State 9-1-1 Advisory Board
August 18, 2021
Members of the Board

- Chair – Patrick J. Mallon, Governor’s Office of Emergency Services (Cal OES)
- Chief Chris Childs, California Highway Patrol (CHP)
- Brenda Bruner, Association of Public-Safety Communication Officials (APCO)
- Lee Ann Magoski, California National Emergency Number Association (CALNENA)
- Rosa Ramos, California National Emergency Number Association (CALNENA)
- Sheriff Ingrid E. Braun, California State Sheriffs’ Association (CSSA)
- Sheriff William “Bill” Ayub, California State Sheriffs’ Association (CSSA)
- Juan Carlos Castillo, California Fire Chiefs Association (CFCA)
- Chief Rebecca Ramirez, California Fire Chiefs Association (CFCA)
- Chief Elise Warren, California Police Chiefs Association (CPCA)
- Chief Andrew White, California Police Chiefs Association (CPCA)

Establishment of quorum
Item 2: Approval of Previous Minutes

Meeting Minutes

May 2021 meeting minutes:

- Meeting held via video conference
Closed Session

The State 9-1-1 Advisory Board will meet in closed session via a secure video conference pursuant to G.C. Section 11126(e)
Mr. Reggie Salvador, Chief, Cal OES Legislative and External Affairs will provide information regarding legislation that may impact California's 9-1-1 system.
Mr. Budge Currier will present updates regarding active projects within Cal OES’ 9-1-1 Emergency Communications Branch:

1. 2020 Call Statistics
2. Statewide Customer Premise Equipment (CPE) Installation and upgrades
3. Text to 9-1-1 Update
4. Next Gen 9-1-1 Update
5. Location Accuracy Project
6. Status of SETNA
### Item 5-1: 2020 Call Statistics

<table>
<thead>
<tr>
<th>Total 9-1-1 Calls</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>25,927,317</td>
</tr>
<tr>
<td>Wireless</td>
<td>21,830,501 (84%)</td>
</tr>
<tr>
<td>Wireline</td>
<td>2,236,812 (9%)</td>
</tr>
<tr>
<td>Voice over IP</td>
<td>1,242,522 (5%)</td>
</tr>
<tr>
<td>Other including Telematics</td>
<td>533,027 (2%)</td>
</tr>
<tr>
<td>Text to 9-1-1</td>
<td>84,455 (&lt;1%)</td>
</tr>
</tbody>
</table>
### Item 5-2: Statewide CPE Installation

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>System Acceptance Signed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>11</td>
</tr>
<tr>
<td>2020</td>
<td>51</td>
</tr>
<tr>
<td>2019</td>
<td>69</td>
</tr>
<tr>
<td>2018</td>
<td>54</td>
</tr>
<tr>
<td>2017</td>
<td>57</td>
</tr>
<tr>
<td>2016</td>
<td>92</td>
</tr>
<tr>
<td>Older than 2016 (includes PSAPs with self-funded CPE)</td>
<td>106</td>
</tr>
</tbody>
</table>

PSAPs with CPE System Acceptance dates of 2016 or prior are utilizing the year 6/7 maintenance options or are working with the CA 9-1-1 Branch on CPE replacement.

August 18, 2021  California State 9-1-1 Advisory Board
Item 5-2: Statewide Cloud-Native CPE

- All new CPE sales have been suspended until CPE passes contract compliance, current barriers with equipment installed at the PSAP today include, but may not be limited to:
  - Internet Protocol, Version 6 (IPV6) and Transport Layer Security (TLS) needed for the Private Key Infrastructure
  - Unique IP address needed to dereference a NENA i3 call for a carrier-maintained Location Information Service
  - Element state and queue state in native NENA i3, which are needed to support dynamic policy routing
  - Inability to support Real Time Text (RTT)
  - Inability to support conferencing, using REFER
  - The NG 9-1-1 service providers (Atos, Lumen, NGA 9-1-1 and Synergem) have put in “work arounds” to ensure that the CA NG 9-1-1 system can interface with CPE
  - Your CPE vendor is required to support the existing ANI/ALI spill to CAD and CDR
  - On a case-by-case basis, CA 9-1-1 Branch will evaluate CPE performance at your PSAP to ensure current equipment does not jeopardize ability to support PSAP operations
Item 5-2: Statewide Cloud-Native CPE

