Overview of NG911 in the State of Missouri

Missouri 911 Service Board

Introducing Missouri 911 Service Board

- The role we play
- How we can help

NG911 in Missouri

- As of December 2025, nearly 60 counties benefited from 911 Service Board grants to implement advanced 911 technology to enable more capable, and efficient operations.
- Prior to the Board projects, state funding and federal funding, 7 counties used a 10-digit phone number. Now, all PSAPs utilize 911.
- The modernization in the state allows for text-to-911, and increased inclusivity.

NG911 in Disasters & Major Emergencies

- NG911 enables real-time data sharing, improved location accuracy, multimedia transmission, and resource coordination during disasters. Enhances situational awareness for tornadoes, floods, severe storms, and mass-casualty events.
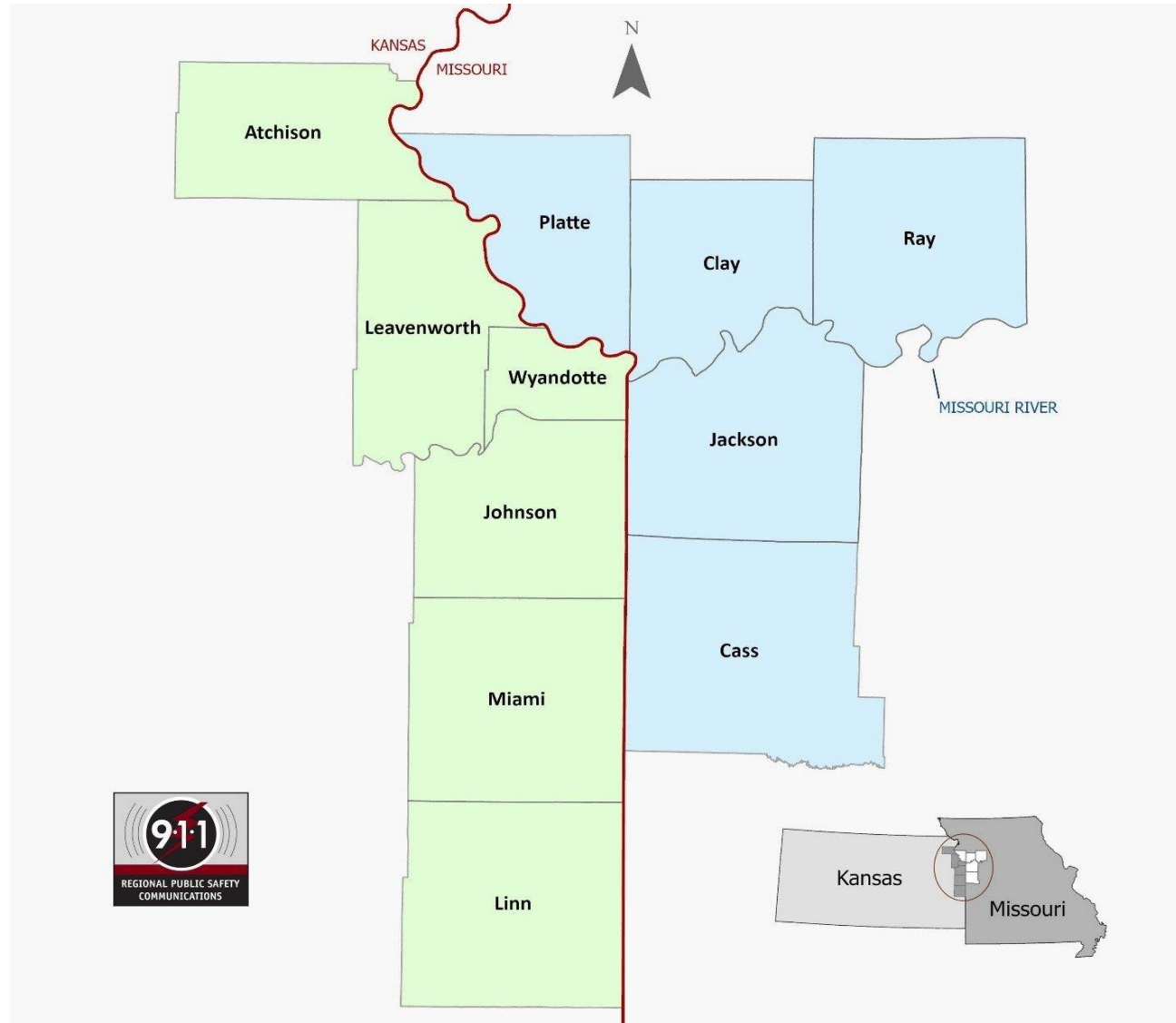
NG911 for People with Disabilities

