Presentation Overview

1. Next Gen 9-1-1 Update
2. CA 9-1-1 Branch Operation Manual Updates
3. Text to 9-1-1 – Deployment Status in California
4. Call Answer Time Letter
9-1-1 in California Today

2016 California 9-1-1 Call Statistics
Total 9-1-1 Calls: 28,507,534
- 80% Wireless
- 16% Wireline
- 3% Voice over IP
- 1% Other to include Telematics
- ~ 5k Text Messages
Why Next Gen 9-1-1?

- Faster call delivery
- Increased routing accuracy and routing functionality  
  - Call overflow and backup
- Updated Geographic Information System (GIS)
- Improved system and outage monitoring
- Prepared for wireless location data
- Facilitates Text-to-9-1-1 delivery
- Prepared for newer technologies
- Aging existing infrastructure
- Keeps California in driver’s seat
Next Gen 9-1-1 in California
Legacy to NG 9-1-1 Transition

- CPE – Customer Premise Equipment
- ESN - Emergency Service Number
- ALI – Automatic Location Information
- ANI – Automatic Number Identification
- pANI - Psuedo ANI
- VoIP – Voice over IP
- MSC – Mobile Switching Center
- VPC – VoIP Positioning Center
Next Gen 9-1-1 Design (UPDATE)

Originating Service Providers:
- Regional Aggregation
- Regional Aggregation
- Regional Aggregation

Carrier Grade IP Switch:
- Prime ESInet
- Regional ESInet x 4

Responsibility of ESInet vendor:
Will likely be a Tariff Service

SS7 or SIP
SIP
Aggregation Tariff
CPE Contract

Slide 8
Next Gen 9-1-1 ESInet Regions Update

Map Depicts:
- 58 Counties
- 24 CHP Communications Centers (■)
- 4 Defined ESINET Regions plus Prime

All four identified regions shall have the capability to interconnect to all other regions.
Regional Task Force Meetings Start in March 2018

Regional Task Forces
- Coordinate region-specific communications structure for feedback and input
- Make procedural decisions for regional ESI nets

CA 9-1-1 Branch
- Establish statewide strategy for ESI nets
- Define technical specifications for regional ESI nets
- Coordinate stakeholders

PSAPs
- Service user
- Provide input on state provided specifications
- Utilize state provided policies and standards
Next Gen 9-1-1 PSAP Meetings

• July 14 - Bay Area: 57
• July 16 - Sacramento: 57
• July 20 - Northern: 45
• July 21 - Coastal: 17
• July 25 - Los Angeles: 77
• July 26 - Inland: 65
• July 27 - San Diego: 40

Total: 358

During August 2017 – 14 Vendor Meetings
During Sept 2017 – Meetings with 15 Local Exchange Carriers
During Oct 2017 – Working through contracts and funding
Funding Plan

• Near Term (FY 2017/2018)
  – Use fund balance to support Next Gen 9-1-1 deployment

• Long Term (FY 2018/2019)
  – Remove technology specific language from SETNA funding model to establish sustainable funding
## What will it cost?

<table>
<thead>
<tr>
<th>Year</th>
<th>Legacy 9-1-1 Costs</th>
<th>NG9-1-1 Costs</th>
<th>Estimated Total</th>
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<tbody>
<tr>
<td>FY 2017-18</td>
<td>$104,446,000</td>
<td>$10,000,000</td>
<td>$114,446,000</td>
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<td>FY 2018-19</td>
<td>$103,123,384</td>
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<td>FY 2019-20</td>
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<td>FY 2020-21</td>
<td>$75,010,114</td>
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<td>FY 2021-22</td>
<td>$64,110,114</td>
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<td>FY 2022-23</td>
<td>$59,641,114</td>
<td>$97,020,000</td>
<td>$156,661,114</td>
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Procurement Plan

• **Near Term (1 Month)**
  - Tariff Meeting Dec 19, 2017

• **Long Term (1-20 years)**
  - Develop Tariff
  - Use for all 9-1-1 services
Deployment Timeline

- Prime ESInet – June 2018 – June 2020
- Northern ESInet – July 2018 – July 2020
- LA County – Oct 2018 – Oct 2020
- Southern ESInet – Jan 2019 – Jan 2021
- Central ESInet – Mar 2019 – Mar 2021
- All selective routers decommissioned - 2022
CA 9-1-1 Operations Manual Updates

Chapter 3 of Operations Manual
  • Updated to support new CPE Contract
  • Add Hosted Solution
  • Refines Incremental Costs
  • Supports Text to 9-1-1 Deployment for CPE replacement

Chapter 10 of Operations Manual
  • Addresses Text-to-9-1-1 Deployment
  • Text-to-9-1-1 fully deployed by December 2018
# Text to 9-1-1 Status

