

The background of the slide is a photograph of a calm lake reflecting a misty mountain range at dawn or dusk. The sky is a mix of soft pinks, purples, and blues. The mountains are dark and silhouetted against the lighter sky, with mist or low clouds clinging to their slopes. The water is very still, creating a clear reflection of the mountains and sky. On the right side of the image, there are several decorative circles of varying sizes and colors (white, light blue, and a solid orange-brown) arranged in a vertical column.

UCA Annual Stakeholder's Meeting

911 DIVISION UPDATE

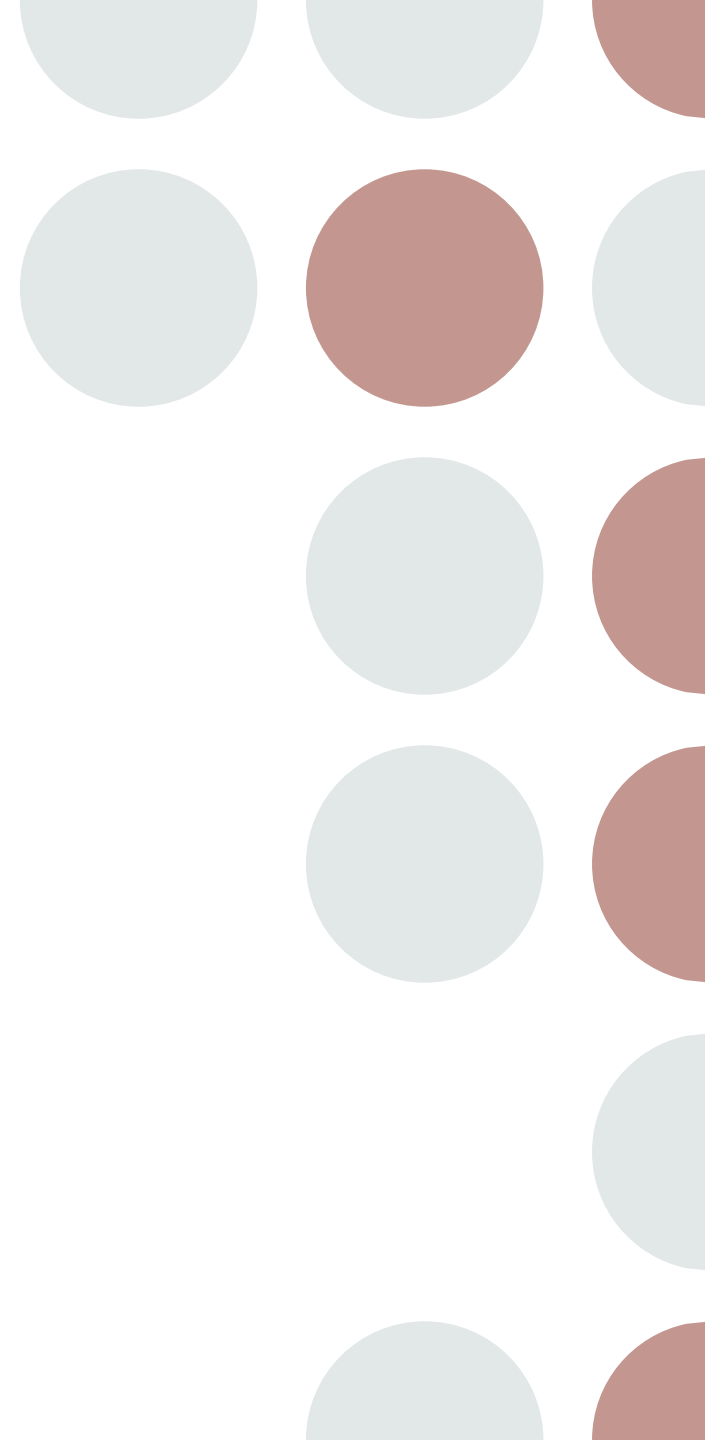
By

Melanie Crittenden

November 29, 2022

911 Update Agenda

- Who and What is the 911 Division?
 - NG911 Project Update
 - PSAP Proportionate Funds
 - Federal Resources
-



Who Is the 911 Division?

Introduction – Melanie Crittenden



What Does the 911 Division Do?



63H-7a-302. 911 Division Duties and Powers- Minimum Standards & Best Practices

(1) The 911 Division shall:

(a) in conjunction with the PSAP advisory committee, develop and report to the director minimum standards and best practices: for PSAPs in the state, including minimal technical, administrative, fiscal, network, and operational standards for PSAPs and Dispatch Centers; and that will result in rapid, efficient, and interoperable 911 services throughout the state.

