EXHIBIT “A”

CUYAHOGA COUNTY

9-1-1 PLAN

Adopted:

March 6, 2024

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APPENDICIES

RECORD OF REVISIONS

Version	Date	Description/Changes
1.0 (Initial Plan)	March 24, 1986	Creation of Document
2.0	May 10, 2006	Updates to reflect the processing of Wireless 9-1-1 calls.
3.0	February 26, 2013	Updates to reflect new consolidated PSAPs, new County governmental structure, updated PSAP territory index and updated 911 Fund disbursements
3.1	April 2, 2013	Update to page 57, North Randall PSAP, Insert new Appendix C – PSAP Territory to Community Index, Update page numbers and Index accordingly.
3.2	April 19, 2013	Update document to include signed signature page.
3.3	August 1, 2013	Update document to reflect PSAP consolidation of Gates Mills to Chagrin Falls
4.0	June 11, 2014	Updated all ORC numbers to reflect re-numbering by Legislative Services Commission. Update Section 2.3 and 2.4 to reflect upgrades to NG911. Update Section 4.3 to designate Cleveland as a wireless 911 answering point. Update Section 4.5 with current fund disbursements. Update Appendix A to reflect consolidation of North Royalton PSAP to Strongsville and North Randall and Highland Hills to Chagrin Valley Regional Dispatch. Update Appendix D to current wireless service providers.
5.0	February 10, 2021	Removes City of Cleveland as wireless 9-1-1 call handling PSAP. Also removed subsidy associated with call handling responsibilities **Updated** • Format & Numbering • Program Review Committee members. • Language on History, Cuyahoga 9-1-1 History, Funding, PSAP Territories. • Appendix 4 **Added** • 9-1-1 Coordinator Responsibilities • language on current system, Text-To-911, ESINet, Advanced Location Services, State of Ohio and Cuyahoga County Operational Requirements, Cuyahoga County System Requirements, misdirected calls, MARCS PSAP Talkgroups, PSAP Relocation, PSAP Redundancies, Future Operations (ECW Refresh, Future Consolidation & Cost Structure, Long-Term Planning) • Appendix 5, Appendix 6

5.1	June 9, 2022	Change to Section 7.2 to reflect postponement of charges to PSAP for AT&T circuit. Updated • Format & Numbering • Program Review Committee members and acknowledgements • Recent consolidations • Language replacing "CallWorks" with "NG911 system" • Update Appendix 5
6.0	December 13, 2023	Updated Committee name, composure of committee, member names and titles. Modified State ESInet Committee to 9-1-1 Steering Committee Updated Network equipment due to change from ECW to Vesta Updated Wireless Government Fund to NG9-1-1 Access fee Modified 9-1-1 Coordinator responsibilities Added new requirements based on ORC 128 revisions Removed acknowledgements and system requirements no longer needed with Vesta.
7.0	March 6, 2024	Updated Committee Roster Updated Committee Membership Language to reflect verbatim ORC 128.06 (B)

Version X.0 – Major Revision
Version X.I – Minor Revision

9-1-1 PROGRAM REVIEW COMMITTEE

The County of Cuyahoga 9-1-1 Planning Committee was established on July 1, 1985 by the Cuyahoga County Board of Commissioners (Resolution Nos. 523321 and 526327), pursuant to Section 128.06 of the Ohio Revised Code (ORC).

On July 3, 2023, Ohio Governor DeWine signed legislation which requires every county to maintain a county 9-1-1 Program Review Committee. The legislation replaces the option for a planning committee.

ORC 128.06(B) In counties with fewer than five townships, a population in excess of seven hundred fifty thousand, and which contains more than one public safety answering point, the composition of the 9-1-1 program review committee shall consist of five members as follows:

(1) A member of the board of county commissioners, or a designee, who shall serve as chairperson of the committee;

(2) The chief executive officer of the most populous municipal corporation in the county. Population residing outside the county shall be excluded when making this determination.

(3) A member from one of the following, whichever is more populous:

(a) The chief executive officer of the second most populous municipal corporation in the county;

(b) A member of the board of township trustees of the most populous township in the county as selected by majority vote of the board of trustees.

(4) The chief executive officer of a municipal corporation in the county selected by the majority of the legislative authorities of municipal corporations in the county pursuant to resolutions they adopt;

(5) A member of a board of township trustees selected by the majority of boards of township trustees in the county pursuant to resolutions they adopt.

