

# KANSAS CITY REGIONAL 911 SYSTEM



# KANSAS CITY REGIONAL 911 SYSTEM

- System Overview

- What is NG911?

- MARC's Responsibilities

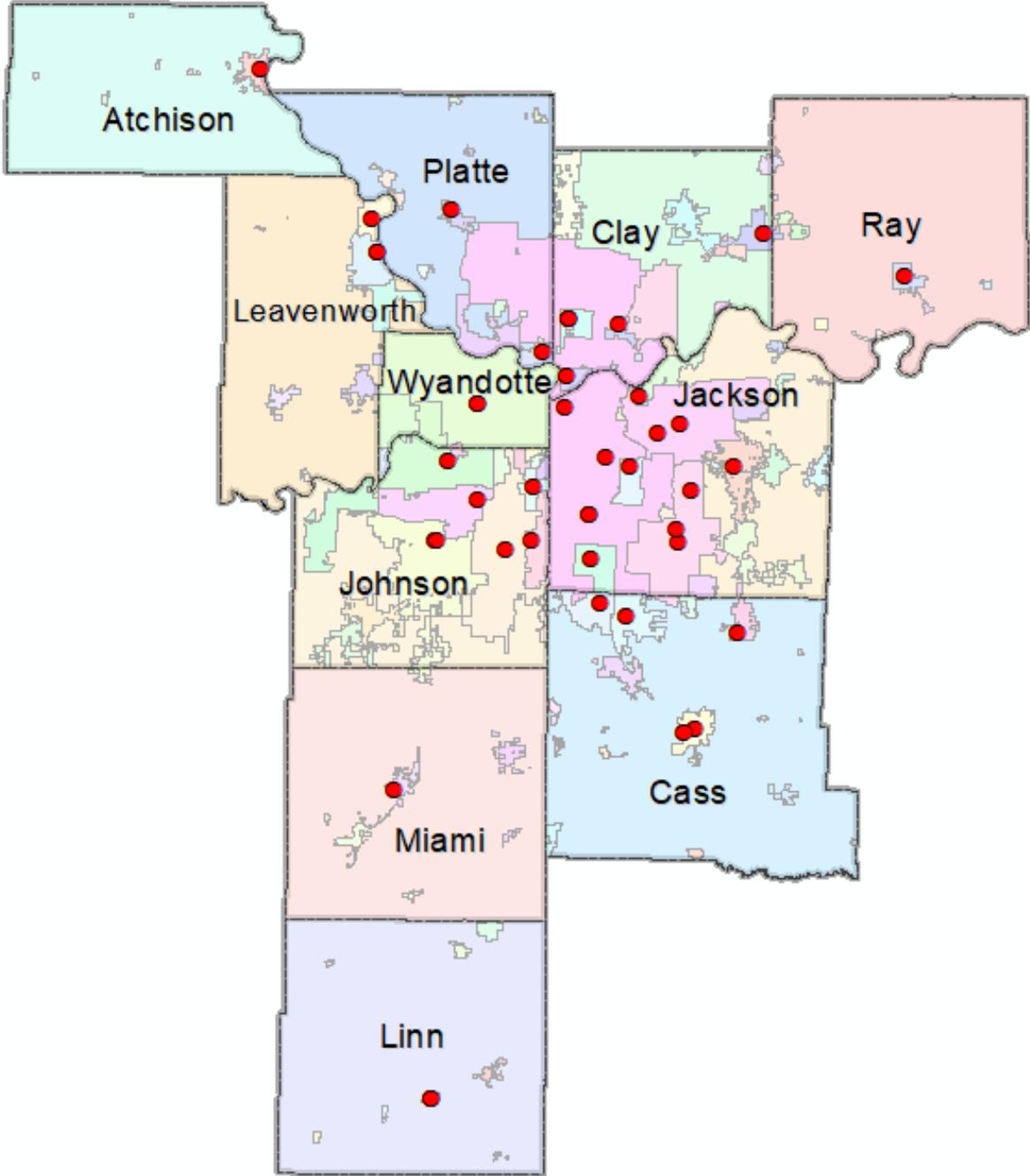
- Operations
      - Technical Services
      - Data Analysis and Mapping