- Full NG 9-1-1 implementation will require PSAPs to move to Cloud Native CPE using the vendors on the new CPE contract

- The highlighted vendors are currently coordinating testing in the NG 9-1-1 Lab:
  - AT&T reselling Rapid Deploy Cloud, Motorola Cloud, Viper Cloud, and Viper Data Center
  - Atos – GEMMA Cloud CPE
  - Carbyne Cloud
  - Carousel reselling Motorola Cloud
  - Lumen reselling Motorola Cloud, Viper Data Center, and Omni911 Cloud
  - Comtech - Solacom Data Center
  - Frontier reselling Motorola Cloud
  - Intrado - Viper Data Center, and Viper Cloud
  - Motorola Cloud
  - NGA911 ACE CHS
  - RapidDeploy Cloud
  - Zetron Data Center
# Item 5-3: Text to 9-1-1 Deployment

<table>
<thead>
<tr>
<th>Text to 9-1-1 Status</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSAPs deployed with Web Based OTT</td>
<td>302</td>
</tr>
<tr>
<td>PSAPs pending deployment of Web Based OTT</td>
<td>0</td>
</tr>
<tr>
<td>PSAPs deployed with Integrated Text</td>
<td>134</td>
</tr>
<tr>
<td>PSAPs pending deployment of Integrated Text</td>
<td>1</td>
</tr>
<tr>
<td>Total PSAPs deployed (99% completed)</td>
<td>436</td>
</tr>
<tr>
<td>Total PSAPs</td>
<td>437</td>
</tr>
</tbody>
</table>

California Assembly Bill 1168 mandated Text to 9-1-1 by January 1, 2021

Contact Chereise Bartlett @ 916-894-5030 or [chereise.bartlett@caloes.ca.gov](mailto:chereise.bartlett@caloes.ca.gov)

August 18, 2021
California State 9-1-1 Advisory Board
Item 5-4: Next Gen 9-1-1 Update

NEXT GENERATION
9-1-1
CALIFORNIA

PSAP Installs
OSP Integration
Test and Integration
Transition
Item 5-4: Next Gen 9-1-1 Deployment

Optimistic Deployment Timeline
- **Statewide Prime**: Aug 2019 – Dec 2022
- **Northern Region**: Aug 2019 – Dec 2022
- **LA Region**: Aug 2019 – Dec 2022
- **Southern Region**: Aug 2019 – Dec 2022
- **Central Region**: Aug 2019 – Dec 2022

Selective routers services replaced – **2022**
Major schedule shift due to CPE limitations, COVID, and process improvements

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**Northern Region**
- 169 PSAPS
- 7,000,000 Calls / Year

**Statewide**
- All 450 PSAPS
- 27,000,000 Calls / Year

**Los Angeles Region**
- 78 PSAPS
- 8,000,000 Calls / Year

**Central Region**
- 112 PSAPS
- 5,000,000 Calls / Year

**Southern Region**
- 91 PSAPS
- 7,000,000 Calls / Year
Item 5-4: PSAP Installs Preparing for NG 9-1-1 Go-Live

**CPE Vendor**
- Install LPG or Upgrade CPE Software
- Install Firewall and Router
- Program CPE and Line Appearances
- CPE Testing and Training

**Atos and Region**
- Region Installs Equipment
- Region Installs Circuits
- Atos Installs Equipment
- Atos Installs Circuits
- Atos and Region Connected at PSAP
- NG 9-1-1 Testing and Training

**Carriers (Originating Service Providers)**
- Connect to NG 9-1-1
- Validate Location Data Flow
- Carrier Test Calls
- Go-Live Preparations
  1. Complete Go-Live Testing
  2. Complete PSAP Training
  3. Validate NOC operations
  4. Schedule Carrier cutover dates
  5. Validate PSAP Readiness

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1. Period of 2 weeks with no network or system changes
2. Validation by dispatchers in each of the PSAPS in the transfer cluster that CPE can answer, transfer, and display NG 9-1-1 calls properly
3. PSAP training completed and verified
4. Validation of the PSAP “Alternate Route” process
5. Validation of the trouble ticket and Network Operation Center activities
6. Validation of ability to deliver test calls from carrier
Item 5-4: What has been validated?

