

BAIRS



Bay Area
Incident
Response
System

BAIRS

Bay Area Incident Response System



IT



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California Department of Transportation
March 30, 2004

BAIRS Project Background ...

- ✦ District 4 Caltrans Maintenance staff respond to an average of **1,200** calls per month
- ✦ Average time for complete incident resolution is around **4 hours**
- ✦ Average time it takes from DCC dispatch to personnel "10-97" is around **1 1/2 hours**
- ✦ Average time it takes Dispatch to contact responding party is **30 minutes.**
- ✦ Average transit time for Maintenance personnel is around **50 min.**
- ✦ For every minute a freeway lane is blocked, traffic is delayed **4 to 10 minutes** due to congestion¹

¹ Parish, Lynn. "Incident responders smooth I-90 traffic". Spokane Journal. 09/13/02.

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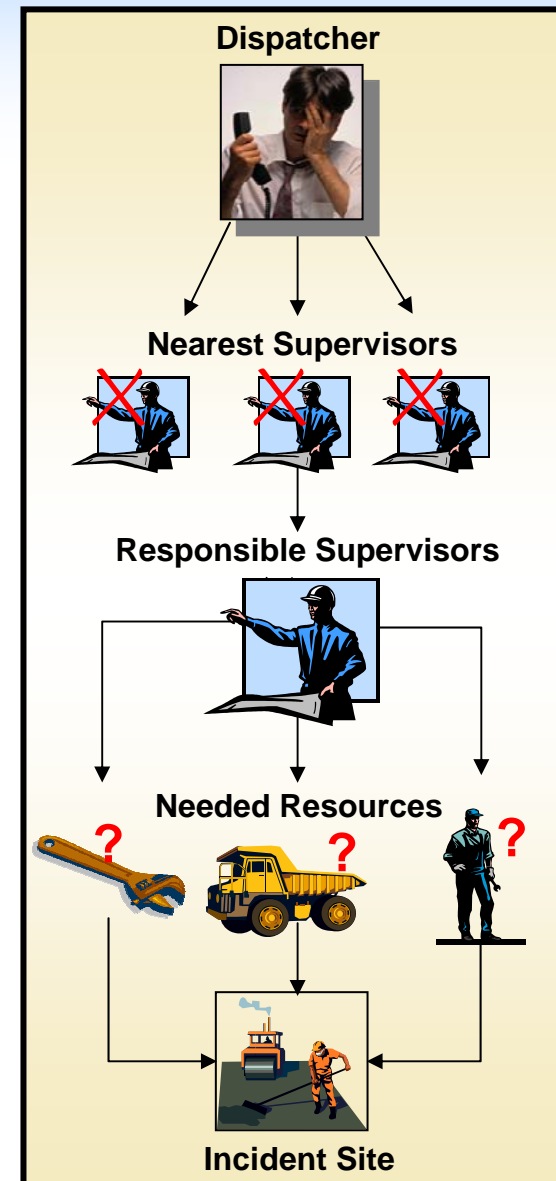


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What causes these response times?

- ⊕ Response personnel - regardless of geographic location
- ⊕ Travel time for personnel
- ⊕ Multiple calls are required
- ⊕ Limited information about incidents
- ⊕ Contact and availability Information not current.
- ⊕ Challenges in DCC/TMC room.