9-1-1 COMMITTEE MEMBERS / ALTERNATES

Chris Ronayne
Cuyahoga County Executive

Brandy Carney (Alternate)
Public Safety Director – Cuyahoga County

Mayor Justin M. Bibb
City of Cleveland

Dornat Drummond (Alternate)
Acting Public Safety Director – Cleveland

Mayor Tim DeGeeter
City of Parma

Robert Coury Alternate
Public Safety Director – Parma

Trustee Lisa Zver
Olmsted Township

_____
Mayors Rep (Vacant)

9-1-1 TECHNICAL ADVISORY COMMITTEE

The purpose of the 9-1-1 Technical Advisory Committee (TAC) is to make recommendations to the 9-1-1 Program Review Committee regarding the operation of the 9-1-1 system.

The 9-1-1 (TAC) committee shall include:

One member appointed by the Cuyahoga County Police Chief's Association

One member appointed by the Cuyahoga County Fire Chief's Association

One member appointed by the Cuyahoga County Sheriff

One member appointed by the Ohio Highway Patrol Representative

One Representative of the local Telephone Company

One member appointed by the Township Trustee Association

One member of Cuyahoga County Emergency Management

One member of Cuyahoga Emergency Communications System (CECOMS)

PLAN ADOPTION

This document titled “The Cuyahoga County 9-1-1 Plan” is adopted by the 9-1-1 Program Review Committee pursuant to the requirements specified in Section 128 of the Ohio Revised Code.

As adopted on this __6th__ day of _March_, 2024.

Cuyahoga County Executive
Chris Ronayne

City of Cleveland
Mayor Justin M. Bibb

City of Parma
Mayor Timothy DeGeeter

Olmsted Township
Lisa Zver, Trustee

Mayors Representative

SCOPE

This document has been prepared pursuant to the requirements specified in Sections 128.01 through 128.99 of the Ohio Revised Code (ORC) and 5507-1-01 through 5507-1-19 of the Ohio Administrative Code (OAC).

9-1-1 PLAN AND AMENDMENT APPROVAL REQUIREMENTS

This plan will be reviewed annually, and subsequent modifications to this plan shall be signed and dated by Cuyahoga County 9-1-1 Program Review Committee members. The Plan will be modified and amended as needed with respect to new information, emerging technologies, accumulated experiences, or in response to legislative changes. Cuyahoga County is committed to working with the local jurisdictions in pursuit of the most cost-effective and efficient implementation of NG9-1-1 services within the County.

The 9-1-1 Program Review Committee shall, not later than April 3, 2024, file a copy of the current 9-1-1 Plan with the Ohio 9-1-1 Program Office and every March thereafter. In addition, any revisions or amendments to the plan must be filed no later than 90 days after adoption.

Pursuant to the Ohio Revised Code Section 128.07, the 9-1-1 Program Review Committee shall send a copy of the final plan to the County Executive, and to the legislative authority of each municipal corporation in the county, and to the board of township trustees of each township in the county either by certified mail or, if the committee has record of an internet identifier of record associated with the board or legislative authority, by ordinary mail and by that internet identifier of record.

A copy of the plan shall also be delivered to the board of trustees, directors, or park commissioners of each subdivision that will be served by a public safety answering point under the plan.

Additionally, pursuant to Ohio Revised Code 128.08, within sixty days after receipt of the final plan as discussed above, the County Executive and the legislative authority of each municipal corporation in the county and of each township whose territory is proposed to be included in the countywide 9-1-1 system shall act by resolution to approve or disapprove the plan. Each such authority immediately shall notify the County Executive in writing of its approval or disapproval of the final plan. Failure by a board or legislative authority to notify the County Executive of approval or disapproval within such sixty-day period shall be deemed disapproval by the board or authority.

The countywide plan is deemed effective if all of the following entities approve the plan in accordance with this section:

(1) The County Executive;

(2) The legislative authority of a municipal corporation that contains at least thirty per cent of the county's population;

(3) The legislative authorities of municipal corporations and townships that contain at least sixty per cent of the county's population or, if the plan has been approved by a municipal corporation that contains at least sixty per cent of the county's population, by

the legislative authorities of municipal corporations and townships that contain at least seventy-five per cent of the county's population.

After a countywide plan approved in accordance with this section is adopted, all of the telephone companies, subdivisions, and regional councils of governments included in the plan are subject to the specific requirements of the plan and to this chapter.