- Future 911 Projects

- NG911 Benchmark

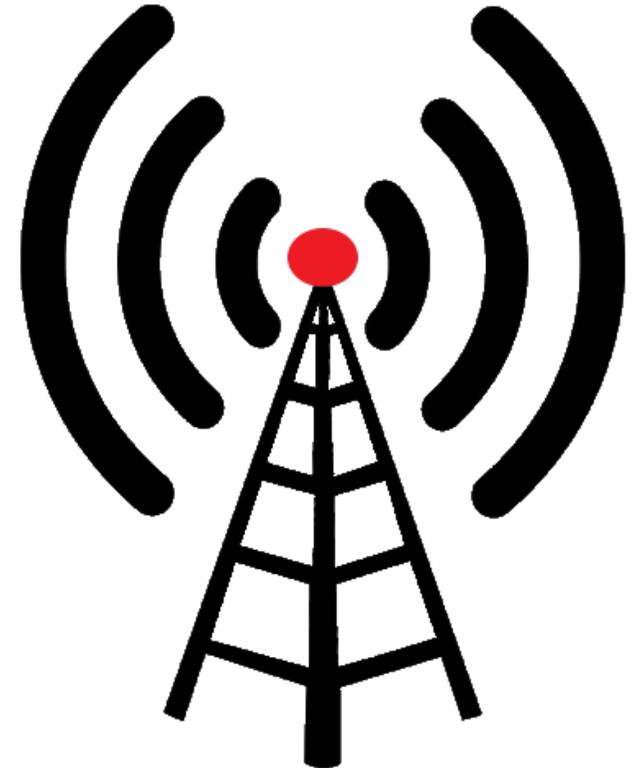
- 911 Call and Map Demo

# Regional 911 Call Center Locations



# Kansas City Regional 911 System

- Connects all **Public Safety Answering Points (PSAPs)** in the system.
- **Allows transfer of 911 calls and data** to any PSAP in the region.
- All PSAPs have the **same 911 equipment and software**.
- In the event a PSAP must evacuate, **911 calls or personnel can move** to another regional 911 location.
- **Regional backup center locations:**
  - South Patrol (Kansas City)
  - Overland Park
  - Johnson County
  - Platte County
  - Independence



# Kansas City Regional 911 System

- Duplicate Digital Selective Routers handle all calls in region.
- One system serves all PSAPs.
- Duplicate connections to all PSAPs.
- All costs for 911 system shared with **11** participating counties:
  - Hardware
  - Software
  - Network
  - Phone Bills
  - Coordination
  - Training
  - Location Data and Mapping

# Public Safety Communications Board

**MARC Board of Directors authorized the creation of the Interlocal Agreement between MARC and nine counties**

## **Public Safety Communications Board**

Oversees the Regional 911 System

Approves the annual budget

**Network, hardware and software to deliver and answer 911 calls provided**

**911 regional answering positions = 233**

# What MARC is responsible for

## Operations

- Annual Budget
- All 911 Bills
- Allocation Revenue Collection
- Purchasing
- 911 Outreach
- Training

## Technical Services

- Installation of all 911 Hardware and Software
- Network CyberSecurity

## Data Analysis and Mapping

- Cell Sector Mapping
- Master Street Guide
- Maps and Map layers
- Carrier Coordination