- PSAP Boundaries are completed
- NENA i3 compliant NG 9-1-1 Core Systems operational for Atos, NGA 9-1-1, Lumen and Synergem
- Failover testing completed between NG 9-1-1 Core Systems
- Carrier testing completed with T-Mobile and Verizon wireless
- Successfully delivered 9-1-1 calls from handsets to PSAP using geospatial routing in a compliant NENA i3 architecture
- Deployed equipment to over 80% of PSAPs in California
- System monitoring and trouble ticketing testing
Item 5-4: What are the barriers to Go-Live?

- There has been a delay in the Go-Live Schedule due to:
  1. CPE is unable to support all NENA i3 functions
  2. NGCS providers have had to develop code changes for CPE
  3. NGCS providers have been completing “Day 2 Support” activities
  4. Impacts on supply chain and resources due to COVID-19
  5. Delivery of location information needed to support operations
  6. An NG 9-1-1 project of this scope and scale has never been attempted

- The CA 9-1-1 Branch anticipated 18-24 months to test the solution
1. CA 9-1-1 Branch is validating delivery of location information from CPE to CAD during the week of 8/16/21 in the CA 9-1-1 lab and at PSAPs

2. CA 9-1-1 Branch is working with NG 9-1-1 service providers to develop a solution to remove CPE challenges from the critical path and reduce project delays
   - Ensure all NG 9-1-1 providers are sending location based on the NENA i3 standard
   - Testing conversion process that will translate NENA i3 location data into the legacy 9-1-1 location format that existing CPE is able to process with no downstream impacts by end of August 2021
   - Using SLAs and other contractual means to hold CPE vendors and NG 9-1-1 providers accountable

3. CA 9-1-1 Branch is testing with cloud native CPE vendors to validate viable replacement equipment for the CPE that is deployed in California

4. Ensuring the solution is valid and reliable but not seeking perfection

5. We will use a soft launch approach and will not use any public messaging until after transition
Item 5-4: We need PSAP help to Support the Testing Process

- Final testing requires dispatchers to answer calls to validate the programming is correct and that the training is adequate.
- We are asking for PSAPs to support test windows for the testing that must be completed at the PSAP:
  - Test Windows will be Tuesday – Thursday from 10:00 am – 1:00 pm.
  - No more than 10 test calls will be completed in any single hour unless approved by PSAP.
  - During planned events and increased busy times, test windows can be cancelled by PSAP.
  - Each PSAP will have unique testing number for Atos and their region to support additional PSAP testing.
There will be 4 types of Testing:

- CA 9-1-1 Branch NG 9-1-1 lab testing
- CPE Testing to validate CPE upgrades or LPG
- NG 9-1-1 Testing to validate NG 9-1-1 connectivity to your PSAP
- CPE and NG 9-1-1 Testing – Your CPE technician will answer the first test calls to ensure functionality
- “Go Live” Testing to validate NG 9-1-1 Go-Live readiness
- Carrier Testing to validate each carrier can deliver 9-1-1 calls through NGCS
- “Go Live” and Carrier Testing – After line appearances are programmed on your CPE and training is completed by the CPE vendor, anticipate that your PSAP will be receiving NG 9-1-1 test calls
Item 5-4: PSAP Install Status

- NG911 Deployment PSAP Dashboard Technical Information
  https://www.caloes.ca.gov/PublicSafetyCommunicationsSite/Documents/DashboardInfo.pdf

- NG911 Deployment PSAP Dashboard
  https://calema.maps.arcgis.com/apps/dashboards/edccc14f232640c4b53a65e946880568

- Live Demo
Item 5-4: Selective Router Transition
Tentative Dates

- Each Phase will take 2-6 months to complete
- Some Carriers must be transitioned by Selective Router (Multiple PSAPs)
- PSAPs will be accepting both NG 9-1-1 calls and legacy 9-1-1 calls
- **Focus is on project success, not the schedule**
- Using the SLAs and contract requirements to hold vendors accountable

