Introduction/Overview

This report presents a detailed report from strategic planning work completed for the State of New Mexico E-911 System on December 3-4, 2013. For the purposes of this work, NM E-911 was defined as the E-911 system throughout the state, including but not limited to the DFA/LGD E-911 program, other relevant state agencies, PSAPs, and GIS data providers.

Products in this report include:

- A draft statement of the mission of New Mexico E-911
- A draft five-year vision
- Eight strategic goals that were identified as priorities by meeting participants
- Draft action plans for accomplishing the goals
- Suggested next steps
- An appendix with detailed discussion notes:
  - Strengths and weaknesses of NM E-911
  - All responses to goal/vision questions

Meeting participants met in two groups to allow for dedicated discussion of GIS/data concerns and PSAP concerns. Strategic goals and action plans from the two days were combined where possible.
Meeting participants on December 3 or 4:

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Draft Mission Statement
The mission of New Mexico E-911 is to provide reliable, efficient communications between the public and emergency responders.

Draft Five-Year Vision Statement
The New Mexico E-911 system efficiently provides reliable communications between the public and responding agencies. State funding is stable and secure, and it is used in a fair and collaborative way that benefits everyone. A coordinated network of interconnected PSAPs uses standardized practices, professional staff, and current technology to serve people’s needs. The public and state recognize E-911 as an essential government service.

Draft Strategic Goals

- Establish a common governing structure to improve policies, processes, and procedures by enhancing communication, coordination, and cooperation, establishing guidelines and principles, and reducing internal jurisdictional conflicts. A governing body should consist of local, tribal, state, and federal entities as well as representatives from all pertinent emergency response disciplines.

- Enhance current legislation to establish New Mexico's statewide E-911 program in legislation as a comprehensive, essential government service.

- Maintain stability and security in the 911 Fund through planning and transparency.

- Reintroduce legislation to implement a surcharge of VOIP, prepaid cell phones, and other emerging communications technologies.

- Create a realistic plan to transition to current and forecasted technology for the E-911 system.

- Increase professional development and personnel training for E-911 professionals.

- Use existing technology to improve communication between PSAPs, including technology to permit instant communication between centers.

- Create complete and accurate mapping and addressing statewide, including standard attributes, naming, rows, and topological rules.
Draft Action Plans

**Goal:** Establish a common governing structure to improve policies, processes, and procedures by enhancing communication, coordination, and cooperation, establishing guidelines and principles, and reducing internal jurisdictional conflicts. A governing body should consist of local, tribal, state, and federal entities as well as representatives from all pertinent emergency response disciplines.

**Justification:** To provide a framework, structure, consistency, and coordination.

**Lead Parties:** DFA/LGD, Statewide Interoperability Working Group (DoIT), NMAC 911 Directors Affiliate

**Action Steps:**
1. Establish Governance Development Group
   a. Identify executive sponsorship
   b. Identify chair and vice-chair
   c. Identify stakeholders
   d. Create structure
   e. Involve subject matter experts as necessary
   f. Develop charter (establish authority, purpose, objectives, etc.)
2. Identify policies, procedures, legislation, rules, etc. to be addressed by the Governance Development Group for the E-911 system

**Goal:** Enhance current legislation to establish New Mexico’s statewide E-911 program in legislation as a comprehensive, essential government service.

**Justification:** Many separate pieces of legislation impact E-911 and need to be looked at comprehensively to support statewide E-911.

**Lead Parties:** NMAC 911 Directors Affiliate, DFA/LGD, associations of local governing bodies (NMAC, NMML, tribal entities), DoIT

**Action Steps:**
1. Identify stakeholders and bring them together to meet as a working group
2. Identify the legislation that requires enhancements
3. Develop plan with timeframe to improve legislation

**Goal:** Maintain stability and security in the 911 Fund through planning and transparency.
Justification: Funding is the foundation for the statewide E-911 program.

Lead Parties: DFA/LGD, NMAC 911 Directors Affiliate, DoIT

Action Steps:
1. Maintain visibility of proposed changes to legislation
2. Develop spending plan for monthly reoccurring expenses
3. Develop plans for projects, including project timelines and timely budget adjustments. Put standardized project management tools in place.

Goal: Reintroduce legislation to implement a surcharge of VOIP, prepaid cell phones, and other emerging communications technologies.