Any changes made to the minimum standards and best practices must go through the PSAP Advisory Committee, as well as approved by the UCA Governing Board. Updates can be found on the UCA website: www.uca911.org; under the 911 tab "Minimum Standards and Best Practices".

911 Division Duties and Powers- Annual PSAP Reporting

(1) The 911 Division shall:

(b) annually prepare and publish a report of how well PSAPs statewide are complying with the standards and best practices developed.

A questionnaire is distributed to the PSAPs at the beginning of each year. The PSAPs must fill out the questionnaire and send back to the 911 Division. The results from those self-reporting questionnaires can be found on our website: www.uca911.org; under the 911 tab " 911 Center Performance Report 2021"

911 Division Duties and Powers-Emerging Technologies

(1) The 911 Division shall:

(c) Investigate and report to the director on emerging technology

(d) Monitor and coordinate the implementation of the unified statewide 911 emergency services network

The 911 Division attends 2 National Association of State 911 Administrators (NASNA) conferences each year where we receive states updates on NG911 processes, technology, as well as 911 issues at the Federal level. We also attend the annual NENA and APCO conferences where we are able to see what's coming for 911 technologies.

911 Division Duties and Powers- PSAP Assistance

(1) The 911 Division shall:

g) assist public safety answering points implementing and coordinating the unified statewide 911 emergency services network



What Funds UCAs 911 Division?



69-2-403. Unified Statewide 911 Emergency Service Charge

- Until June 30, 2019, UCA received 9 cents per month, per access line (1 cent per month, per access line went directly to Utah Geospatial Resource Center (UGRC) for the purpose of statewide mapping)
 - Since July 1, 2019, UCA receives 25 cents per month, per access line (1 cent per month, per access line directly to UGRC) This funding pays for the NG911 statewide system.
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Permitted Uses of the Unified Statewide 911 Service Account

63H-7a-304. Unified Statewide 911 Emergency Service Account-Permitted Uses

(2) (a)...the authority shall disburse funds in the 911 account for the purpose of enhancing and maintaining the statewide public safety communications network and 911 call processing equipment in order to rapidly, efficiently, effectively, and with greater interoperability deliver 911 services in the state.

(b) In expending funds in the 911 account, the authority shall give higher priority to an expenditure that:

- (i) best promotes statewide public safety
 - (ii) best promotes interoperability
 - (iii) impacts the largest service territory
 - (iv) impacts a densely populated area; or
 - (v) impacts an underserved area.
-

Unified Statewide 911 Emergency Service Account-Permitted Uses

(2) (c) The authority shall expend funds in the 911 account in accordance with the authority strategic plan

(d) the authority may not expend funds from the 911 account collected through the 911 emergency service charge on behalf of a PSAP that chooses not to participate in the:

- (i) public safety communications network

- (ii) the 911 emergency service defined in 69-2-102(1): “911 emergency communication” means a direct 911 communication received by a public safety answering point. (2) “911 emergency service” means a unified statewide communication system that provides a user with direct access to a PSAP by dialing or accessing 911.

NG911 Project Update



WE ARE COMPLETE!!!

As of August 11, 2022 –All 30 Utah PSAPs and 3 participating Dispatch Centers completed migration to the new i3 NG911 Vesta Routers.



NG911 Project History



Planning Phase



- A 911 Strategic Plan was a critical component of the 911 Division in 2017. A very overdue investigation of the current state of Utah's 911 was needed, as well as planning for future technologies to better serve our citizens and visitors of Utah
 - UCA Governing Board Approval
 - RFP for 911 Consultants in 2018
-

NG911 Technology RFP Phase

- With the assistance of our 911 consultants, Federal Engineering (FE), and the Utah State Procurement office, UCA wrote and published two 911 RFPs in October 2018:
 - 1-Statewide Call Handling solution
 - 2-Statewide ESInet, or the technology infrastructure.
 - Due to unforeseen circumstances UCA was forced to cancel both 911 RFPs in late December 2018.
-

Lessons Learned –First Set of RFPs

- UCA did not receive enough funding to fund a statewide NG911 solution.
 - January 2019, UCA sent an email to all PSAPs notifying them that UCA could not afford to upgrade the entire NG911 system statewide, with the \$.09 fee received for 911, rather, UCA would pay for the infrastructure (ESInet). The PSAPs would have to purchase and maintain costs for the call handling equipment, connecting to the UCAs statewide NG911 ESInet.
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Unified Statewide 911 Emergency Service Charge