- Supports Text-to-911, real-time text (RTT), video, and multimedia. Increases accessibility for Deaf and Hard-of-Hearing individuals, speech disabilities, cognitive disabilities, and those who cannot safely speak as well as translation modules.
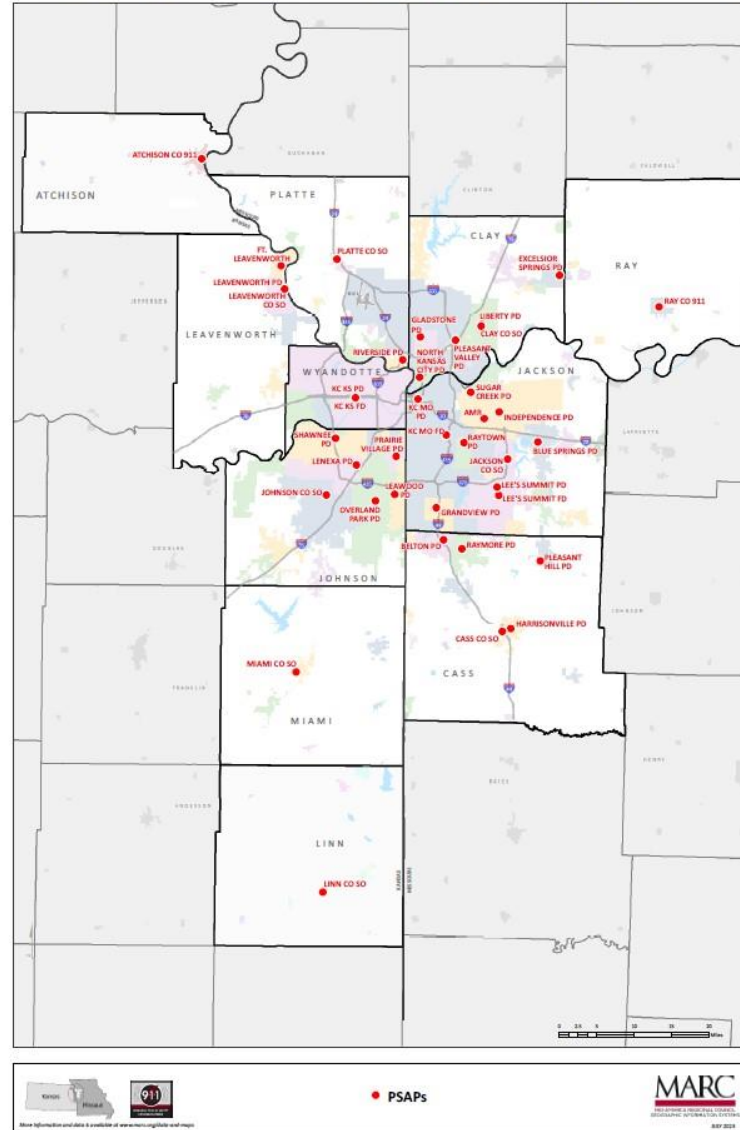
Kansas City Regional 911 System

Kansas City Regional 911 System

- System Overview
- What is NG 911
- MARC's responsibilities
  - Operations
  - Technical Services
  - Data Analysis and Mapping
- Future 911 Projects
- NG911 Benchmark
- 911 Call and Map Demo

Kansas City Regional 911 System

Local Government 911 Call Centers (Public Safety Answering Points – PSAPs)

Kansas City Regional 911 System

- Connects all PSAPs in the system so that 911 calls and data can be transferred to any PSAP in the region.

- All 911 equipment and software is the same across the region.

- In the event a PSAP must evacuate, 911 calls or personnel can be moved to another PSAP in the region.