Justification: Increased funding is necessary to keep the state E-911 system up-to-date and prepare for Next Generation 911. A surcharge on additional technologies places a fair burden on all beneficiaries of E-911.

Lead Parties: DFA/LGD, NMAC 911 Directors Affiliate, NMAC GIS Affiliate

Action Steps:
1. Research other state surcharges, potential revenues, and other technologies that may need to be included in such legislation. Prepare report on benefits for the state.
2. Review language of previous bill and rewrite as necessary
3. Educate NMML, DoIT, TRD, Governor’s office, BOF, etc., and gather support
4. Find sponsor to carry bill through 2015 legislative session

Goal: Create a realistic plan to transition to current and forecasted technology for the E-911 system.

Justification: To improve the quality and availability of information to/from the caller and to/from the responder.

Lead Parties: DFA/LGD, NMAC 911 Directors Affiliate, DoIT

Action Steps:
1. Complete gap analysis of statewide systems, including equipment, software, mobile devices and training requirements used daily by the GIS-to-PSAP system and by responders
2. Determine need in order to address highest priorities first, bringing everyone up to a basic level
3. Develop policies, procedures, and a plan to proceed
4. Conduct training workshops on available technology

**Goal:** Increase professional development and personnel training for E-911 professionals.

**Justification:** To improve public safety and employee welfare. To improve the competency of the E-911 workforce across the state. To prepare the workforce to address emerging 911 technology.

**Lead Parties:** NMAC 911 Directors Affiliate, PSAP directors, state and local government

**Action Steps:**
1. Establish collaborative effort between PSAP directors and local and state government
2. Expand reach of existing training programs in place, e.g. via video streams and shared training
3. Conduct study on benefits of reclassification of employees
4. Utilize existing professional development services
5. Consider increases in personnel that may be necessary to handle new technology, e.g. text-to-911 and video streaming

**Goal:** Use existing technology to improve communication between PSAPs, including technology to permit instant communication between centers.

**Justification:** Communication is a necessary daily part of PSAP operation

**Lead Parties:** PSAP directors, a state-level 911 coordinator, local government

**Action Steps:**
1. Conduct gap assessment to identify communication needs between PSAPs statewide
2. Develop specifications for the technology necessary to improve interoperability
3. Secure funding, including but not limited to federal or state grants and local funds
4. Purchase necessary technology and integrate it into centers statewide
5. Train employees in use of new technology
**Goal:** Create complete and accurate mapping and addressing statewide, including standard attributes, naming, rows, and topological rules.

**Justification:** Complete and accurate mapping and addressing is necessary for successful deployment of Next Gen statewide.

**Lead Parties:** DFA/LGD, CIO, GIS Affiliate, local governing entities

**Action Steps:**
1. Create draft of addressing standards for review by GIS Affiliate
2. Finalize standards and make available to all local entities
3. Create task force to provide support to local entities during implementation of new standards
4. Conduct training workshops biyearly or yearly
5. Report on quality control and tracking at quarterly meetings
Next Steps

- DFA/LGD staff will present the draft plan at the NMAC winter conference or share the plan with chairs of relevant NMAC affiliate groups.
- The plan will be revisited at the quarterly 911 Directors and GIS affiliate meetings.
- Lead entities for each action will contact and involve other agencies and entities that were not represented at the strategic planning session.
- A recommendation was made to consider a larger gathering of affiliate groups, emergency managers, local governments, and other state agencies to encourage collaboration, coordination, and transparency.
- DFA/LGD staff or other representatives will work to align this plan with other strategic plans, such as the Statewide Communications Interoperability Plan, and meet in a joint session to discuss the Statewide IT Plan. Jacque Miller, DoIT, will take the lead on this coordination.
Appendix: Strengths and Weaknesses Analysis

- What are the strengths of NM E-911? What is it good at?
  - Rapid access to first responders and vital resources
  - Large amounts of core data
  - Save lives and property
  - Know local situations
  - Verbal communication skills
  - Tools to do work correctly
  - Volunteer base is huge and dedicated
  - Dedicated dispatching
  - NM is ahead of others in 911 system
  - Excellent technology
  - Availability of coverage for landline and wireless is good
  - Well-equipped, trained and dedicated dispatch and support staff
  - Strong affiliate
  - MPLS network
  - Collaborative environment
  - Good redundancy and backup

