

Support Material for Agenda Item No. 1

City/County Manager's Technical Advisory Committee

November 3, 2016

10:00 a.m.

Location:

SANBAG

First Floor Lobby

Santa Fe Depot, 1170 W. 3rd Street
San Bernardino, CA

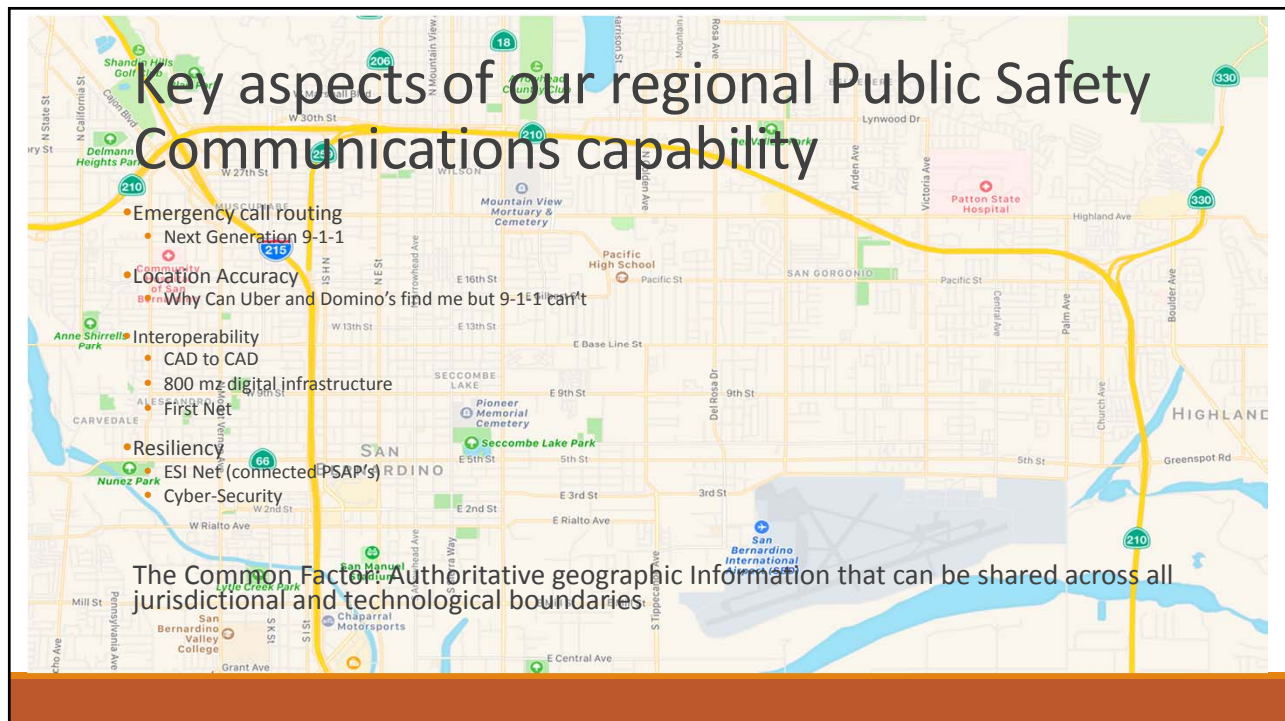
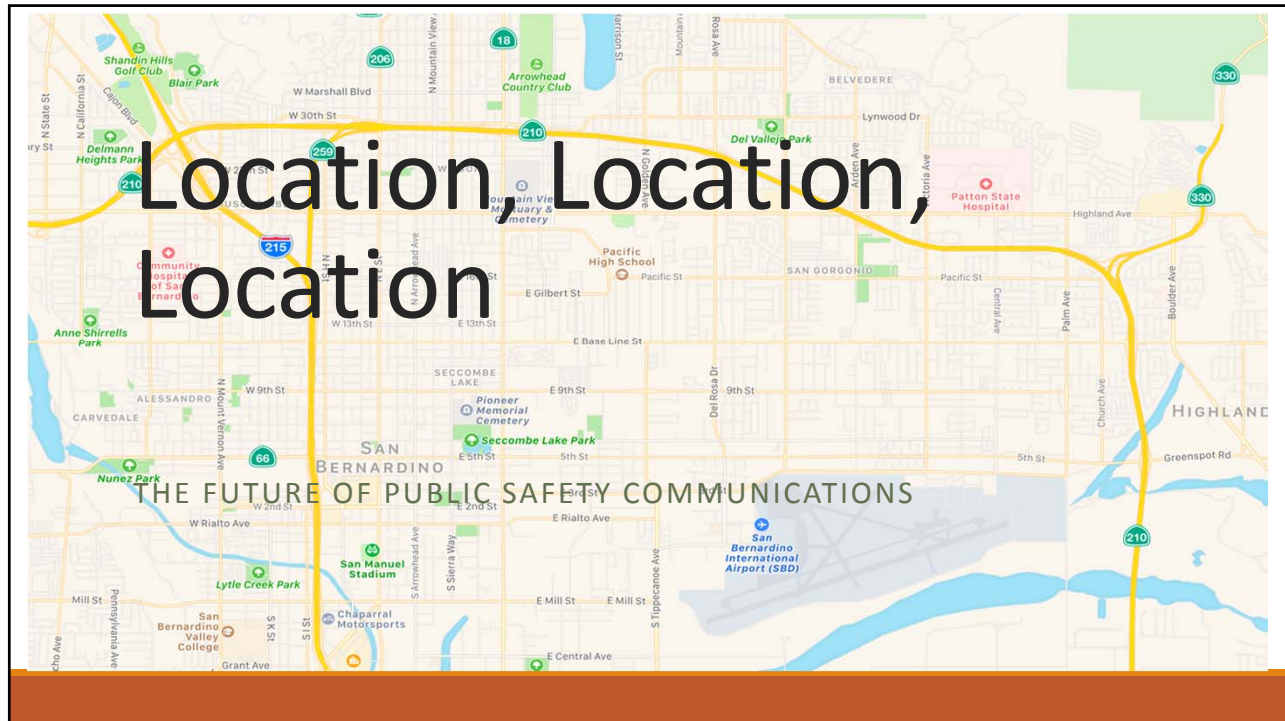
Discussion Calendar