- The PSAPs chose to rally together, spearheaded by Tina Mathieu, who took the issue of NG911 funding to the Utah State Legislature in 2019's Legislative Session, thus reflecting the increase to \$.25 per month, per access line. This UCA 911 fee would be used to pay for all costs associated with the i3 NG911 statewide solution: ESInet, network, maintenance, and end user equipment minus the \$.01 to UGRC for statewide mapping.
-

New NG911 RFP Process

- UCA and Federal Engineering re-grouped and merged the two RFPs into one RFP for an end-to-end NG911 solution.
 - With the assistance of FE and advertising through the State Procurement office, UCA published a third NG911 RFP in the fall of 2019 for an end-to-end NG911 solution that all PSAPs and Dispatch Centers that chose to join, could join.
-

Oversight and Stakeholder Participation

- UCA requested assistance from various board members for oversight, and stakeholders from around the state to participate in RFP selection process and award. Stakeholders from large to small PSAPs located north to south participated in the process. UCA staff, and Federal Engineering participated in offering technical advice, but did not participate in scoring of the RFP.
 - April 2020, the UCA Governing Board approved awarding the winning vendor Vesta Solutions Inc., a subsidiary of Motorola Solutions Inc, with the statewide NG911 contract.
-

Contract Negotiations

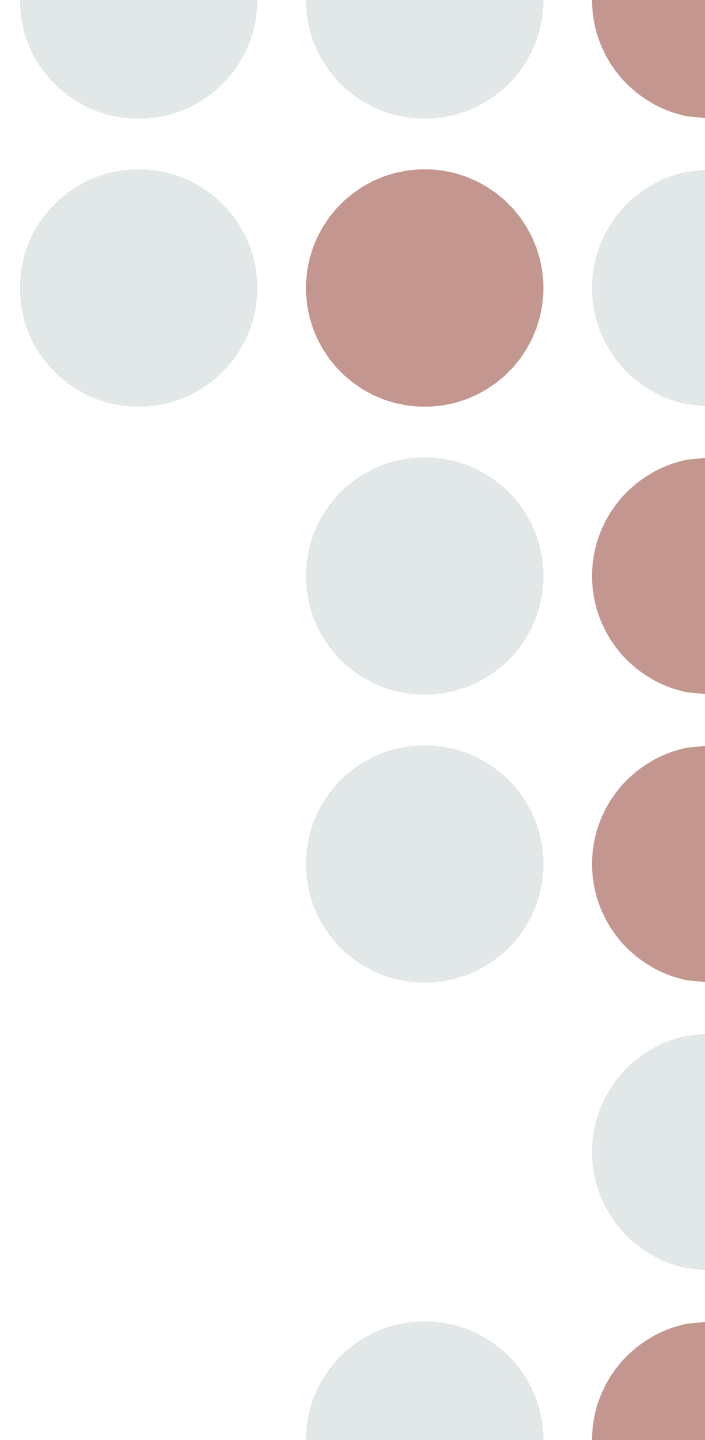
- COVID impact
 - April to June, 2020 UCA, Federal Engineering and Vesta Solutions heavily engaged in negotiations for the Utah Statewide NG911 contract for services.
 - UCA Software as a Service (SaaS) contract.
-