The final plan shall specify:

- Which telephone companies serving customers in the county and, as authorized in division (A) of section 128.03 of the Revised Code, in an adjacent county will participate in the 9-1-1 system;
- The location and number of public safety answering points (PSAP);
- How the public safety answering points will be connected to a county's preferred next generation 9-1-1 system;
- From what geographic territory each public safety answering point will receive 9-1-1 calls; whether enhanced 9-1-1 or next generation 9-1-1 service will be provided within such territory;
- What subdivisions will be served by the public safety answering point;
- And whether a public safety answering point will respond to calls by directly dispatching an emergency service provider, by relaying a message to the appropriate emergency service provider, or by transferring the call to the appropriate emergency service provider;
- How originating service providers must connect to the core 9-1-1 system identified by the final plan and what methods will be utilized by the originating service providers to provide 9-1-1 voice, text, other forms of messaging media, and caller location to the core 9-1-1 system;
- That in instances where a public safety answering point, even if capable, does not directly dispatch all entities that provide the emergency services potentially needed for an incident, without significant delay, that request shall be transferred or the information electronically relayed to the entity that directly dispatches the potentially needed emergency services;
- Which subdivision or regional council of governments will establish, equip, furnish, operate, and maintain a particular public safety answering point;
- A projection of the initial cost of establishing, equipping, and furnishing and of the annual cost of the first five years of operating and maintaining each public safety answering point;
- Whether the cost of establishing, equipping, furnishing, operating, or maintaining each public safety answering point should be funded through charges imposed under section 128.35 of the Revised Code or will be allocated among the subdivisions served by the answering point and, if any such cost is to be allocated, the formula for so allocating it;

- How each emergency service provider will respond to a misdirected call or the provision of a caller location that is either misrepresentative of the actual location or does not meet requirements of the federal communications commission or other accepted national standards as they exist on the date of the call origination

All applicable requirements can be found throughout this document.

Any amendment to the final plan shall require a two-thirds vote of the committee. Amendments are required for any of the following purposes:

- Expanding the territory included in the countywide 9-1-1 system;
- Upgrading any part or all of the countywide 9-1-1 system
- Adjusting the territory served by a public safety answering point;
- Permitting a regional council of governments to operate a public safety answering point;
- Re-prescribing the funding of public safety answering points as between the alternatives set forth in division (A)(7) of section 128.07 of the Revised Code;
- Providing for wireless enhanced 9-1-1;
- Adding, changing, or removing a 9-1-1 system service provider as a participant in the countywide 9-1-1 system;
- Providing that the state highway patrol or one or more public safety answering points of another 9-1-1 system function as a public safety answering point or points for the provision of wireline or wireless 9-1-1 for all or part of the territory of the system established under the final plan, as contemplated under division (I) of section 128.03 of the Revised Code;
- (9) Making any other necessary adjustments to the plan.

Changes to the plan are documented in the following manner:

- The new Plan version number following the annual review and update cycle, or following any interim update that was necessary. The number given at that time is a full number, that is, 1.0, 2.0 etc.
- Any changes made to the Plan on an interim cycle are given a fractional number, that is, 1.1 or 1.2, etc.

Upon approval by the 9-1-1 Program Review Committee, the plan shall serve as the reference on the configuration of Public Safety Answering Point (PSAP) territories in Cuyahoga County.

In addition, it is a requirement of this Plan that agencies considering consolidation or adjusting the territory served by a PSAP must inform the 9-1-1 Coordinator of such efforts.

9-1-1 SYSTEM FISCAL REPORT

Pursuant to Ohio Revised Code, the County Program Review Committee shall, not later than the first day of March of each year, submit a report to the political subdivisions within the county and to the 9-1-1 Program Office detailing the sources and amounts of revenue expended to support and all costs incurred to operate the countywide 9-1-1 system and the public safety answering points that are a part of that system for the previous calendar year.

1 HISTORY OF 9-1-1

The concept of a three-digit uniform emergency telephone number has existed for decades in the United States and for even longer in Great Britain and other European countries. In 1957, the National Association of Fire Chiefs recommended the use of a single number for reporting fires. While no action was taken at the time, the concern of the firefighting community set the groundwork for future governmental action.

In 1967, a Presidential Advisory Commission recommended establishment of a common nationwide telephone number for public use in an emergency. In November 1967, the FCC met with the American Telephone and Telegraph Company (AT&T) to find a means of establishing a universal emergency number that could be implemented quickly. In 1968 the digits 9-1-1 were reserved for this purpose. Later that same year, the first 9-1-1 call was placed from the Haleyville City Hall in Alabama to the city's police station.