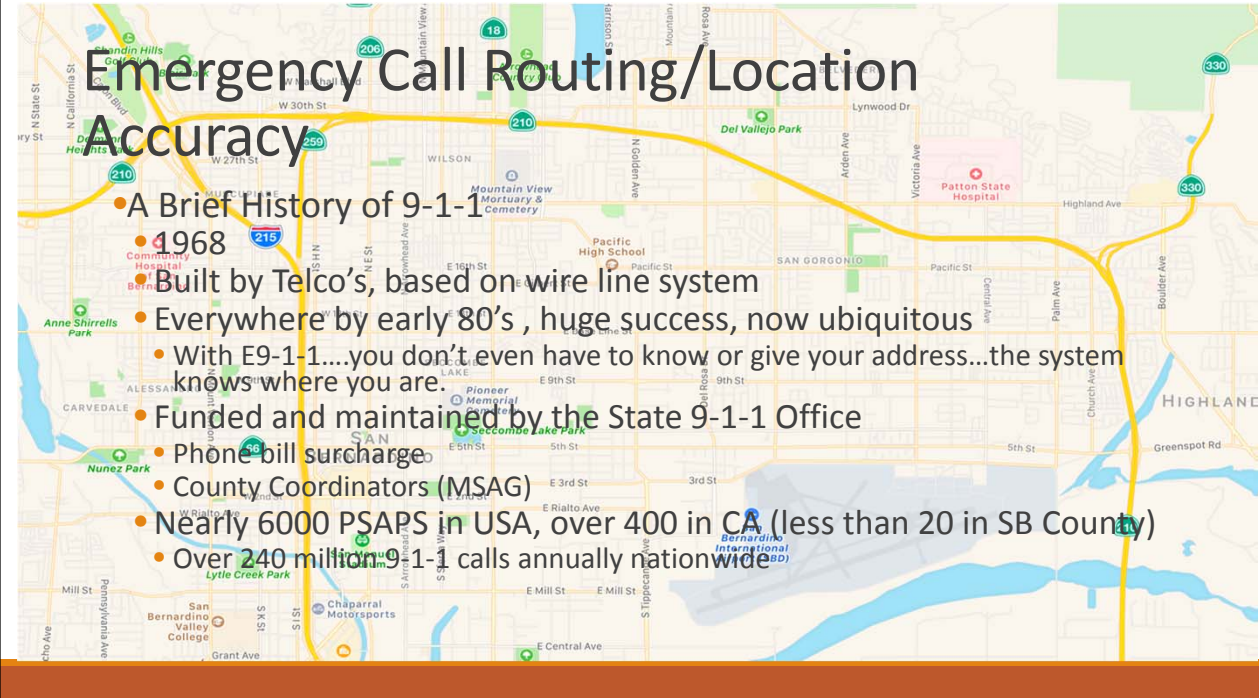
- 1. Public Safety Communications - Mike Bell, Communications Director, CONFIRE**