Kick Off Call- UCA and Vesta Solutions

- UCA met with the multiple teams that would be working on the Utah project in June 2020. The ever-looming end of life for our legacy 911 system was impacting Utah's PSAPs. Our legacy 911 contract expired March 31, 2021. We didn't have much time to get this done.
-

Phases of NG911 Project

- Hosted Call Handling
 - NG Core Services
 - Support
 - Legal Review
-



NG911 Project Breakdown-for UCA Staff

Various separate meetings quickly started with the different teams within Motorola:

- Aware Map (including UGRC to coordinate statewide mapping)
 - Call Handling
 - NG911 routing (including UGRC for PSAP boundaries for LE, Fire and EMS)
 - Automated Location Information (ALI) and 911 Database preparation
 - NG Core Services-Vesta Router migration
-

NG911-Coordination and Implementation

- UCA and Vesta Solutions jumped into the project quickly. The 30 PSAPs and 3 Dispatch Centers were split into 5 regions around the state. This was based upon legacy multi-nodes that were already in place or stand- alone PSAPs with aged equipment. Migration would take place region by region with a phased approach.
 - UCA/Vesta's first Kick Off call was completed in June of 2020 with the first Region (largest) of PSAPs on the Greater Wasatch multi-node. The groups legacy 911 equipment was past due for an upgrade. With the call volume that impacted this region, we had to get this done quickly.
 - Site visits were performed by Vesta and UCA for each PSAP and Dispatch Centers throughout July for this region. We had our eyes on Call Handling equipment installation in OCT of 2020.
-

Call Handling Equipment Planning

The Call Handling team and UCA quickly organized kick off calls with each PSAP region-introductions of the Vesta team

- Site visits were performed for the remaining PSAPs and Dispatch Centers
 - PSAP and Dispatch Center designs were drawn up for their approval
 - Demonstrations took place for each PSAP region
 - Status calls were scheduled with each PSAP and dispatch center to discuss outstanding action items, and project updates.
 - Vesta 911 training for Administrators-2 Days; Train the Trainer 1 Day was provided for each region
-

Next Generation Core Services(NGCS) Planning

- Circuits were ordered for each PSAP and Dispatch Center to replace existing 911 circuits
 - Policy Routing discussions with PSAPs and Dispatch centers, to identify back up resources
 - Meetings about diverse circuits and paths into the PSAP or Dispatch Center
 - Work with bordering states PSAPs, request for Letter of Agent (LOA) for Motorola to contact their legacy 911 provider with a goal to seamlessly transfer 911 calls with location data to a disparate 911 system.
-

Support Team

- Support calls for those PSAPs that have migrated to the new V911 system performed on live cut over date.
 - Follow up support calls
 - Tracking items to be done
-

Legal Review of Statewide Contract

- Legal review of current contract and negotiations for contract amendments
 - Face to face meetings
 - Participating Agreements
-

Call Handling Stats

- Completion of 268 PSAP positions, and 15 Dispatch Center positions=283 positions (UCA paying for 263 PSAP positions only)
 - First installation started July 28, 2021
 - Last installation completed March 31, 2022
 - Approximately 10,000 miles traveled by the UCA 911 Division to each PSAP and participating Dispatch Centers across the state.
 - Additional Dispatch center joined October 2022.
-

Vesta Router Stats

- The Vesta Router migration was the final stage to the NG911 contract.
 - Thorough testing end to end must be completed.
 - Significant delays caused by our legacy 911 provider.
 - Teleco stragglers to migrate to the NG911 Vesta Routers.
-

Obstacles:

- UCAs legacy 911 contract expired March 31, 2021.
 - Switches and Router shortages
 - Shipping Delays
 - Vendor moratoriums'
 - Transitional between the legacy environment and the NG911 i3 environment
 - Legacy vendor dragging their feet to cooperate with the migration all together
 - Delays in circuits, pushing the go live dates.
-

Learned to Pivot

- Two to Three PSAPs cut overs a week
 - Policy was put in place to wear masks while on site at any PSAP or Dispatch Center during COVID.
 - Contract Negotiations for delays
 - More personnel assigned to the UT Project
-

Now What??