# What MARC is responsible for

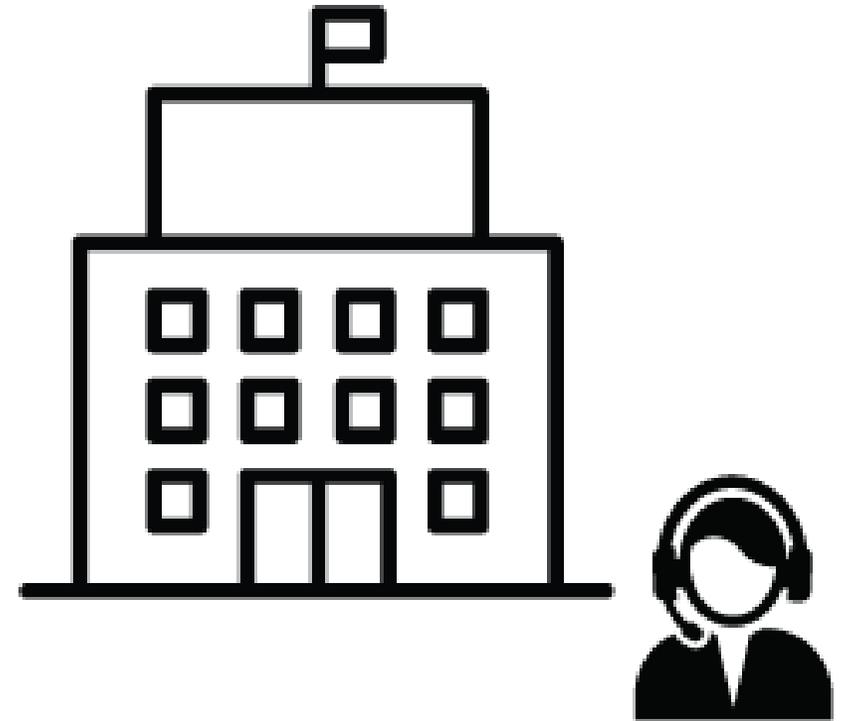
- **Receive the 911 call from the phone carrier to the region's selective routers.**
- **911 call delivery from selective router to PSAP based on call location.**
- **All network, hardware and software assets that delivers the 911 call to the PSAP.**
- **All hardware and software installed in the PSAPs to obtain the 911 call and the mapping of the call location.**
- **Maintenance, repair and lifecycle replace of all 911 assets.**



# Local 911 call center responsibilities

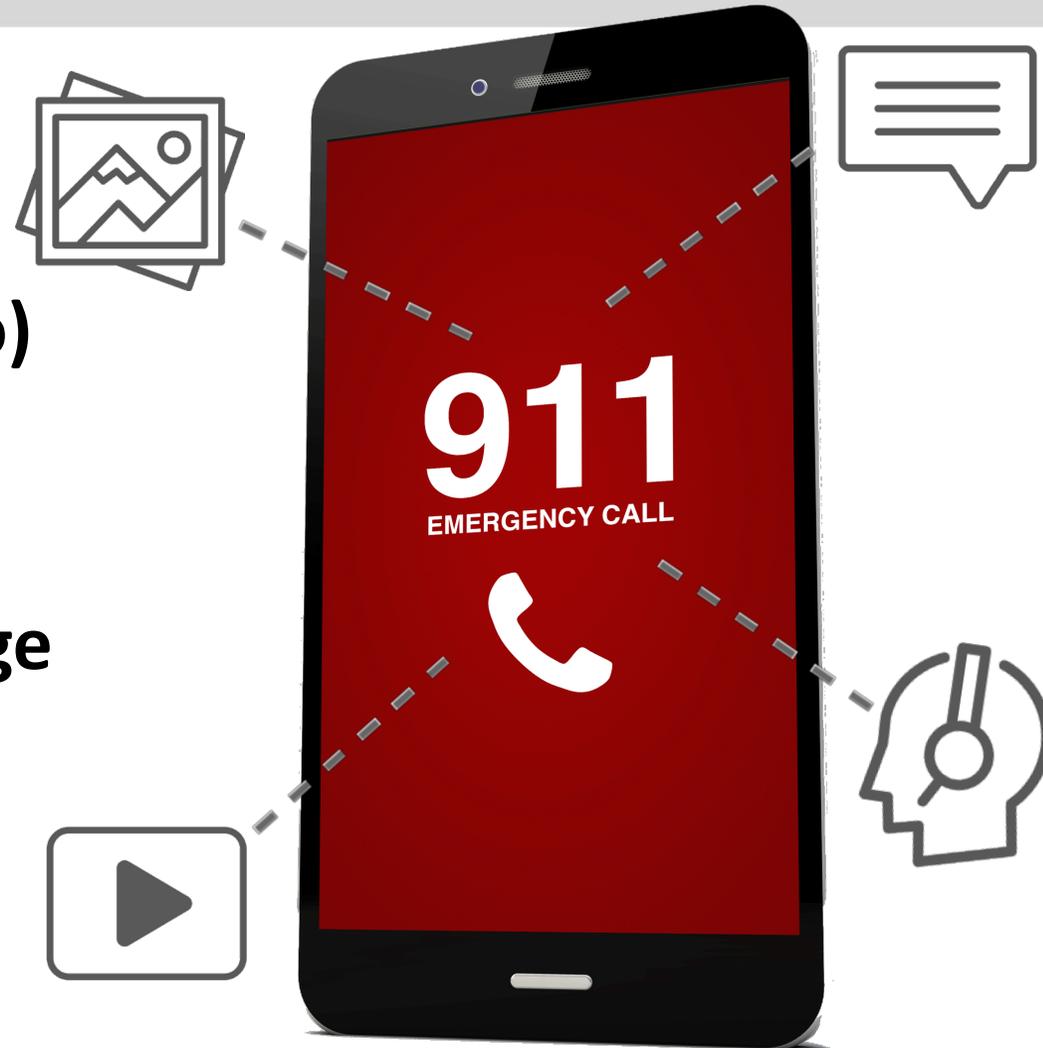
**Once 911 call is delivered to the PSAP, all other actions are the responsibility of the PSAP agency.**