- Backup Centers throughout the region
  - South Patrol (Kansas City)
  - Overland Park
  - Johnson County
  - Platte County
  - Independence

Kansas City Regional 911 System

- Duplicate Digital Selective Routers in place which can handle all calls in region
- One system serves all PSAPs.
- Duplicate connections to all PSAPs in region.
- All costs for the 911 system are shared with the eleven participating counties, based on population
  o Hardware
  o Software
  o Network
  o Phone Bills
  o Coordination
  o Training
- 911 taxes in Missouri and Kansas pay for the system

Public Safety Communications Board

- Created by the Interlocal Agreement between MARC 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
- 233 911 answering positions in the region

Public Safety Communications Board

2023 Public Safety Communications Board

Presiding Commissioners (8)	Member	Designee
Clay County	Presiding Commissioner Jerry Nolte	Commissioner Jay Johnson
Jackson County	County Executive Frank White	Jeanie Lauer
Johnson County	Commission Chair Mike Kelly	
Leavenworth County	Commission Chair Doug Smith	Chuck Magaha
Miami County	Presiding Commissioner Tyler Vaughan	*Captain Matt Kelly (need to verify)*
Platte County	Presiding Commissioner Scott Fricker	Captain Tony Avery
Ray County	Presiding Commissioner Billy Gaines	Chief Scott Bagley
Wyandotte County	Mayor/CEO Tyrone Garner	
MARC Board (2)	**Member**	**Designee**
Leavenworth County,	Commissioner Jeff Culbertson	
Clay County, MO	Auditor Victor Hurlbert	
Cass County Emergency Services Board (1)	**Member**	**Designee**
	Marie Beauchamp	
Police Chiefs (4)	**Member**	**Designee**
Kansas City, MO	Chief Stacey Graves	DC Derek McCollum
Kansas City, KS	Chief Karl Oakman	Major Heron Santana
Overland Park, KS	Interim Chief Simon Happer	DC Eric Houston (Co-Chair)
Independence, MO	Chief Adam Dustman	Deputy Chief Jason Petersen
County Sheriffs (2)	**Member**	**Designee**
Platte County, MO	Sheriff Mark Owen (Co-Chair)	
Johnson County, KS	Sheriff Calvin Hayden	Captain Paul Haynes
Metro Fire Chiefs (2)	**Member**	**Designee**
South Platte FPD	Chief Richard Carrizzo	
Metro Fire Chiefs	Chief Mike Snider	
EMS Chief (2)	**Member**	**Designee**
Med-Act	Chief Paul Davis	
KC EMS		Asst. Chief Nathan Dougan
9-1-1 Users (2)	**Member**	**Designee**
Kansas Co-Chair	Scott Boden	
Missouri Co-Chair	Steve Hoskins	
PSAP Supervisor (4)	**Member**	**Designee**
Leavenworth County, KS	Wendy Dedeke	
Overland Park Police	Mike Daniels	
Lee's Summit Police	Christina Bailey	
Independence Police		
At-Large Elected Official (2)	**Member**	**Designee**
MISSOURI	Mayor Kris Turnbow, Raymore, MO	
KANSAS	Commissioner Michael Ashcraft	

Public Safety Communications Board

Jurisdiction	2020 Census Population	2020 Estimated Percent of Regional Population	2023 Allocation (Percent of population x $10,139,415.63)
Atchison County, Kan.	16,348	0.77%	$77,844.67
Cass County, Mo.	107,824	5.06%	$513,428.16
Clay County, Mo.	232,229	11.40%	$1,156,060.94
Jackson County, Mo.	717,204	33.68%	$3,415,127.68
Johnson County, Kan.	609,863	28.64%	$2,903,999.44
Leavenworth County, Kan.	81,881	3.85%	$389,894.74
Linn County, Kan.	9,591	.45%	$45,669.70
Miami County, Kan.	34,191	1.61%	$162,808.11
Platte County, Mo.	106,718	5.01%	$508,161.69
Ray County, Mo.	23,158	1.09%	$110,272.01
Wyandotte County, Kan.	169,245	7.95%	$805,898.02
City of Excelsior Springs, Mo.	10,553	0.50%	$50,250.48
REGIONAL TOTALS	2,129,358	100%	$10,139,415

What is NG 911

On January 12, 2018, the National 911 Program and the NG911 NOW Coalition (which involves NENA, NASNA, and the Industry Council for Emergency Response Technologies [iCERT]) mutually agreed that "NG911 services" means 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, including voice, text, data, and multimedia information.