There is a need for updated communications and technology infrastructure to serve the needs of public safety. This might be an opportunity to collaborate to insure our communities are prepared to take advantage of technology changes in the 9-1-1 call processing environment as well as interoperable and redundant capability between communications centers.

The 9-1-1 - Location, Location, Location PowerPoint presentation was made available after the posting of the agenda.

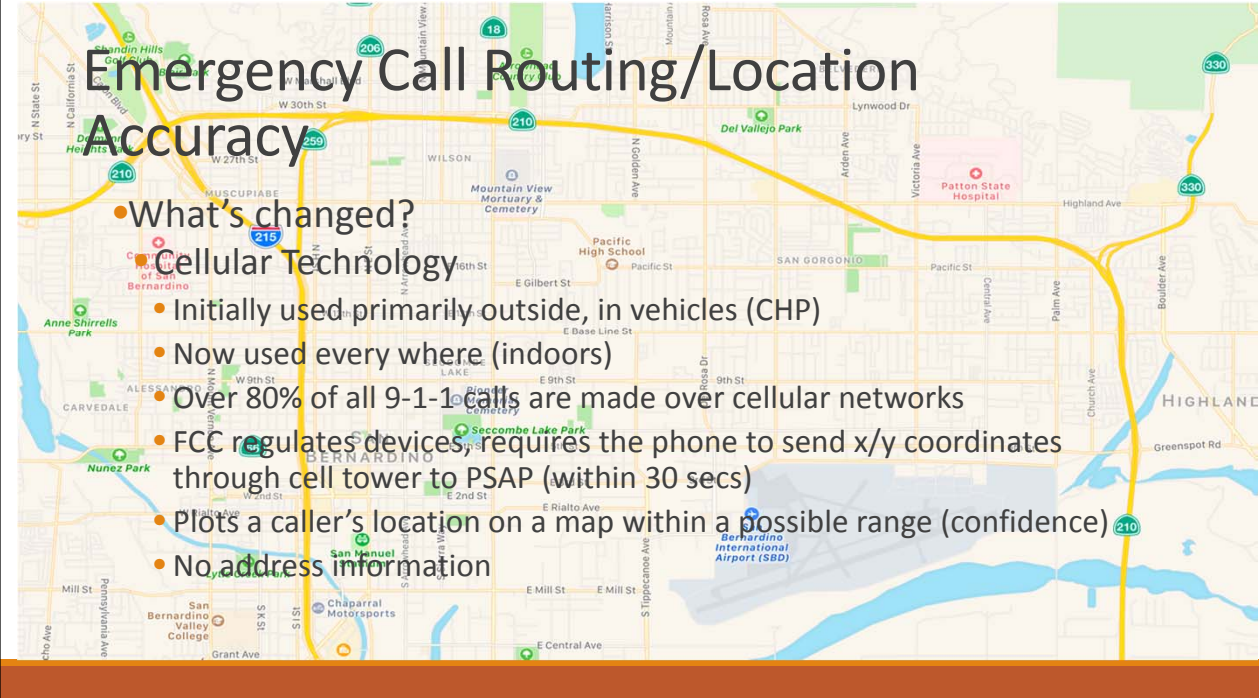
Attachment: PowerPoint Presentation for Item No. 1