Three buckets of support to the system

1-On going support and maintenance

2-New Technologies

3-PSAP Remodels or Moves

Ongoing Support

- UCAs contract includes upgrades, equipment replacement or refresh for the term of the contract.
 - Quarterly site visits
 - 24/7 Network & Security Operations Center (NSOC)
 - Training of new updates
 - Dedicated support Operations Manager and Field Technician residing inside of UT
 - Motorola's subcontract to assist when needed
-

New Technologies

As we met with PSAPs pre installation, several made requests for more than the basic product being installed such as:

- Quadrant routing
This would allow a large PSAP to break their jurisdiction into different quadrants for the purpose of less impact to one PSAP for overflow or busy routing of 911 calls.
 - Aware map
Access to insert specific layers for each PSAP that was pertinent to their jurisdiction
-

i3 and Location Based Routing (LBR)

- UCAs statewide contract requires i3 technology, but it's important to know that the system is capable of handling i3 technologies, the carriers now must push this technology in an i3 format directly to the Vesta Routers.
 - Motorola is actively working with carriers to provide this to UT.
 - Cell Carrier LBR vs Motorola statewide LBR
 - It's important to note that in any situation a PSAP is contacted directly by a cell phone provider asking for updated shape files, please refer them to Melanie Crittenden to coordinate with Vesta and UGRC.
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Remodels, and PSAP Moves

Activity has been occurring around the state, from remodeling of PSAPs, to moving into new locations.

- What's a part of the contract?
 - Planning and Implementation
 - Resources
-

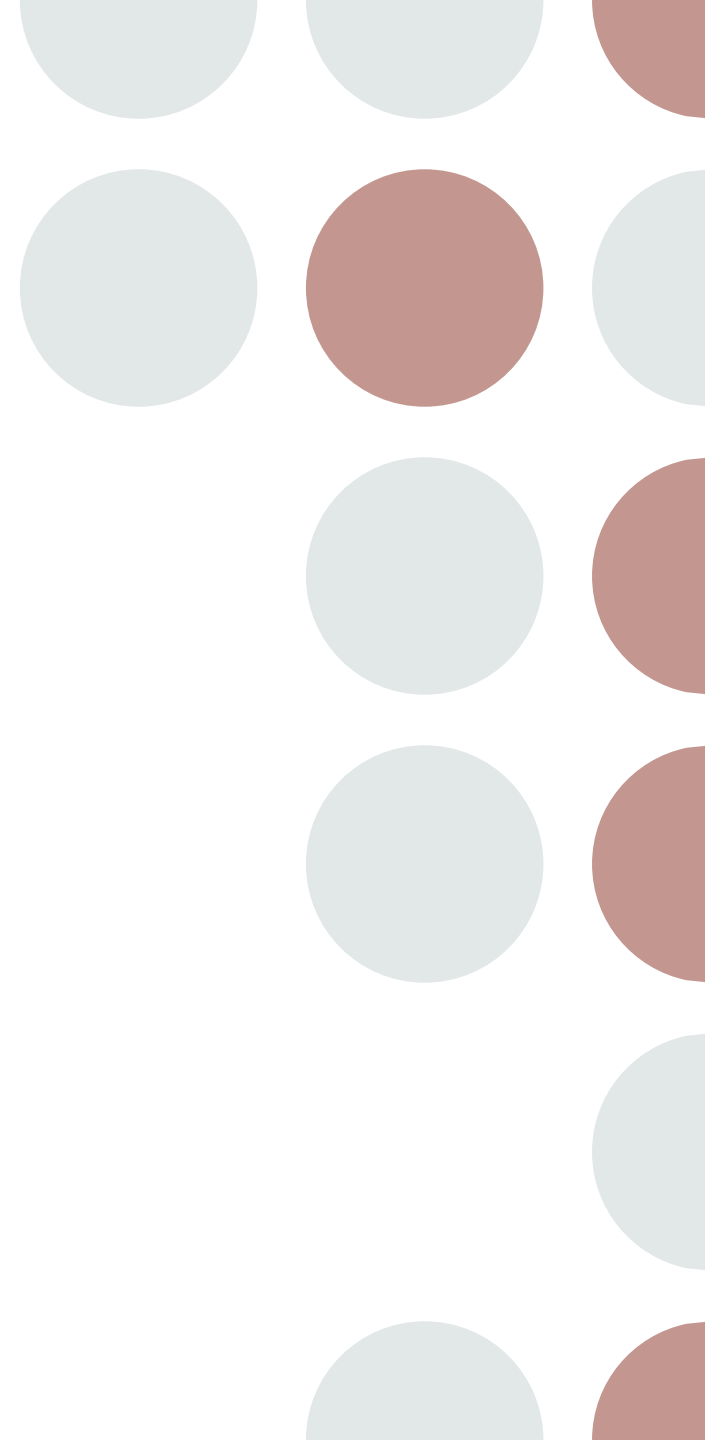
THANK YOU, THANK YOU, THANK YOU!!