- What are the weaknesses? How is it vulnerable?
  - Communications. Being reliable to take calls.
    - Have to have telephone line to make call, receive call
    - Need electricity (whole centers may be down)
    - Big outage 3-4 years ago
    - Don’t have redundant systems in place
  - Addressing. Challenge to get addressing correct. People don’t want to change addresses.
    - Delaying response. Rely a lot on ANI/ALI systems.
    - Having addresses posted in the field, so people can be found.
  - Equipment. Aging equipment is an issue. Staff sitting on old, beat-up chairs.
  - Have good core data, but not able to push it out to the first responders. People responding to the emergencies don’t have the ALI data. Relying on people to flag them down in the road.
  - Equipment, interoperability, data.
  - Data information sharing at multiple levels of government, across jurisdictions, interagency.
  - GPS jammers
  - Stability of platforms
  - Lack of redundancy
  - No established equipment standards
  - No statewide standards of service
  - Wireless coverage
  - Terrain issues
Lack of appropriate information sharing
Money and funding
Inconsistency in applied funding
Lack of transparency on funding
NG plan – lack
Security and attack vulnerabilities
Public expectations
Lack of true workarounds
Vendor support of infrastructure

- **What changes and obstacles will the program face in the next five years?**
  - Next Gen technology. Context of federal standards and initiatives, specifically First Net and their perceived logical role. Expectations of being able to send data, but don’t know how to manage that data at dispatch centers.
  - Antiquated rules and statute on managing funding and implementation. Need to revisit rules and governance models.
  - Lack of Governing rules in place
  - Problem with turnover in terms of educated data sources – education and training gap
  - Critical data gaps for Next Gen, e.g. fire law EMS boundaries. Many PSAPS do not have these boundaries created.
  - Financial resources are weak.
  - Institutionalization/adoptions of new standards for GIS. Had recommended standards in place, and they were ignored.
  - Sometimes conflicting fed/state/local/NENA/postal standards
  - To deploy Next Gen, need better state and local level coordination (btw state and local and at state level)
  - Phone surcharge one of lowest in nation
  - Staffing for PSAPS. Need to have someone monitoring text messaging. Database manager. 1-2 IT staff.
  - Storage, management, custody, security, access to data.
  - Funding stream – integrity problems. Can be raided by other agencies and legislators. Need to implement protection for integrity of funding. E911 Fund supports E911. People who implement locally should have “hammer” in decisions.
  - Maintain/retain fund at local level as it is now, for local governments.
  - Definitive plan of Next Gen and how to get there.
  - Meet expectations of public, without having expectations of public drive program.
  - Forced to be reactionary. Going to create conflict because can’t meet increasing expectations. Not meet expectation, but manage expectations.
• **What are opportunities that are recently available or that might become available that the program could capitalize on?**
  o Surcharge. Currently only on cell phones and landlines. Need to be added to VOIP and prepaid.
  o Transition to IP digital system
  o Federal funding
  o Federal technical expertise. OEC, part of Homeland Security. NIST.
  o MPLS, sizing to PSAP needs
  o Help and support from federal government in terms of funding and other technical support, for instance OEC contacted re governance study
  o Surcharge for VOIP and prepaid and other funding
    ▪ Try to get ahead of curve re VOIP and prepaid, and make it any device that can access 911 because of changing technology
  o Can gain knowledge and lessons learned from each other and from other states
  o Technology and equipment will be changing
  o Mobile apps
  o Need to establish procurement vehicle for purchasing Next Gen equipment and technology
  o DFA continues to offer funding for training and equipment
  o Recently added different state agencies, e.g. DOIT and Homeland Security. With collaboration, will get better 911 product.

• **What are the greatest challenges the E-911 system has in achieving its mission?**
  o Rules and regulations are outdated
  o Training – huge obstacles for local training, cross-training, no minimum standards
  o Redundancy and resiliency, including backups, geographical limitations to radio systems,
  o Statewide coordination. On statewide level, local levels, all levels.
  o Funding. Federal, state, local. Pooling of resources.
  o Planning.
  o Systems have been vendor-driven.
  o Move toward Next Generation. Unfunded mandate. Need to evaluate benefits to state of NM.
  o Still problems with enhanced 911. Need to fix those before moving forward.
  o Fast-changing technology
  o Funding
  o Changes in technology
  o Public perception, lack of knowledge, expectations
  o Regulations/governance. DFA, law enforcement, DOH, local government issues pulling in different directions.
• **In E-911, what are the greatest needs in NM?**
  