Emergency Call Routing/Location Accuracy

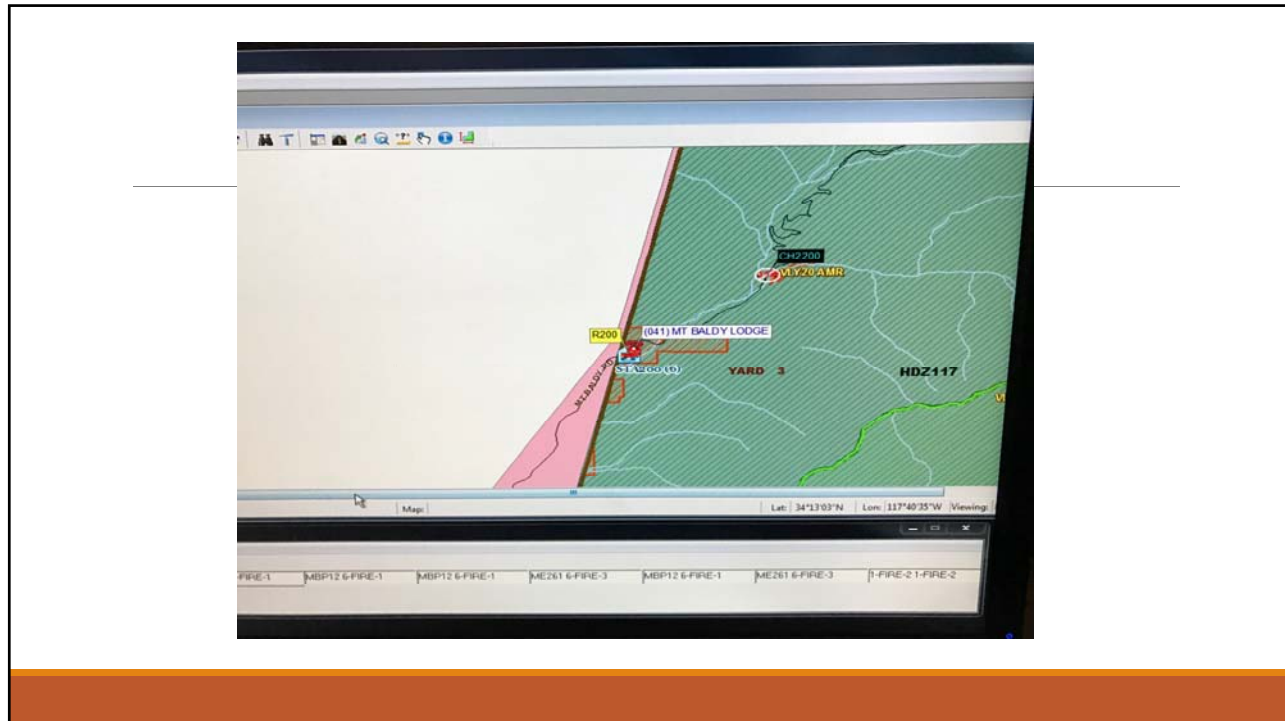
- A Brief History of 9-1-1
 - 1968
 - Built by Telco's, based on the wire line system
 - Everywhere by early 80's, huge success, now ubiquitous
 - With E9-1-1...you don't even have to know or give your address...the system knows where you are.
 - Funded and maintained by the State 9-1-1 Office
 - Phone bill surcharge
 - County Coordinators (MSAG)
 - Nearly 6000 PSAPs in USA, over 400 in CA (less than 20 in SB County)
 - Over 240 million 9-1-1 calls annually nationwide



Emergency Call Routing/Location Accuracy

- What's changed?
 - Cellular Technology
 - Initially used primarily outside, in vehicles (CHP)
 - Now used every where (indoors)
 - Over 80% of all 9-1-1 calls are made over cellular networks
 - FCC regulates devices, requires the phone to send x/y coordinates through cell tower to PSAP (within 30 secs)
 - Plots a caller's location on a map within a possible range (confidence)
 - No address information