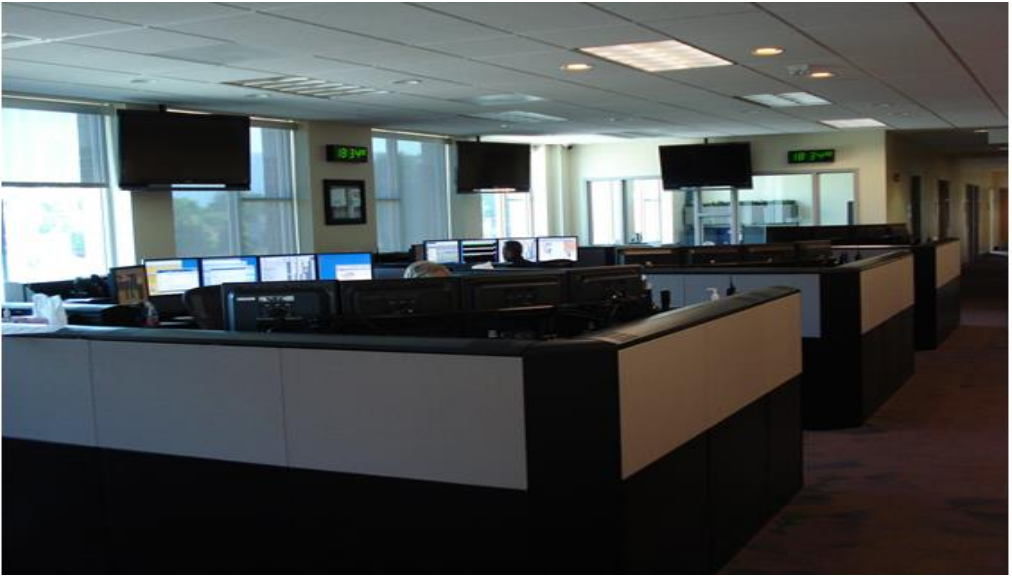
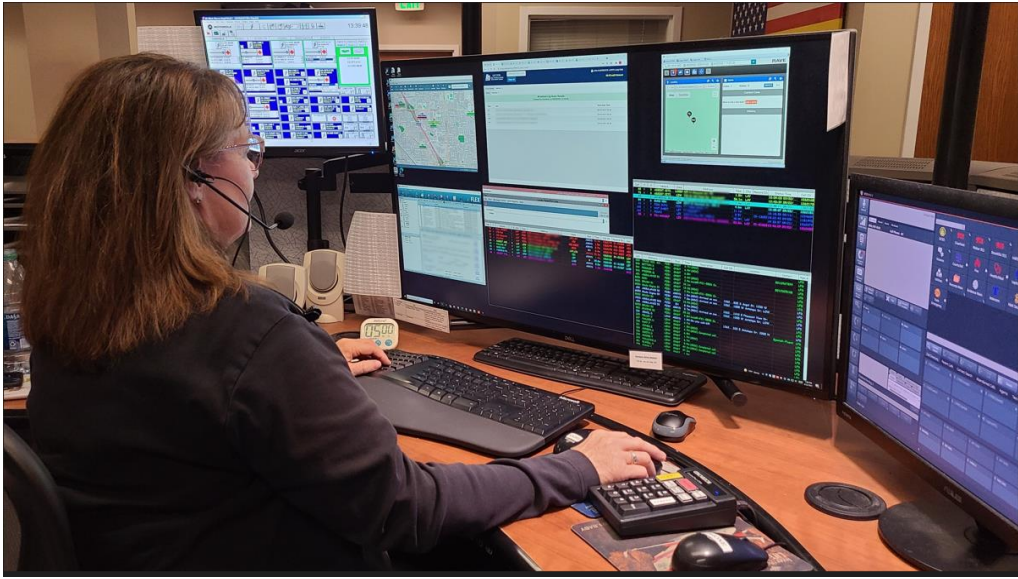
We can not thank the PSAPs enough for their support and understanding throughout this project. It hasn't been easy, but we all got through it together.