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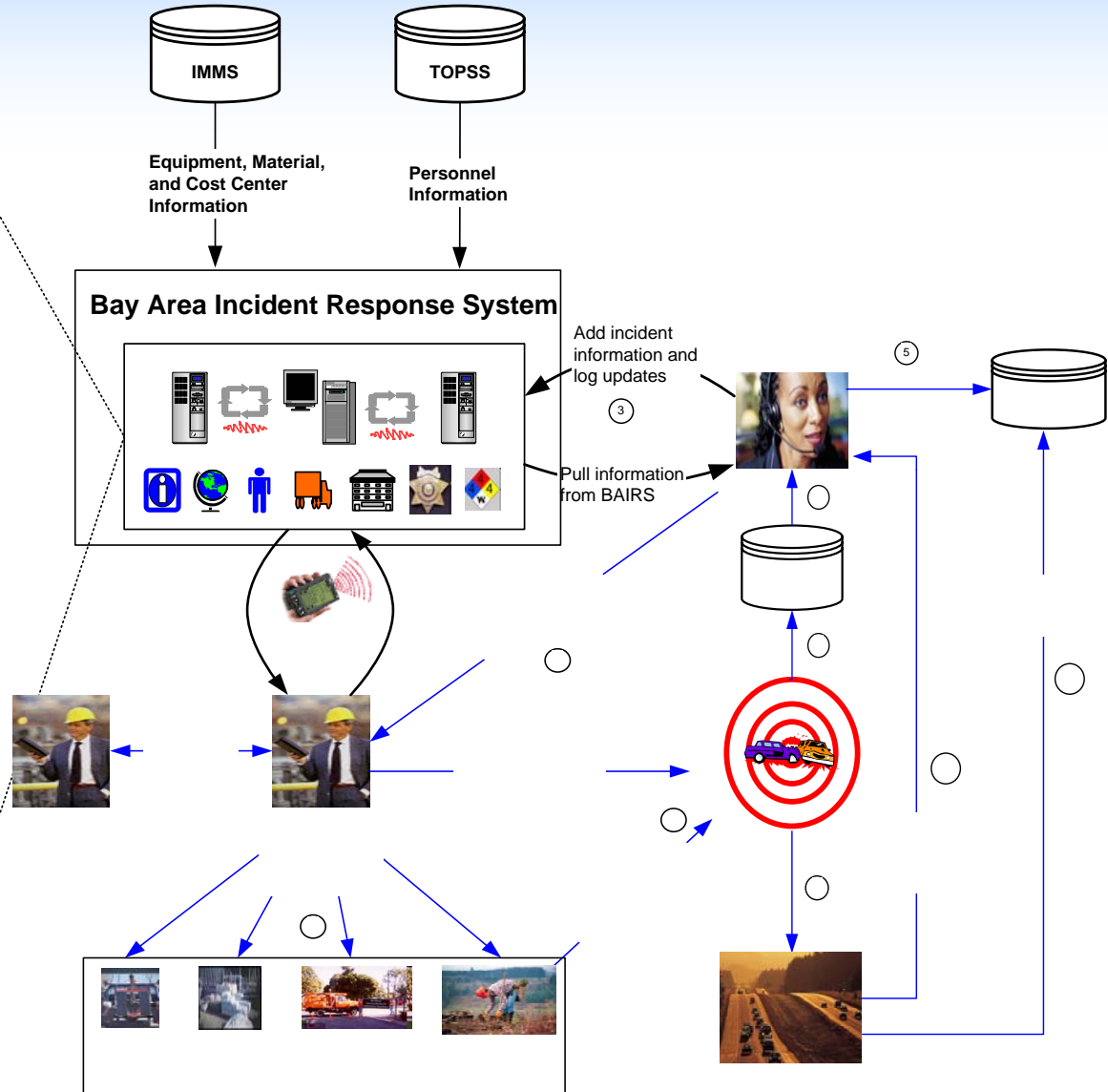