Cal OES Lab Phase 2 Testing

- August 2021: PSAP Testing
- February 2021: OSP Testing
- System Monitoring

Phase 1 Migration

- Start Sept / Oct 2021
  - Sonora SR: Start with Tuolumne County Sheriff
  - Placerville SR: Start with South Lake Tahoe PD or El Dorado County Sheriff
  - El Centro SR: Start with Brawley PD and Imperial County Sheriff

Note: Go-Live means that one carrier from one Selective Router is active with NG 9-1-1 into your PSAP

Phase 2 Migration

- Start Jan 2022

Phase 3 Migration

- Start Feb 2022

Phase 4 Migration

- Start Mar 2022

Contingent on Success

- August 2021: Cal OES Lab Phase 2 Testing
- February 2021: OSP Testing
- System Monitoring

PSAP Testing

Start with Tuolumne County Sheriff

Start with South Lake Tahoe PD or El Dorado County Sheriff

Start with Brawley PD and Imperial County Sheriff

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California State 9-1-1 Advisory Board
Item 5-5: Location Accuracy and Validation Project

- All Over the Top text solutions will be migrated to RapidDeploy beginning November 2021
- All Over the Top text PSAPs must start using RapidDeploy
- All PSAPs have been updated to RadiusPlus
  - Includes an SMS text from 9-1-1 capability
  - Integration of data from OnStar is now available
- Any questions, Cal OES Project Manager:
  Curt Guillot @ 916-894-5035 or curt.guillot@caloes.ca.gov
- For RadiusPlus access, Customer Success Manager:
  Mel Bland @ 512-488-6420 or OTT@rapiddeploy.com
## Item 5-6: SETNA Fund Condition Statement

**0690  Office of Emergency Services**

### FUND CONDITION STATEMENTS

<table>
<thead>
<tr>
<th>0022</th>
<th>State Emergency Telephone Number Account 4</th>
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<tbody>
<tr>
<td><strong>2019-20</strong></td>
<td><strong>2020-21</strong></td>
</tr>
<tr>
<td><strong>BEGINNING BALANCE</strong></td>
<td>241</td>
</tr>
<tr>
<td>Prior Year Adjustments</td>
<td>22,394</td>
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<tr>
<td>Adjusted Beginning Balance</td>
<td>22,635</td>
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#### REVENUES, TRANSFERS, AND OTHER ADJUSTMENTS

<table>
<thead>
<tr>
<th>Description</th>
<th>2019-20</th>
<th>2020-21</th>
<th>2021-22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41050 Emergency Telephone User's Surcharge</td>
<td>111,889</td>
<td>184,514</td>
<td>184,424</td>
</tr>
<tr>
<td>411100 Cost Recoveries - Other</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>411400 Escheat - Unclaimed Checks, Warrants, Bonds, and Coupons</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4173500 Settlements and Judgments - Other</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td><strong>Transfers and Other Adjustments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Transfer from Prepaid MT3 911 Account (3256) to State Emergency Telephone Number Account (0022) per Chapter 885, Statutes of 2014 (AB 1717) Section 8 Revenue and Taxation Code 42023 (a)</td>
<td>-</td>
<td>-1,408</td>
<td>-1,408</td>
</tr>
<tr>
<td>Revenue Transfer from Prepaid MT3 911 Account (3256) to State Emergency Telephone Number Account (0022) per Chapter 885, Statutes of 2014 (AB 1717) Section 8 Revenue and Taxation Code 42023 (a)</td>
<td>17</td>
<td>1,408</td>
<td>1,408</td>
</tr>
</tbody>
</table>