Fun Facts

- 1,054,900 911 Calls taken over the last 12 months statewide
 - Approximately 2,900 911 calls per day
 - Busiest Hours: 1500
1600
1400
1700
-







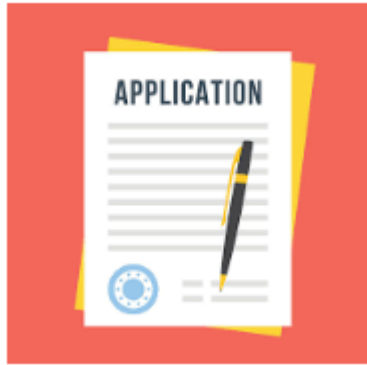
Is That All?

- Annual State Tax Commission Report
 - Utah's Annual reporting the use of 911 and E911 fees to the FCC, on behalf of the Governor.
 - Federal 911 Grant that was 100% used towards the NG9-1-1 project
 - PSAPs Text to 911 bills
 - Legacy 911 PSAP Bills
 - P25
 - Participating Addendums
 - System Alarms or issues
 - Other technology installations or offerings outside of NG911 contract.
-

Intrado/ADT SMS Calls

- Intrado approached PSAPs over several states to offer ADT alarms across SMS, instead of a voice admin call.
 - Working with Intrado to be notified when a PSAP has opted in
 - Working with ECATS
 - Working with Motorola
 - Please make sure to keep the UCA 911 Division updated on your status if you OPT in for this service.
-

PSAP Proportionate Funds



63-H-7a-304.5 Distributions From 911 Account to Qualifying PSAPs.

Effective May 12, 2020: PSAPs can apply for the proportionate funds:

(2) (a) To qualify for a proportionate share of remaining funds, a PSAP shall, for the period for which remaining funds are sought:

(i) Have answered:

(A) 90% of all 911 calls arriving at the PSAP within 15 seconds; and

(B) 95% of all 911 calls arriving at the PSAP within 20 seconds;

(ii) have adopted and be using the statewide CAD-to-CAD call handling and 911 call transfer protocol adopted by the board under 63H-7a-204(17);

(iii) have participated in the authority's annual interoperability exercise; and

(iv) have complied with the required transfer rate

Required Transfer Rate

63H-7a-304.5(1)

(f) “Required transfer rate” means:

(i) a transfer rate of no more than 2 %; or

(ii) for a PSAP with a transfer rate for the fiscal year ending June 30, 2020 that is greater than 2%, and until June 30, 2023, the transfer rate that meets the requirement for the application period under Subsection 69-2-204(3)(a),(b),or (c).

(b) “Transfer rate” means the percentage of 911 calls that are:

(i) received by a PSAP and

(ii) transferred to another location in the state.

69-2-203. Audit of Public Safety Answering Points Within a County – Reports – Consequences of Failure to Comply.

Effective 5/12/2020

(1) A county that by June 30, 2024 has not achieved a transfer rate as defined of 2% or less shall:

- a) utilize a qualified third party to conduct an audit of each PSAP with the county
- b) require the audit to be completed no later than January 1, 2025

(5) A PSAP in a county that fails to comply with the requirements of this section does not qualify for a distribution of funds under 63H-7a-304.5

Notable Notes for PSAP Proportionate Funds

- If you do not qualify for the funding, you do not need to apply for it
 - Please make sure that you do in fact qualify before certifying that you do
 - Please follow the cover sheet with step-by-step directions how to answer each question properly and what report(s) are required
 - Please review the Utah State Statute before applying and make sure that you've adopted everything that is required to comply.
-

Distributions From 911 Account to Qualifying PSAPs

- A PSAP that seeks a proportionate share of remaining funds shall submit a certified statement to the authority no later than July 31 following the end of the fiscal year for which remaining funds are sought.
 - A qualifying PSAP in a county with multiple PSAPs does not qualify for a proportionate share of remaining funds for a period beginning after June 30, 2023, unless every PSAP in that county is a qualifying PSAP.
 - 2022 Progress report: 13 of the 30 PSAPs qualified for the proportionate funds for FY23, totaling: \$1,736,166.99 in PSAP disbursements.
-

Permitted Uses of the 911 Emergency Service Account

- Each PSAP receives a \$.71 emergency service fee based on their 3-year average 911 call volume report issued to the Utah State Tax Commission January of each year. This report includes the past 3 years for each PSAP, and the report is pulled from the ECaTS reporting system.
- (*It's good to note that the local 911 fee will increase to \$.73 starting January 1, 2025 for PSAPs)

69-2-301 Public Safety Answering Point-911 Emergency Service Account-permitted uses of funds.