Emergency Call Routing/Location Accuracy

- Where is it going?
- Next Generation 9-1-1 (NG 9-1-1)
 - Telco's are divesting from wired systems
 - No clear mandate...but many pushing for 2020
 - IP-Based system designed to take advantage of emerging technology to route calls to the right PSAP over a variety of mediums (cell, text, video, sensors etc)
 - Heavy reliance on locally maintained authoritative geographic data-bases to provide "dispatchable addressing."

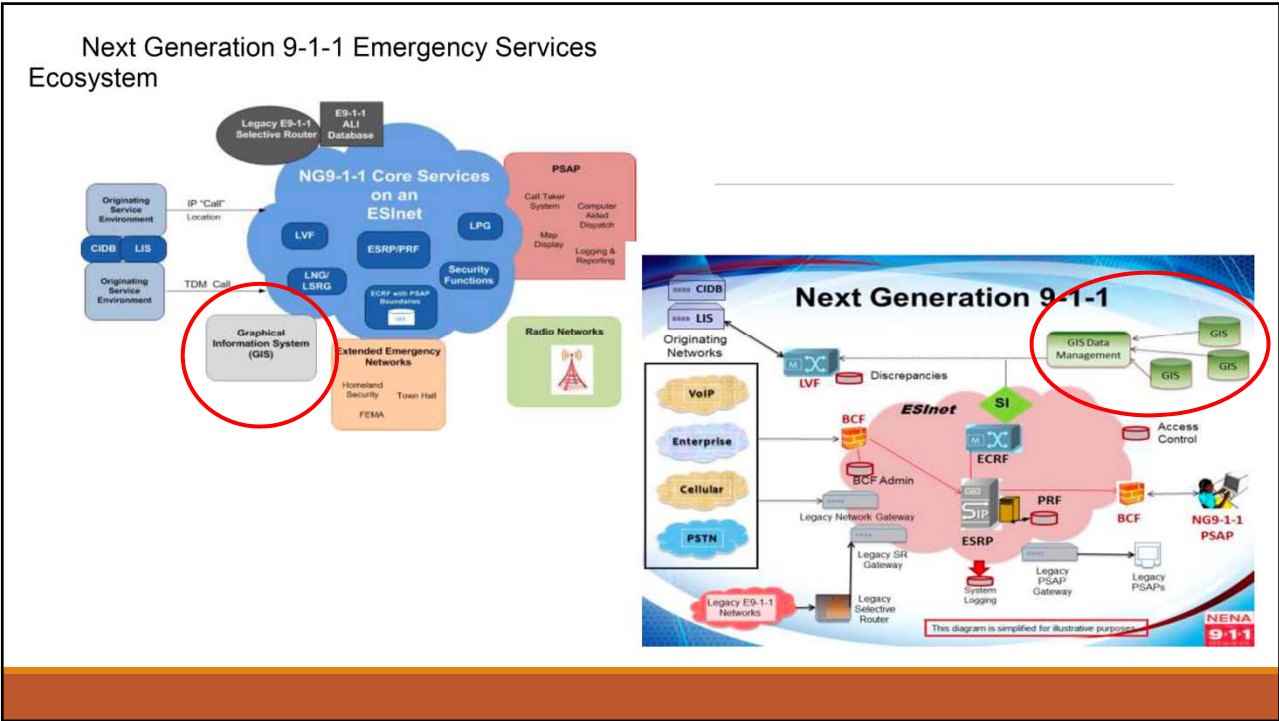
Emergency Call Routing/Location Accuracy

- What are we solving for?
- Location, Location, Location!
- Public Expectation...people think it does and should work 100% of the time (it does not)
- FCC estimates 10,000 lives saved per year with better location accuracy
- Improved regional collaboration

Who is Working on NG 9-1-1

NENA THE 9-1-1 ASSOCIATION

The only non-profit professional organization solely focused on 9-1-1 policy, technology, operations, and education issues.



