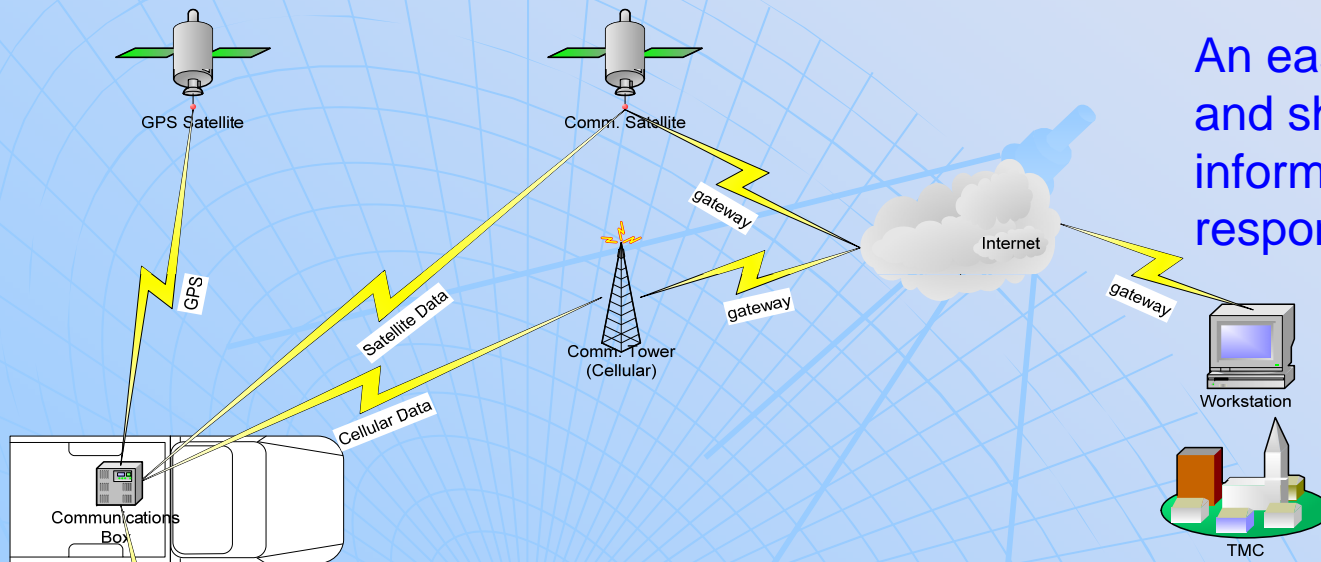
Camera



A communication box
that includes **GPS**,
Wi-Fi, **Cellular** and
Satellite modems

Responder System - A communication tool for first responders anywhere, anytime

An easy-to-use means to collect and share accurate incident information among emergency responders.



Auto-populated data fields

The software interface, titled "Redding Responder Incident Organizer", features several key components:

- Summary Panel:** Displays "Redding Responder Incident" with tabs for Summary, Mapping, Photos, Weather, Sketches, and Messaging. It includes a "Get Current/Weather" button and a "Point Forecast" section for the current location.
- Weather Information and forecast:** A detailed weather forecast for the current location, including latitude (39.77621), longitude (-112.29554), and elevation (5592). It provides data for two time slots: 3:00 PM PDT and 4:00 PM PDT, listing temperature, dew point, relative humidity, sky cover, wind speed, and wind direction.
- Preloaded Maps:** A topographic map showing terrain contours, a road, and a "Tunnel No 10". A yellow arrow points to the map area.
- Form Fields:** A "Responder Summary" form with auto-populated fields for Organization (Caltrans), Date (2/26/2004), District (2), Time (08:35 AM), and Observer (Responder). Other fields include Description, Facility (Lane blocked), Incident Type (Rockslide/Mudslide), and Location (Butte, California).

Weather Information and forecast

Preloaded Maps

Responder System - A communication tool for first responders anywhere, anytime

Incident Information sent via Microsoft Word Attachment to Email

Responder Summary:

Generated: 9/22/2008 , 2:45:37 PM Pacific Daylight Time

Location:

Latitude: 39.77621
Longitude: -121.45579
Road / Address: SR-70, Oroville, CA 95965
Mile Marker: BUT 70 39.52
City:
County: Butte
State: California

Description:

Rockslide 1.5 miles west of Pulga. Includes mc
some weighing well over 200 tons.
Facility: Lane blocked
Incident Type: Rockslide/ Mudslide
Organization: Caltrans
Date: 2/26/2004
District: 2
Time: 08 : 35 AM
Observer: Responder

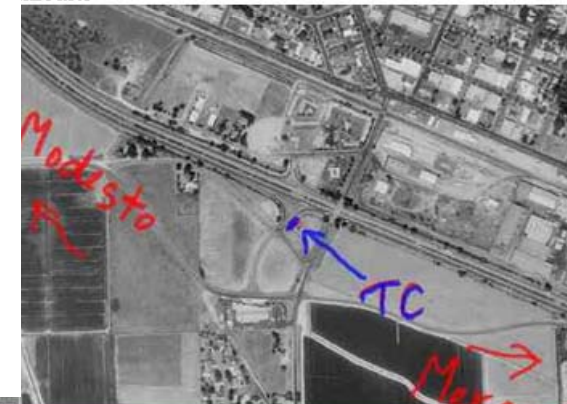
Incident Sketch: sketch 3
Relative size of slide



Incident Sketch: sketch 2
Road Map



Incident Sketch: sketch 3
Aerial Photo



Responder System -

A communication tool for first responders
anywhere, anytime

Examples of Uses:

Earthquakes

Plane crashes on
highways

Bridge failures

Major slides

Explosions

Major traffic accidents

Major hazmat incidents

Fires that effect traffic

Major floods

PIO – radio, TV alerts, etc