- **Staffing to answer call**
- **CAD data entry**
- **Dispatch of resources**
- **Call recording**
- **Facility operations**



# The goal of NG911 is to...

**Enable the general public to make a 9-1-1 “call” (any real-time communication – voice, text or video) from any wired, wireless or IP-based device, and allow the emergency services community to take advantage of advanced call delivery and other functions through new internet working technologies based on open standards.**



# Regional 911 System Technology

**Motorola Digital Router Version 1**

**Motorola Digital Router Version 2**

**Motorola VESTA 9-1-1 Call Handling Solution**

**Text to 911 available in region since 2016**

**ESInet**

**Maintained by MARC Technical Services 24/7**

# Regional 911 System Technology

**Cybersecurity for the 911 system in place**

**Closed system**

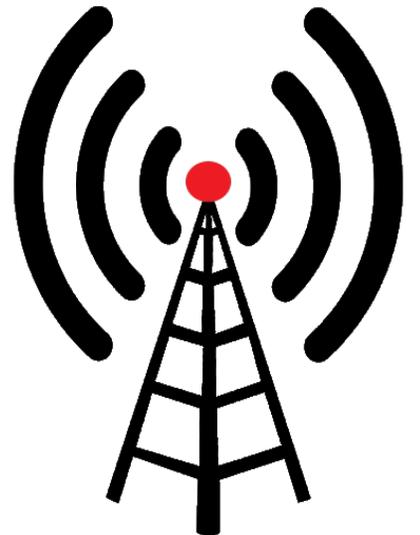
**Few connections to the Internet**

**Firewalls**

**Always threats and active attempts to hack system**

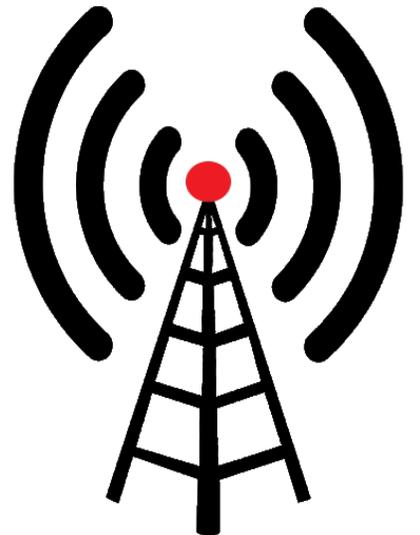
# Kansas City Regional 911 Current Projects

- **Motorola Projects**
  - **Automated Abandoned Callback for KCMO PD.**
  - **Motorola Queue Selector (Auto Attendant) for KCMO PD.**
  - **911 Workstation Replacement.**
- **GeoComm Maps**



# Kansas City Regional 911 Future Projects

- **Motorola Projects**
  - **911 server replacements**
  - **Citizen Input**
  - **Disaster Recovery**
  - **Smart Transcription**
- **RapidDeploy Eclipse Analytics**