(1) A PSAP shall maintain in a separate emergency telecommunications service fund and funds dispersed to PSAP from the Commission under 69-2-302, from proceeds of the 911 emergency services charge levied under 69-2-402.

69-2-301 Public Safety Answering Point-911 Emergency Service Account-Permitted Uses of Funds.

(2) A PSAP may expend the money in the emergency telecommunications service fund described in subsection (1) to pay the costs of

- (a) establishing, installing, maintaining, and operating a 911 emergency service system

- (b) receiving and processing emergency communications from the 911 system or other communications or requests for emergency services

- (c) integrating a 911 emergency service system into an established PSAP including contracting with an access line provider or a vendor of appropriate terminal equipment as necessary to implement the 911 emergency services

Federal Resources:



FCC

Federal Communications Commission



- The Net 911 Act of 2008 required that FCC report to Congress annually regarding the collection and expenditure of fees or charges established by states in connection with 911 services.
 - Each year a letter is sent to each states Governor around April with a due date of the end of June.
 - The 911 Division also gets a copy of this letter and reports back with the required answers.
 - This report includes state-by-state data on 911 call volumes, number of PSAPs, 911 expenditure categories, staffing, implementation of Next Generation 911, and 911 cybersecurity expenditures.
 - Some data can be taken from ECaTS, other data is requested from PSAPs, by the 911 Division
-

Federal 911 Office



- Created by Congress in 2004
 - Part of the National Highway Traffic Safety Administration (NHTSA) and National Telecommunication and Information Administration (NTIA).
 - Mission is to provide federal leadership and coordination in supporting and promoting optimal 911 services. The Federal “home” for 911 plays a critical role by coordinating federal efforts that support 911 services across the nation.
 - Webinars- archived back to 2012
 - Newsletter
 - Documents & Tools
 - This site shows each states 911 Administrators if you google: how can I get a copy of a 911 call?; how can I register my phone for 911: www.911.gov
-

Federal 9-1-1 Grant



- Utah awarded \$1.3 million
 - This money could only be used towards upgrading to NG911 for PSAPs
 - The grant is 60% FED; 40% UCA match
 - Must have been used and completed with certain milestones by March 31, 2022
 - Progress Report: UCA has completed 3 out of 3 milestones on this grant. UCA has received reimbursements in the amount of \$1.3 million and the Federal 911 grant has been closed.
-

Resources on **911.gov**

RECOMMENDED BEST PRACTICES FOR **SUPPLEMENTAL 9-1-1 LOCATION DATA**

The National 911 Program Next Generation 911 (NG911) Standards Identification and Review

A compilation of existing and planned standards for 911 systems

911.gov

Washington, DC
April 2018

NG911 & FirstNet

Together Building the Future of Public Safety Communications

A GUIDE FOR STATE & LOCAL AUTHORITIES



NG911 Video gives



NG911 NEXT GENERATION 911 FOR LEADERS IN LAW ENFORCEMENT

A GUIDE FOR LAW ENFORCEMENT OFFICIALS



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December

12
12pm EST

NG911 Planning Ahead: Helpful Checklists and Pilot Efforts

New resources and pilot efforts are constantly under development to help 911 leaders plan for and implement Next Generation 911 (NG911), which presents stakeholders with a complex set of operational, technical, security and funding choices. The FCC's Task Force on Optimal PSAP Architecture (TFOPA) Working Group 2 developed the NG911 Readiness Scorecard - a valuable tool to help ensure effective and efficient planning for the transition to NG911.

Working Group Chairman David Holl will step through the scorecard, explaining its usefulness in surveying the areas crucial to NG911.

2022 Interoperability Workshop

- UCA attended in Washington D.C., hosted by The National Association of State 911 Administrators (NASNA), Mission Critical Partners (MCP), and the Cybersecurity and Infrastructure Security Agency (CISA)
 - 1.5 days of discussing interoperability concerns and setting interoperability goals.
 - A 911 goal established during this workshop: The 911 Division will work with CISA to promote Cyber Awareness and what CISA offers as a free service for PSAPs by November 2022. A presentation was performed by CISA for participating PSAPs on November 16, 2022.
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Resources:



- www.uca911.org
- www.911.gov
- www.fcc.gov
- www.nasna911.org
- www.apcointl.org
- www.nena.org
- www.cisa.gov





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