• Acquires and integrates additional emergency call data useful to call routing and handling.

• Delivers the emergency calls, messages, and data to the appropriate public safety answering point (PSAP) and other appropriate emergency entities based on the location of the caller.

• Supports data, video, and other 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.

• NG911 Roadmap VERSION 1.0 | 2019

What MARC is responsible for

- Operations
  - Annual Budget
  - All 911 Bills
  - Purchasing
  - 911 Outreach
  - Training
- Technical Services
  - Installation and maintenance of all 911 Hardware and Software
  - Network
  - CyberSecurity
- Data Analysis and Mapping
  - Cell Sector Mapping
  - Master Street Guide
  - Maps and Map layers
  - Location Corrections

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
- Once 911 call is delivered to the PSAP, all other actions (staffing to answer call, CAD data entry, dispatch of resources, call recording, etc.) is the responsibility of the PSAP agency.

Kansas City Regional 911 System Technology

- Motorola Digital Router Version 1 – installed and operational October 2023
- Motorola Digital Router Version 2 – operational Quarter 3 2025
  - Geospatial Routing Capable
- Motorola VESTA 9-1-1 Call Handling Solution
  - Installed at all PSAPs in region
  - Computer, Monitors, Keyboards, Mouse, Software
  - 911 call data provided to the PSAP systems (CAD, Recorders)
- Text to 911 available in region since 2016
  - Real Time Text scheduled in future upgrades
- ESInet network
  - Fiber
  - State/County/City owned
  - Private Contractors (Unite, KFN, AT&T, Lumen, Comcast)
  - Microwave Network upgraded in 2021 by Nokia (quadrupled bandwidth)
  - Point to Point (PTP)Links across the region
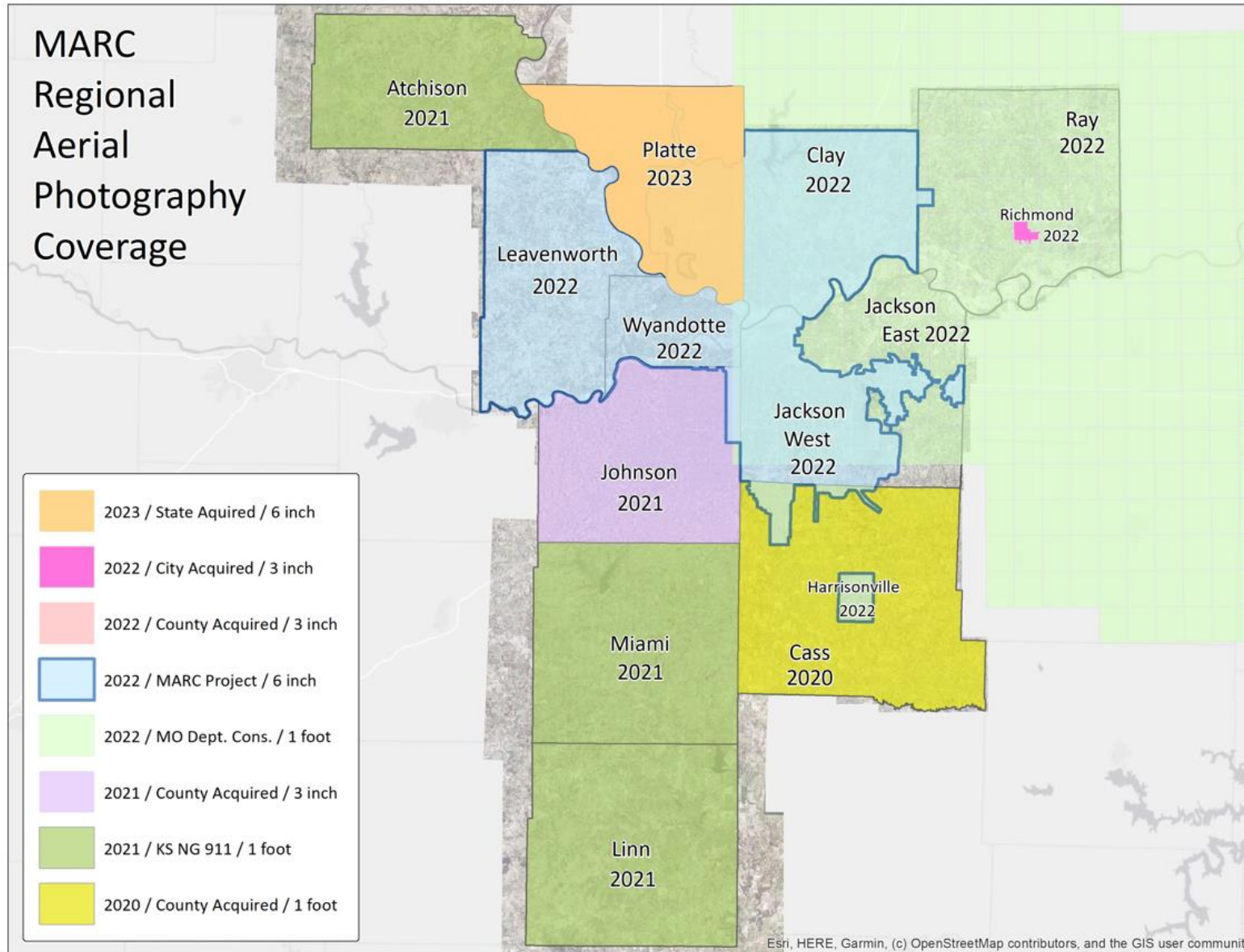
- Maintained by MARC Technical Services 24/7