  o **Staffing**  
    - Maintaining current workforce. Once trained, create incentives to keep them on staff.  
  o Backup centers not fully equipped or nonexistent  
  o Standardization  
  o Enhancing communication between primary and secondary (backup) PSAP  
  o Need education and outreach to multiple audiences  
  o Need instructors  
  o Need cross-training  
  o Better PR  
  o More money  
  o Better coordination  
  o Spending money wisely  
  o Dedicated (or shared) individual for GIS data at each county  
  o Getting ALI to first responders  
  o Better technology for rural PSAPs. More up-to-date equipment.  
  o Signage within communities  
  o Improved funding strategy  
  o Utilize other funding sources out there  
  o Plan  
  o Governance  
  o Better coverage from wireless providers
Appendix: Complete Responses to Goal/Vision Questions and Dot-Voting Results

Questions:
- Five years from now, what would you like to say had been accomplished by NM E-911?
- Five years from now, what should be happening differently in NM E-911?
- Five years from now, what changes should be made?
- Five years from now, what would you like to see as the reputation of NM E-911?

December 3 Responses:
1. Some form of instant communication for each PSAP, instead of having to pick up telephone or write email (2)
2. Less fear and more knowledge of what 911 is (2)
3. More equipment available for PSAPs to purchase (3)
4. Strong collaboration and coordination at all levels (4)
5. Complete and accurate mapping and addressing statewide (8)
6. Entire state has migrated to Next Generation 911 (1)
7. In-car routing displays for emergency vehicles (5)
8. Next Gen should be implemented, 2-3 test areas. (2)
9. Better interoperability between PSAPs (5)
10. Governance. We need some. Policies that are current and realistic. Input of end-use community in that governance model. (13)
11. Better planning, more planning (0)
12. Gathering of consensus among all state, local, county entities on business and technical goals for existing E-911 and Next Gen (2)
13. Reputation that we are using our 911 Fund in a fair and collaborative way that benefits everyone equally (15)
14. Standardization in terms of policies and procedures to create opportunities for economies of scale (6)
15. Needs assessment of infrastructure to make sure you’ll get same service across NM (2)
16. Better communication among all organizations (0)
17. Responders have accurate map of incident sites (0)
18. True statewide 911 system. Interconnected, sharing. (3)
19. Better utilization, more utilization, and locating grant funding (1)
20. Standards for addressing in place and implemented (7)
21. Errors in addressing and mapping corrected (1)
22. Uniform set of addressing standards adopted by all (8)
23. Rules and policies across the board statewide (2)
24. Improve technology and training to go along with that technology (4)
25. GIS and MSAG 100% matching statewide (2)
26. Legislation approached again about VOIP and prepaid surcharge (8)
27. Make more data available to emergency responders while en route to call. Map of location, aerial photography, floor plans. (4)
28. GIS data acquisition more streamlined, more efficient. Standards for that. (2)
29. For ALL counties to participate in submitting E911 GIS data (1)
30. Leader in effective and efficient deployment of Next Gen 911 (1)
31. Legislation that lets us move forward with Next Gen technology and operations (6)

December 4 Responses:
1. Solid plan for transition to current and forecasted technology (8)
2. Improve stability and consistency in 911 system (5)
3. Redundancy in all areas (6)
4. More stable funding source. Secure funding source – can’t be raided (16)
5. Governance to ensure same standards throughout the state. Includes policies, procedures, funding strategy. (10)
6. Accomplished every PSAP having CTI at level that it should be (0)
7. Stable network of interconnected PSAPs that work well together using standardized practices. Interoperability. (8)
8. Improved focus on people, improved training. Dispatching as desired professional career path. (14)
9. Approaching legislation on surcharge for VOIP, etc. Capture other technologies. (10)
10. Plan for security for Next Gen 911 for PSAPs throughout the state (1)
11. All GIS providers have same training (1)
12. Public awareness so they know purpose of 911 (2)
13. Improved collaboration and coordination and cooperation and communication at all levels (8)
14. Updates to legislation language that supports direction the state is going. 911 established in legislation as essential government service. (13)
15. Resolving equity in the state – equal access to technology and information (2)