9-1-1 Technology Roadmap

Vision

- To build a resilient, interoperable, and future-ready emergency communications system that ensures rapid response, seamless coordination, and public safety across Oklahoma.

Strategic Priorities

1. Statewide Mapping & GIS Integration

- **Objective:** Establish a unified, accurate, and continuously updated statewide GIS dataset to support 911 operations.
- **Key Actions:**
  - Standardize address data collection and maintenance across jurisdictions.
  - Deploy a central GIS repository accessible by all PSAPs.
- **Pros:**
  - Improves caller location accuracy and response times.
  - Creates consistency and eliminates data silos.
  - Supports Next Generation 911 (NG911) compliance.
- **Cons:**
  - High upfront cost for data remediation and repository setup.
  - Requires ongoing coordination between multiple agencies.

2. Satellite Emergency Communication Infrastructure

- **Objective:** Ensure uninterrupted emergency communication during outages of terrestrial networks.
- **Key Actions:**
  - Identify strategic locations where emergency satellite terminals can be available.
  - Train staff on usage, testing, and maintenance.
  - Develop a policy for deployment, usage, and operational needs.

- **Pros:**
  - Provides redundancy during outages of cellular and landline systems.
  - Critical for rural, remote, and disaster-affected areas.
  - Independent of terrestrial infrastructure.
- ï**Cons:**
  - Ongoing subscription/service costs can be high.
  - Limited coverage indoors or in heavily obstructed areas.
  - Requires periodic testing to maintain readiness.

3. Push-to-Talk (PTT) Technologies

- **Objective:** Enable secure, real-time voice communication across agencies and jurisdictions.
- **Key Actions:**
  - Deploy PTT over LTE and/or LTE/FirstNet for interoperable communication.
  - Integrate with legacy radio systems to ensure compatibility.
  - Establish common talk groups and protocols for multi-agency incidents.
  - Ensure the application and device is vendor agnostic.
- **Pros:**
  - Faster coordination between agencies and responders.
  - Scalable and cost-effective compared to traditional radio systems.
  - Enhances interoperability during multi-jurisdictional incidents.
- **Cons:**
  - Dependent on cellular/LTE coverage for reliability.
  - May require device upgrades or new equipment.
  - User adoption and training are critical for success.

4. CAD To CAD

5. **Objective:** Deploy a CAD to CAD model that allows all PSAPs within the State of Oklahoma to connect their CAD to a centralized hub.

6. **Key Actions:**

- Establish seamless CAD-to-CAD interoperability between:
  - Public Safety Answering Points (PSAPs)
  - Emergency Communications Centers
  - Response agencies
- Improve incident response coordination across jurisdictions
- oReduce call-processing delays
- Eliminate redundant data entry
- Enhance situational awareness for all participating entities
- Utilize a cloud-hosted design to eliminate single points of failure for all participants.

7. **Pros:**

- Faster dispatch and response times
- Elimination of duplicate call entry
- Improved accuracy and situational awareness
- Better data for analytics and QA
- Stronger mutual aid and interoperability

8. **Cons:**

- High maintenance fees
- Complex integration
- Increased points of failure
- Training challenges
- Data duplication and/or conflicts
- Multiple interfaces increase exposure to cybersecurity attacks