## Deployed Counties/PSAPs

<table>
<thead>
<tr>
<th>Deployed Counties/PSAPs</th>
<th>Deployed</th>
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</thead>
<tbody>
<tr>
<td>Contra Costa (Richmond, Antioch &amp; Martinez)</td>
<td>3</td>
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<tr>
<td>CSU Long Beach</td>
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<tr>
<td>Riverside County (partial)</td>
<td>5</td>
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<tr>
<td>San Bernardino County (includes 2 CHP)</td>
<td>17</td>
</tr>
<tr>
<td>Santa Cruz/San Benito (includes 1 CHP)</td>
<td>2</td>
</tr>
<tr>
<td>Butte (includes 1 CHP)</td>
<td>8</td>
</tr>
<tr>
<td>Los Angeles County Phase 1 &amp; 2 (includes 1 CHP) Public Notification Dec 2017</td>
<td>45</td>
</tr>
<tr>
<td>Monterey County (Monterey EC c4 entire Co)</td>
<td>4</td>
</tr>
<tr>
<td>Imperial County</td>
<td>3</td>
</tr>
<tr>
<td>Santa Clara (Sunnyvale DPS, Santa Clara PD)</td>
<td>2</td>
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**Total Deployed: 90**

## Selected TCC

<table>
<thead>
<tr>
<th>Selected TCC</th>
<th>Count</th>
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<tbody>
<tr>
<td>San Joaquin (Partial)</td>
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<tr>
<td>San Luis Obispo County</td>
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<tr>
<td>Merced County</td>
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<tr>
<td>Santa Clara (partial)</td>
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<tr>
<td>Alameda (Partial)</td>
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<td>Kern County</td>
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<tr>
<td>Shasta County</td>
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<td>Santa Cruz (Scotts Vly PD)</td>
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<tr>
<td>Riverside County partial</td>
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<td>LA County Sheriff</td>
<td>22</td>
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<td>Contra Costa County (Partial)</td>
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<td>San Mateo County</td>
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**Total Selected: 81**

## Submitted letter to FCC

<table>
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<th>Count</th>
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<tbody>
<tr>
<td>LA County (partial)</td>
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<tr>
<td>Remaining CHP CC's Statewide</td>
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</table>

**Total Count: 24**

San Bernardino, Monterey, Santa Cruz, and San Benito have held media events.

LA County media event Dec 1, 2017

Text – to – 9-1-1 Letter
1. The CA 9-1-1 Branch is mandated to monitor all 9-1-1 emergency telephone systems to ensure they comply with minimal operational and technical standards as described in Government Code Section 53115.

2. The Fiscal and Operational Review (FOR) process is an onsite review completed at each PSAP at least once every five years.

3. The Branch completed 33 FORs during the period of May 2017 thru September 15, 2017.

4. Approximately 30 FORs are being scheduled and completed during each quarter of the year – equates to ~120/year.
Call Answer Time Letter

• Letter sent to PSAPs if below 85% of calls answered in 15 seconds or less
• Goal of letter is to start collaborative process and provide assistance needed to meet standard
  • We understand that call answer times are influenced by a variety of factors, some of which are beyond PSAP control
  • We understand that staffing is often the biggest obstacle
  • We will work with you to identify the source and develop a solution
• Please contact 9-1-1 Branch if receive letter
• Responses due by Nov 10, 2017
FirstNet: State Plan Review

• California conducted parallel review streams:
  – Technical Advisory Group (TAG) Evaluation
    • Comprised of 22 Members
    • Focused on Reviewing Information in Portal
      – Portal Updates – FirstNet Delivered on time: 9/19/17
      – AT&T Letter – Delivered 2 days late: 9/21/17
      – Answers to 687 Comments - Delivered 3 days late: 9/22/17
      – Official Governor’s Notice – Delivered 10 days late: 9/29/17
  – Subject Matter Expert (SME) Analysis
    • Comprised of SAIC Subject Matter Experts
    • Focused on all data available
FirstNet: Review Working Groups

Group A: Coverage and Deployment
Phasing, Rural, Tribal, and Deployables

Group B: Network Resiliency and Security

Group C: Service Plans, Devices, Operations and Local Control, and Applications

TAG Evaluation
FirstNet: Evaluation Score Results

- Coverage Average Score: **1.9**
- Network Average Score: **1.9**
- Service Plans Average Score: **2.2**
- Overall Weighted Score: **2.0**

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<thead>
<tr>
<th>Scoring Legend</th>
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<td>FirstNet’s State Plan</td>
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<tr>
<td>3</td>
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<tr>
<td>1</td>
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</table>
FirstNet: Opt-In – Not an Option

• Does not guarantee sites will be built to support needed public safety coverage
• Does not guarantee sites will be hardened to public safety grade
• Does not guarantee that applications will support interoperability between all carriers or other systems
• Does not guarantee that user portal will meet stakeholder needs
• Does not guarantee integration of LA-RICS equipment and users
• Does not guarantee a suitable plan for deployables
FirstNet: Opt-Out – Not an Option

- Requires an unrealistic number of subscriptions / connections – over 200,000 primary and 100,000 extended primary users
- Requires almost $3 billion of Spectrum Lease Payments
- Penalties exceed $15 billion if we fail to build radio access network