Kansas City Regional 911 System Technology

- Cybersecurity for the 911 system in place
  - Seculore
- Closed system
- Few connections to the Internet
- Firewalls
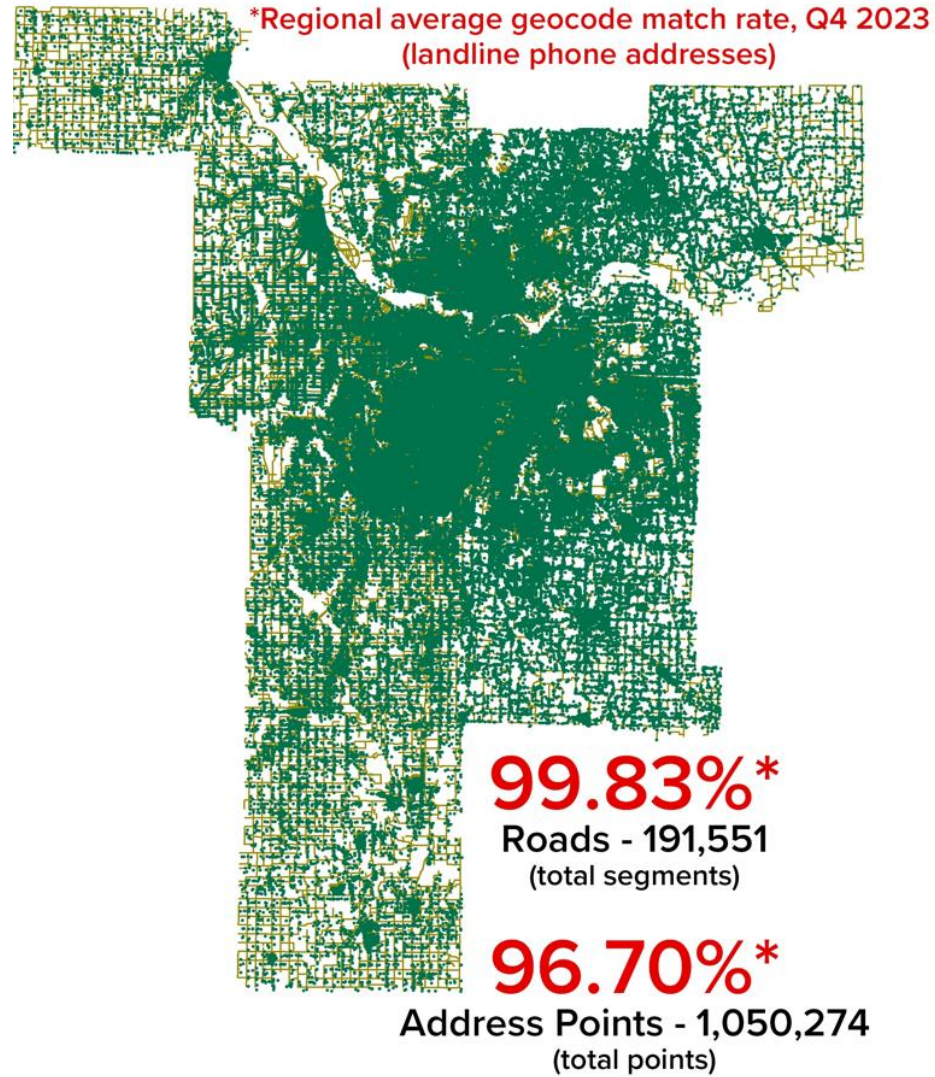- Always threats and active attempts to get into system