District 4 Incident Management Vision

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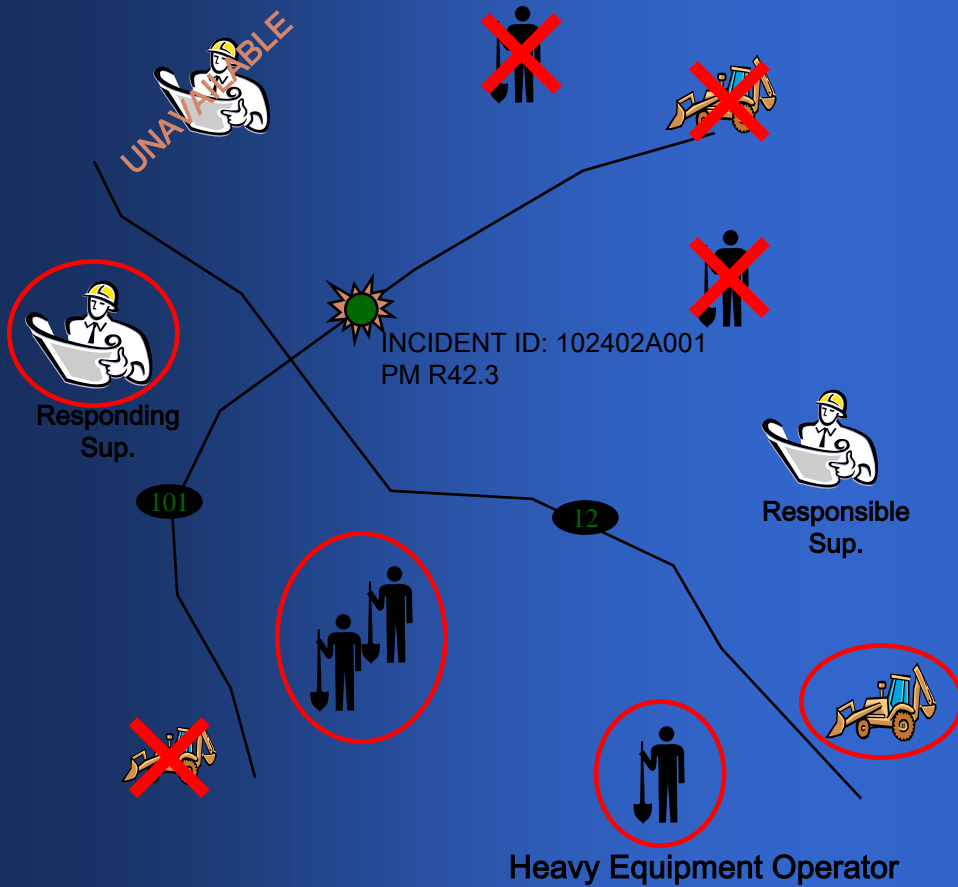
An electronic tool to track, query, update, and provide the following information:

-  **Incident Information**
Description
Personnel Contacted
Status [Ten-Codes]
-  **GIS Functionality**
Incident Location
Resource Locations
Detour Information
-  **Nearest Crew Members**
Contact Information
Availability
Qualifications
-  **Nearest Available Equipment**
-  **Nearest Maintenance Yard & Stock Area**
-  **Public Safety Contact Information**
Police
Fire Department
Hospitals
-  **Contractor Contact Information**
HAZMAT
Tow Service





Typical Scenario



- Incident reported

....SPILL ON NB 101 JUST 0.5 MI N. OF RT 12.....

- Locate and Display Incident, and Assign Incident ID Number

- Display, Locate and analyze Nearest Available Resources

- Contact Supervisor(s) with analysis results





What BAIRS is...

BAIRS is an integrated incident tracking system that replaces the various current paper tools and manual processes

BAIRS will replace current systems and tools:

- TMC/DCC Paper Radio and Telephone Cards
- Post-mile Book
- Call-out Lists
- Region Directories
- Notification Guidelines
- Various maps and guides
- Various Telephone books, directories, and contact sheets
- Manual reports

At Go-Live, BAIRS will provide:

- Web-Based incident log
- GIS capabilities
- Enhance reporting capabilities
- Performance metrics
- Mobile devices
- Increased incident information available to both dispatcher and Supervisor
- Online contact and availability information
- Scalable System.



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BAIRS benefits include...

- ⊕ Reduced overall response and clearance time (long-term goal of 90 minutes for total resolution)
- ⊕ Reduction of labor-intensive paper documentation
- ⊕ GIS Mapping capabilities
- ⊕ Decreased time to identify response personnel
- ⊕ Improved access to resources
- ⊕ Decreased duration of congestion due to incident
- ⊕ Standardization of the dispatching process
- ⊕ Decrease travel time and exposure thus enhancing safety
- ⊕ Mobile devices would allow Supervisors to spend more time in the field which leads to increased production
- ⊕ Inspiring and empowering District 4 Maintenance employees improves morale

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Who's on Board?

Internal:

- ✦ District 4 Maintenance
- ✦ HQIT
- ✦ Office of GIS
- ✦ Deloitte Consulting
- ✦ Union
- ✦ Caltrans Legal* (Letter of support)
- ✦ Human Resources
- ✦ Labor Relations
- ✦ Traffic Operations
- ✦ Caltrans HQ staff
- ✦ IMMS
- ✦ TOPSS



External:

- ✦ California Highway Patrol*
- ✦ Metropolitan Transportation Commission* (Letter of support)

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Demonstration