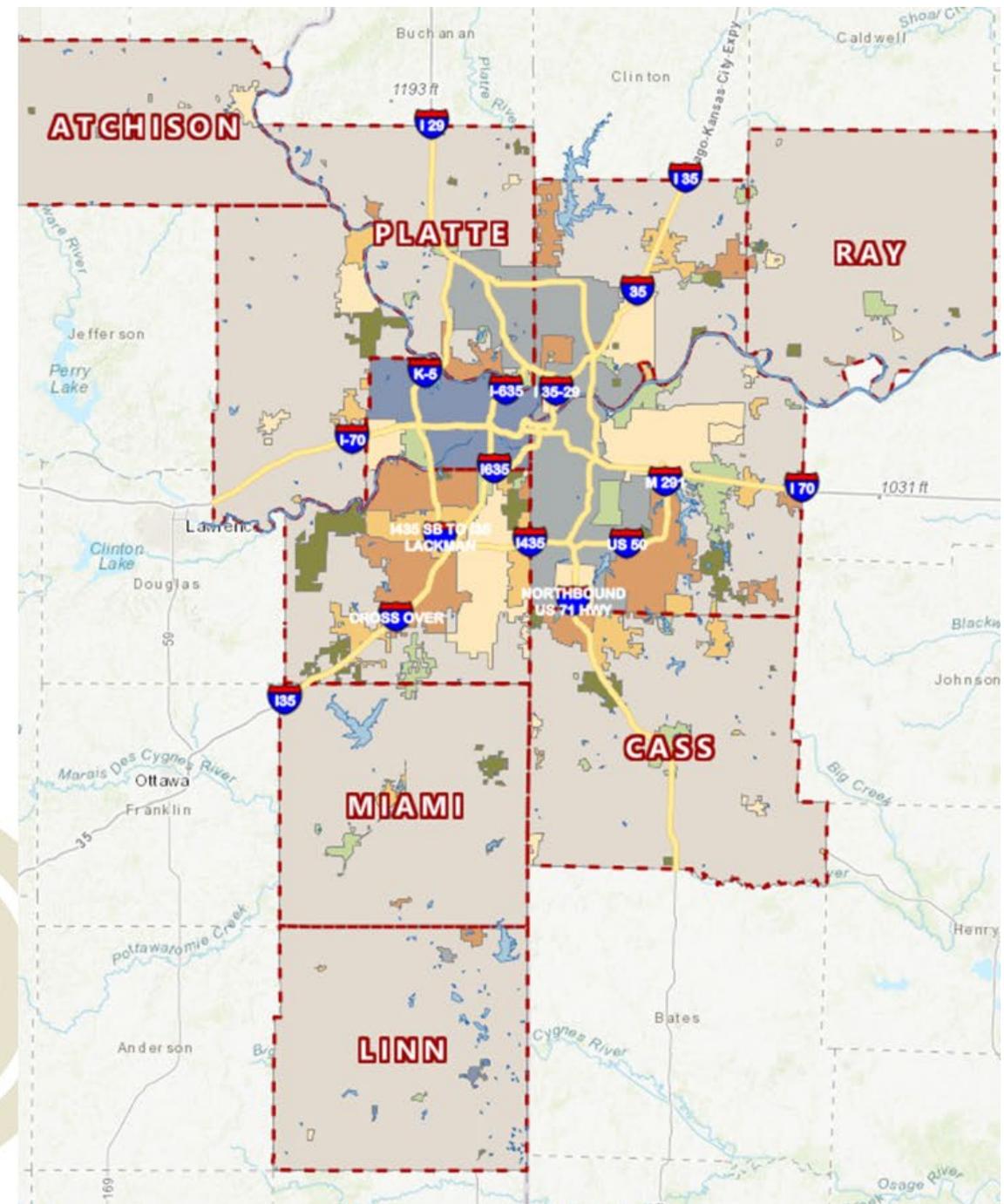


# 911 Data Analysis and Maps

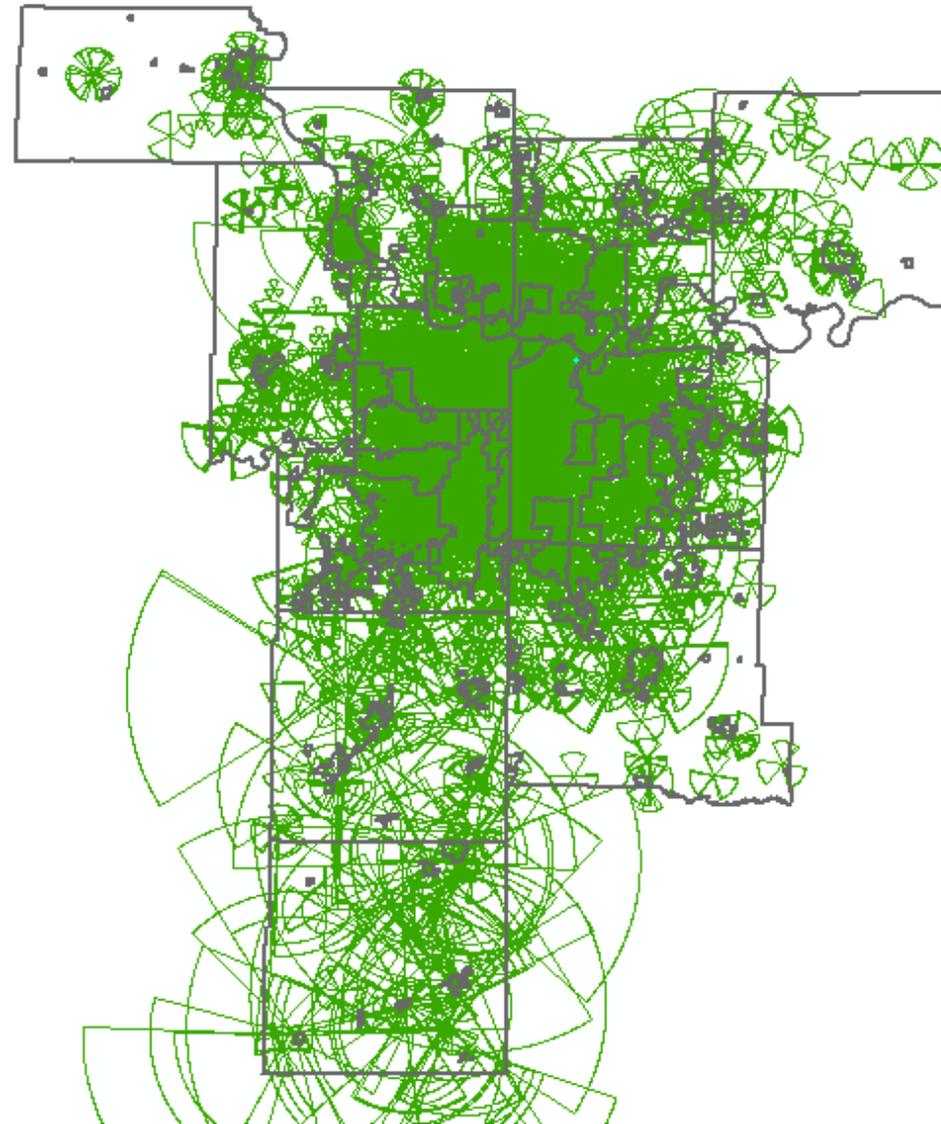
- **Installed in every PSAP**, on each workstation.
- Installed and maintained by **MARC Technical Services**.
- Work with all city/county address and/or mapping contact.
- Maps **911 call based on location data** provided by the phone carriers.
- **Cellular sector mapping** (23,412).
- Map overlays - 15 data layers.
- **Rapid SOS** - with access to additional data points, can provide supplemental location information for 911 calls.