**Total Revenues, Transfers, and Other Adjustments**

$111,929 $184,519 $184,426

**Total Resources**

$134,544 $208,087 $222,039

### EXPENDITURE AND EXPENDITURE ADJUSTMENTS

<table>
<thead>
<tr>
<th>Description</th>
<th>2019-20</th>
<th>2020-21</th>
<th>2021-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>0650 Office of Emergency Services (State Operations)</td>
<td>19,746</td>
<td>21,020</td>
<td>21,572</td>
</tr>
<tr>
<td>0650 Office of Emergency Services (Local Assistance)</td>
<td>136,283</td>
<td>142,391</td>
<td>154,991</td>
</tr>
<tr>
<td>3540 Department of Forestry and Fire Protection (State Operations)</td>
<td>3,615</td>
<td>3,615</td>
<td>3,615</td>
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<tr>
<td>7600 California Department of Tax and Fee Administration (State Operations)</td>
<td>784</td>
<td>1,659</td>
<td>1,755</td>
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<tr>
<td>8880 Financial Information System for California (State Operations)</td>
<td>-1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9892 Supplemental Pension Payments (State Operations)</td>
<td>95</td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td>9900 Statewide General Administrative Expenditures (Pro Rata) (State Operations)</td>
<td>254</td>
<td>1,487</td>
<td>481</td>
</tr>
<tr>
<td>Less funding provided by General Fund (State Operations)</td>
<td>-50,000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
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**Total Expenditures and Expenditure Adjustments**

$110,975 $170,474 $162,716

**FUND BALANCE**

<table>
<thead>
<tr>
<th></th>
<th>2019-20</th>
<th>2020-21</th>
<th>2021-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve for economic uncertainties</td>
<td>23,508</td>
<td>37,613</td>
<td>39,323</td>
</tr>
</tbody>
</table>

**2019-20** **2020-21** **2021-22**
How the fee is set by Cal OES:
- Revenue needed is determined by FY 2021-22 budget
- Access Line Service Providers sent number of access lines to Cal OES
- Cal OES calculated the surcharge based on the budget and number of access lines
- Cal OES sent letter to CDTFA on September 29, 2020
- For calendar year 2021, the recommend surcharge is $0.30

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020-21 Revenue Needed</td>
<td>$207,048,613</td>
</tr>
<tr>
<td>Estimate number of Access Lines</td>
<td>57,883,663</td>
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<tr>
<td>Surcharge per month</td>
<td>$0.30</td>
</tr>
<tr>
<td>Projected Monthly Revenue</td>
<td>$17,365,099</td>
</tr>
<tr>
<td>Projected Annual Revenue</td>
<td>$208,381,185</td>
</tr>
</tbody>
</table>
Item 6: Long Range Planning Committee

- The LRPC will brief out current LRPC activities
- The LRPC will take direction from 9-1-1 AB on future activities for the LRPC
The 9-1-1 Advisory Board members are requested to review the Committee member assignments and make recommendations for new assignments.

The 9-1-1 Advisory Board will vote on recommended assignments.
The 9-1-1 Branch will provide an overview and update on the current strategic initiatives.

**Mission of CA 9-1-1 Branch:** Enable public safety answering points (PSAPs) to provide the fastest, most reliable, and cost-effective access to 9-1-1 services for California.

- **Goal 1:** Improve 9-1-1 system reliability and call routing for California PSAPs
- **Goal 2:** Support the 9-1-1 operational needs of California PSAPs
- **Goal 3:** Collaborate with state and federal partners to ensure that policies, procedures, and statutes reflect the needs of California

Draft Strategic Plan has been sent to the 9-1-1 Advisory Board and posted on the CA 9-1-1 Branch website: [www.caloes.ca.gov/911](http://www.caloes.ca.gov/911)

- Requesting feedback by September 30, 2021
- Vote to approve at Nov 17, 2021 Advisory Board
Item 9: Agenda Items for Future Meetings

Board requests for matters to be placed on a future agenda

2021 Meeting Dates:

- NOVEMBER 17, 2021

2022 Meeting Dates:

- FEBRUARY 23, 2022, 10 AM – 12 PM
- MAY 18, 2022, 10 AM – 12 PM
- AUGUST 17, 2022 10 AM – 12 PM
- NOVEMBER 16, 2022 10 AM – 12 PM
Item 10: Public Comment

Public Comment
Thank you for attending this meeting of the California State 9-1-1 Advisory Board.

- **General Information:**
  Sophia Munoz, State 9-1-1 Advisory Board Liaison, at (916) 894-5016 or via email at sophia.munoz@caloes.ca.gov

- **Media Information:**
  Bryan May, Public Information Officer, at (916) 845-8449 or via email at Bryan.May@caloes.ca.gov