911 Data Analysis and Maps

- Installed across the region in every PSAP
- Work with all city/county address or mapping contact
- Maps 911 call based on location data provided by the phone carriers
- Cellular tower mapping (23,412 sectors)
- Map overlays- 15 data layers
- Rapid SOS
  - With access to additional data points, is able to provide supplemental location information for 911 calls.
- Installed and maintained by MARC Technical Services
- Data for the 911 system and maps is coordinated, managed, corrected and analyzed by MARC 911 Data Analysis Team
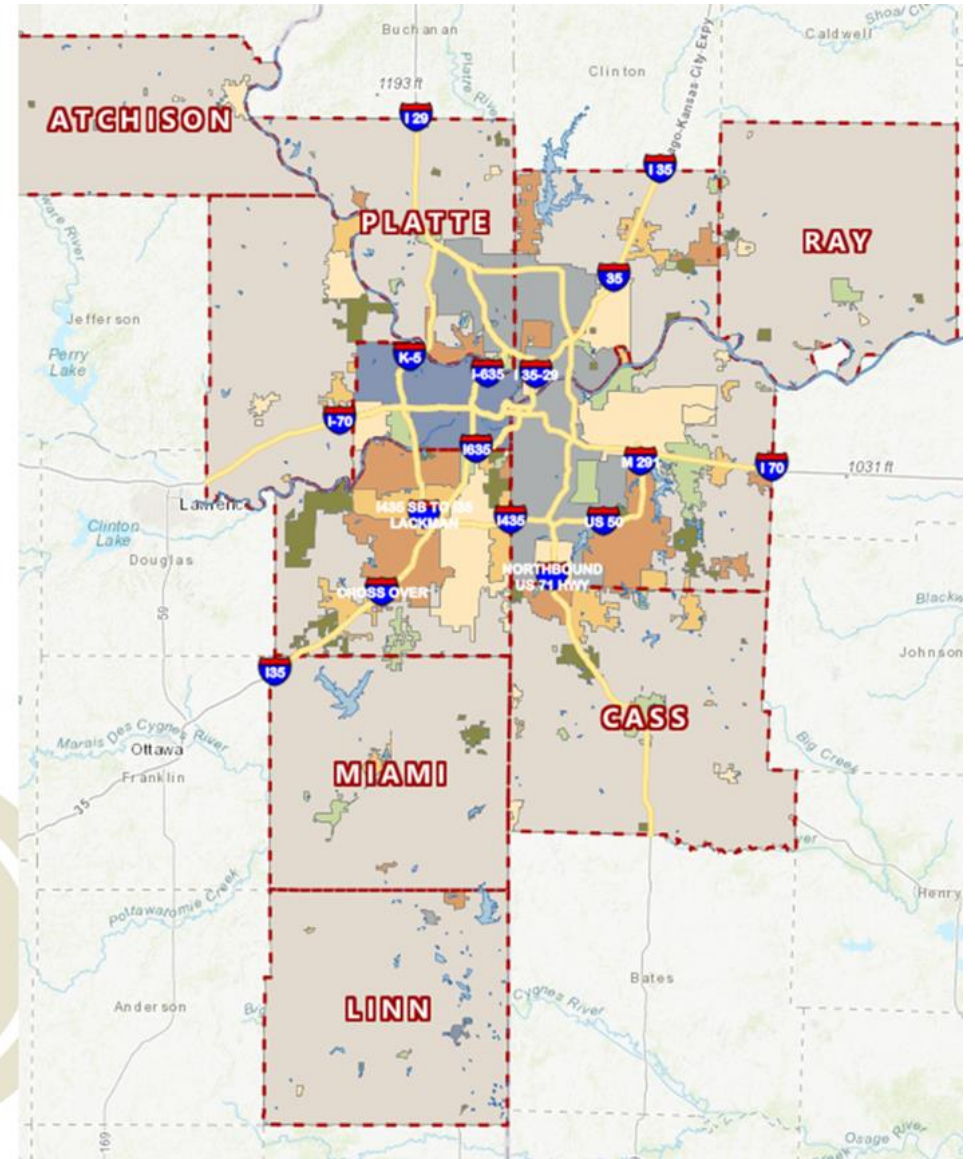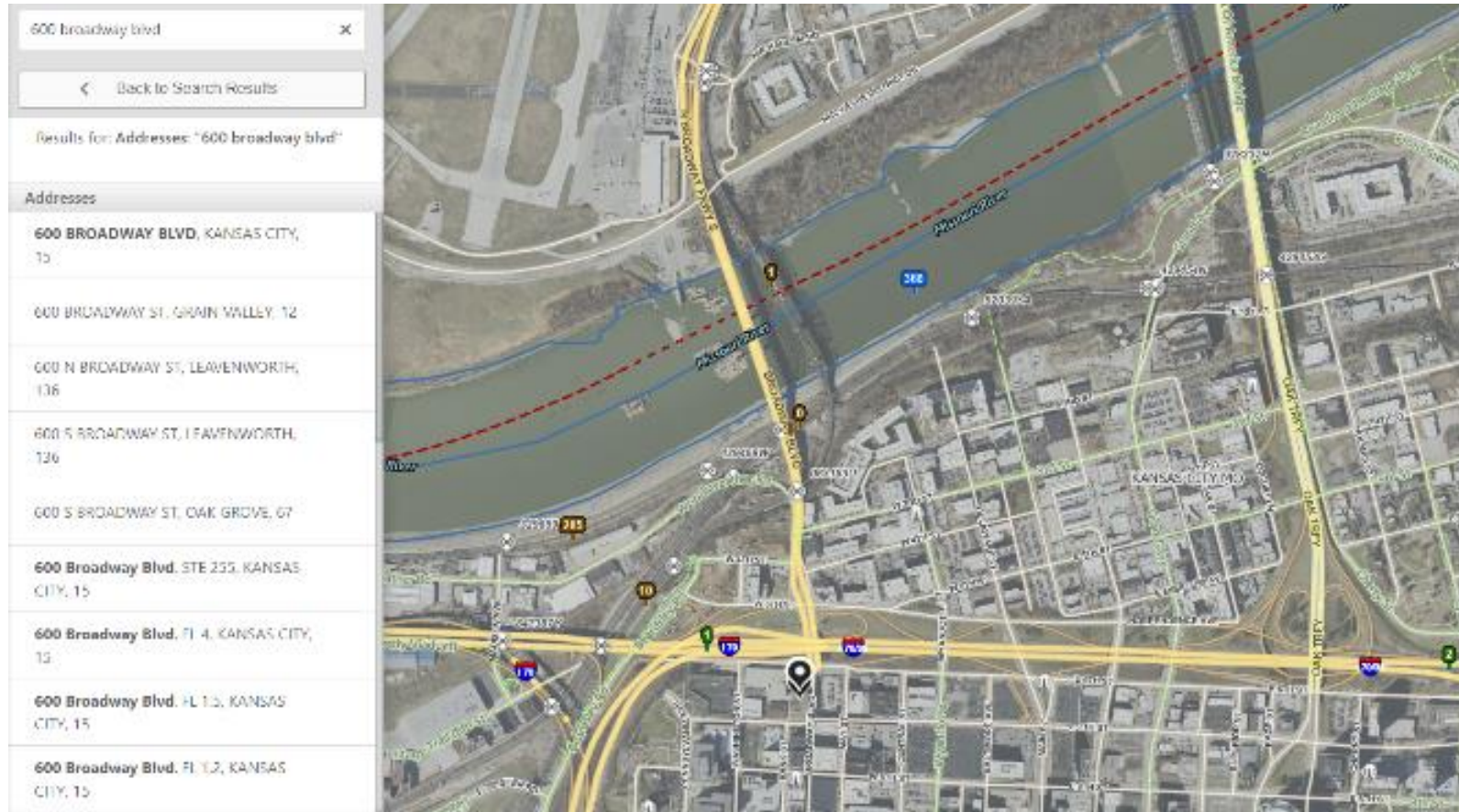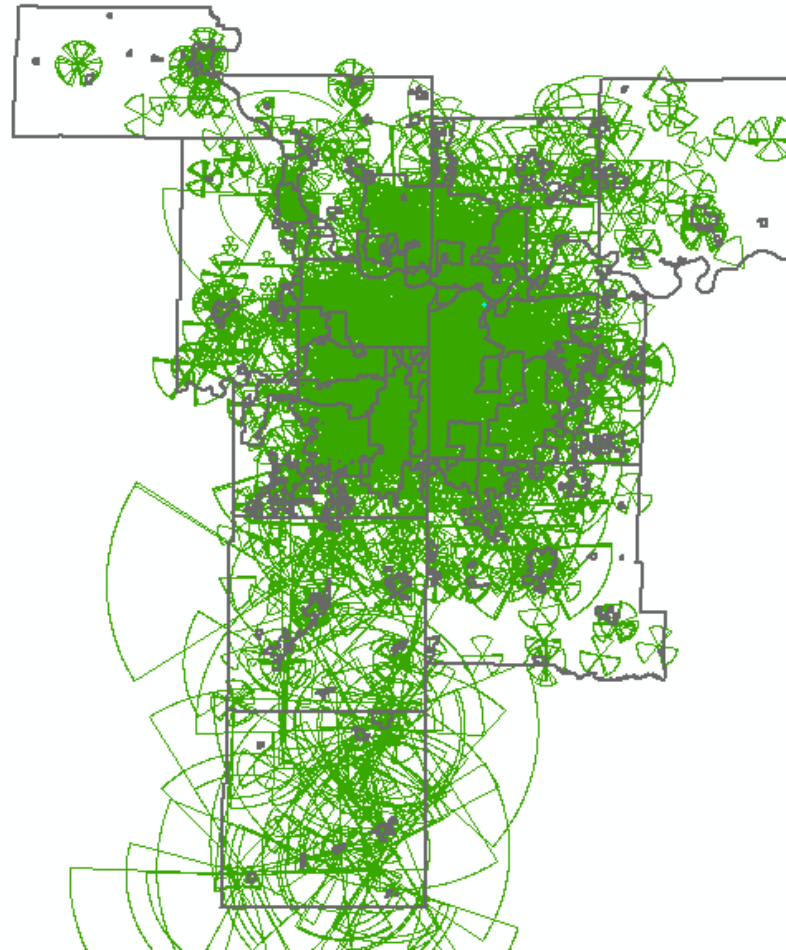
Aerial Imagery Flights

Map Data Accuracy

*Regional average geocode match rate, Q4 2023 (landline phone addresses)

99.83%*
Roads - 191,551
(total segments)

96.70%*
Address Points - 1,050,274
(total points)

GeoComm Maps

911 Data Analysis and Maps

911 Cellular Coverage Map

Kansas City Regional 911 Future Projects

- 911 Workstation Replacement (60 positions annually)

- Disaster Management Backup System (In Queue)

- Rapid Deploy Analytics   (In Queue)
  - Allows each PSAP to develop and run their own analytics reports
  - Staffing module

- Motorola Queue Selector (Auto Attendant) for KCMO (Done)

- Motorola Automated Abandoned Callback for KCMO (Done)

- Rapid SOS Call Transcription, Translation and Video (In Process)
  - Video and Photos, Live transcription of call dialog

Benchmark for NG 911

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