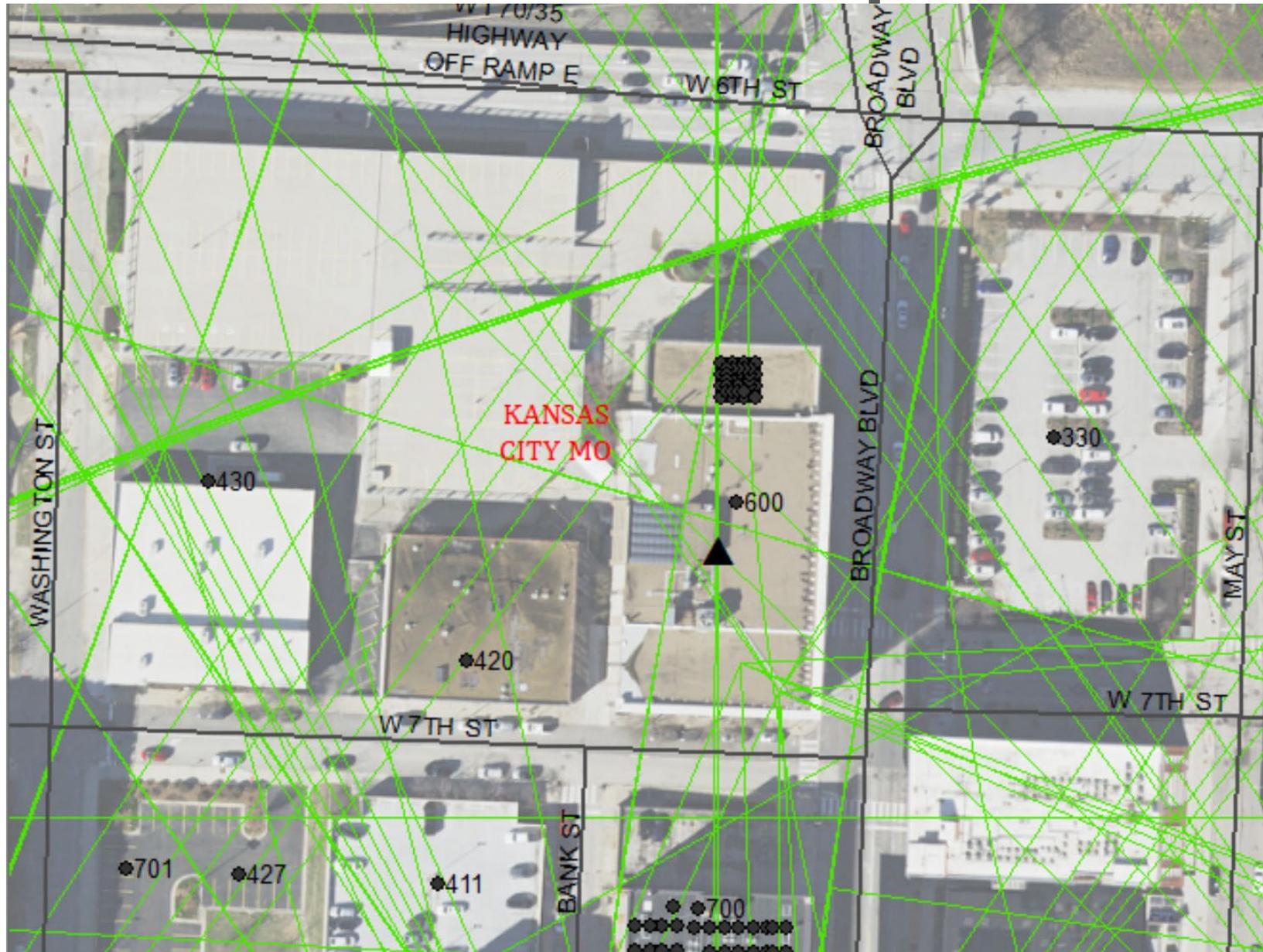
# GeoComm Maps



# 911 Cellular Coverage Map



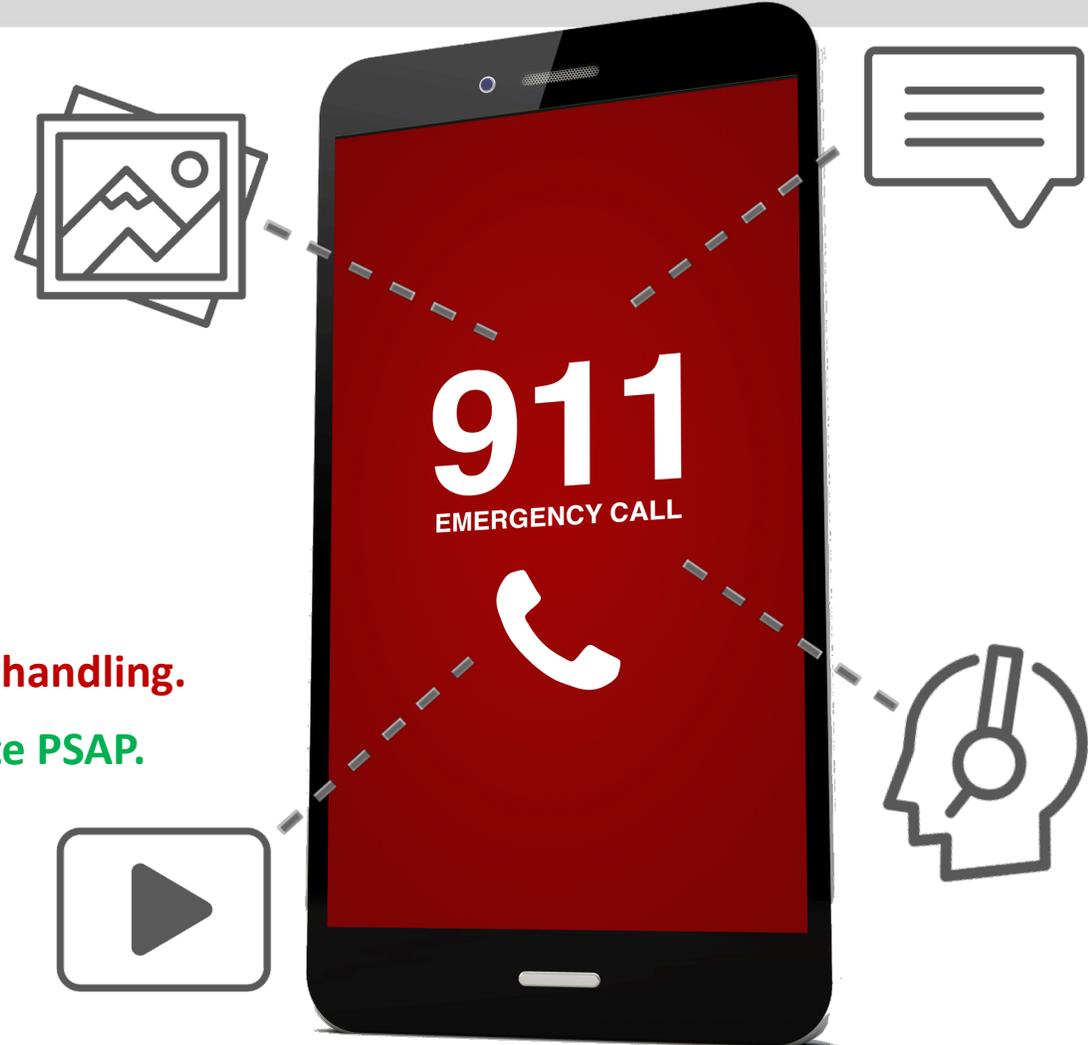
# 911 Cellular Map



# Benchmark for NG911

NG911 is a secure, Internet Protocol (IP)-based, open standards system comprised of hardware, software, data and operational policies and procedures that:

- Provides standardized interfaces from emergency call and message services to support emergency communications.
- Processes all types of emergency calls - **voice, text, data and multi-media.**
- **Acquires and integrates call data useful to call routing and handling.**
- **Delivers emergency calls, messages and data to appropriate PSAP.**
- **Supports communications needs for coordinated incident response and management.**
- **Interoperates with services and networks used by first responders (and other 911 systems) to facilitate emergency response.**



# 911 Call and Mapping Demo

**Live 911 Call from 600 Broadway**

A large, dark red arrow pointing downwards, connecting the first box to the second.

**Information the call-taker is provided  
in 911 call handling software**

A large, dark red arrow pointing downwards, connecting the second box to the third.

**Map showing what the call-taker sees**