What Could/Should We Be Doing?

"The biggest changes evolve around the use of Geographical Information System (GIS) technology and OSEs providing the caller's location information during call setup. The local 9-1-1 Authority shifts from managing the MSAG for address validation purposes to managing the data in a GIS tool. The GIS tool incorporates the address validation data of the MSAG and also includes jurisdictional boundaries of PSAPs and optional boundaries of emergency service providers."

FCC Task Force on Optimal PSAP Architecture, Final Report Jan. 29, 2016

Who Should Be Doing This?

San Diego Regional Public Safety Geodatabase



We Can Build on Successful Partnerships

County GIS – Street Centerline Data

ESRI

University of Redlands

Text to 9-1-1

Regional PSAP Groups

County Fire and Police Chief's Associations

ICEMA

SANBAG

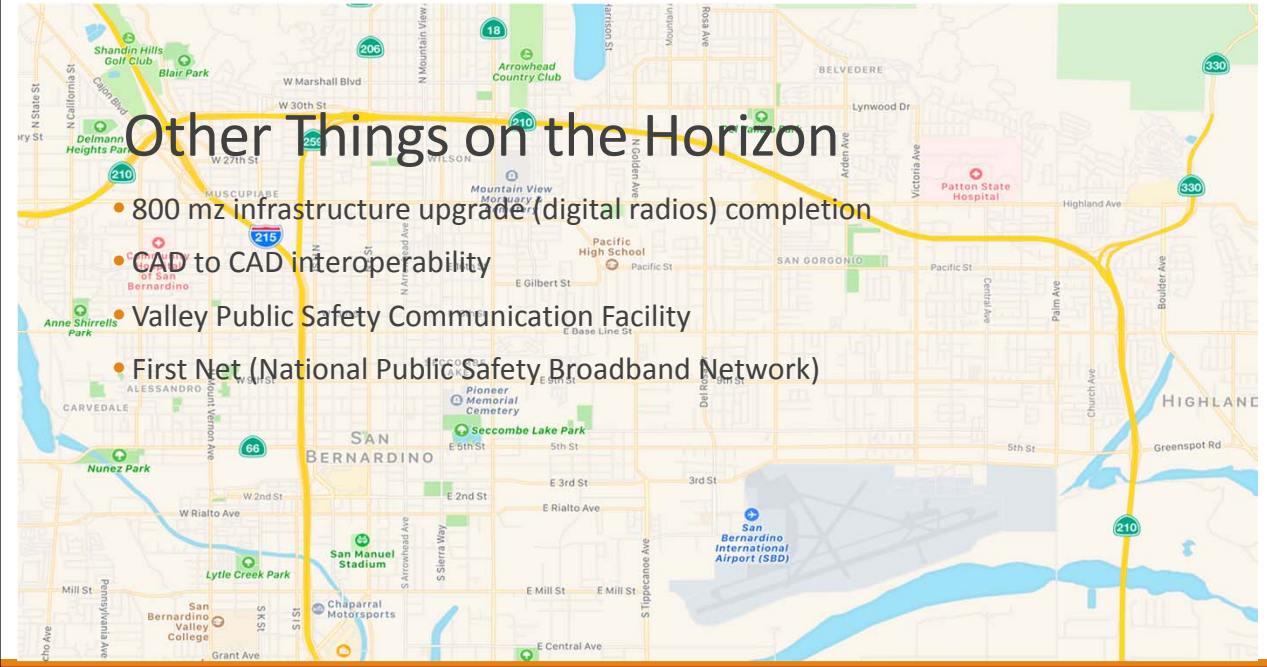
Operational Area Coordination Committee (OACC)

In an Emergency:

Call when you Can...

Text when you Can't





Other Things on the Horizon

- 800 mhz Infrastructure upgrade (digital radios) completion
- CAD to CAD interoperability
- Valley Public Safety Communication Facility
- First Net (National Public Safety Broadband Network)

The map shows the San Bernardino region with major highways (210, 66, 215, 330) and various landmarks. A yellow line traces a path through the city, and a blue shaded area is located near the airport.