In the early 1970's technological advances in communications led to the establishment of Enhanced 9-1-1 (E911) services that originally included 9-1-1 selective routing, automatic location information (ALI) and automatic number identification (ANI). By the end of 1976, 9-1-1 was serving about 17 percent of the population of the United States. In 1979, approximately 26 percent of the population of the United States had 9-1-1 service, and nine states had enacted 9-1-1 legislation. At this time, 9-1-1 service was growing at the rate of 70 new systems per year. By 1987, those figures had grown to indicate that 50 percent of the US population had access to 9-1-1 emergency service numbers.

E911 eventually evolved to include selective transfer, fixed transfer, alternate routing, default routing, PSAP evacuation (abandonment) routing and call detail record. The ability to automatically identify the location of the telephone from which the call originated made 9-1-1 an even more attractive system for urban, multi-jurisdictional areas. At the end of the 20th century, nearly 93 percent of the population of the United States was covered by some type of 9-1-1 service. Ninety-five percent of that coverage was Enhanced 9-1-1 (E9-1-1). Currently, 96 percent of the geographic US is currently covered by some type of 9-1-1.

Location-based functionality remains at the center of our legacy 9-1-1 system today. When a 9-1-1 call is made, it arrives at the appropriate PSAP after it is routed across the Public Switched Telephone Network (PSTN) to a special, often dedicated, telephony switching platform called a selective router. To determine routing, the tandem office 9-1-1 selective router queries the selective routing database (SRDB) using the ANI to match the location of the caller to the emergency service number (ESN), which defines the appropriate PSAP. The ESN is predetermined for each possible originating telephone number using master street address guide (MSAG). When the voice call with its associated ANI is delivered to the PSAP, another query is made from the PSAP's equipment to the ALI database, again using the ANI as a search key. The associated ALI record is then returned to the PSAP where the customer premise equipment (CPE) displays the location on the call taker computer display.

When wireless telephone service emerged and began to sweep the country in the early 1990s, the legacy 9-1-1 network faced another challenge. At that time, wireless phones were not usually used for wireline replacement but rather for mobile calling typically outside of a building. In the E9-1-1 system, location information was based on the fixed

installed-location address of an originating telephone number. Because wireless devices have no fixed service location, new technologies had to be created in order to provide E9-1-1 services to all wireless callers.

In 1996, the Federal Communications Commission (FCC) responded to this need by issuing the Wireless Enhanced 9-1-1 Rules. This order established and required enhanced wireless 9-1-1 services. In order to provide carriers with a staged implementation, the FCC ordered wireless carriers to provide the service in two phases. Under Phase I, within six months of a valid request by a PSAP, wireless carriers had to deliver the 9-1-1 caller's voice and originating cell site location to the most appropriate PSAP. Phase II required wireless carriers, as of October 1, 2001 and within six months of a PSAP request for location information, to improve the location information used for call routing and caller location by providing the 9-1-1 system with the latitude and longitude of callers. Carriers were allowed to choose handset-based location technology within individual wireless phones – or network-based location technology using cell-tower triangulation.

The order also set technical and accuracy requirements for carriers based on the type of implementation they chose. Location accuracy for handset-based technology had to be within 50 meters for 67 percent of calls and within 150 meters for 90 percent of calls. Location accuracy for network-based solutions had to be within 300 meters for 90 percent of calls.

Next Generation 9-1-1 (NG9-1-1) refers to an initiative aimed at updating the 9-1-1 service infrastructure in the United States and Canada to improve public emergency communications services in a wireless mobile society. In addition to calling 9-1-1 from a phone, it intends to enable the public to transmit text, images, video and data to the 9-1-1 call center (PSAP). The NG9-1-1 system is viewed as an evolutionary transition to enable the general public to make a 9-1-1 "call" from any wired, wireless, or internet Protocol (IP) based device, and allow the emergency services community to take advantage of E9-1-1 call delivery and other functions through new internetworking technologies based on open standards. By enabling the general public to access 9-1-1 services through virtually any communications device, the NG9-1-1 system provides a more direct ability to request help or share critical data with emergency services providers from any location. In addition, call takers at the PSAP will be able to transfer emergency calls to another PSAP and forward the location and other critical data, such as text messages, images, video, with the call.[1]

[1] Information for the section titled "History" gathered from NENA "9-1-1 Origin & History" and The Industry Council for Emergency Response Technologies, "History of 911"
County history collected from archived files and courtesy Mr. John Snack.

1.1 Cuyahoga County 9-1-1

Prior to the mid-1960s, traumatic injury and sudden illness accounted for a large portion of deaths throughout the country. There were no organized emergency medical response plans in place. There was no central telephone number to contact to request assistance. If you were able to dial a number where someone could send help, often the local mortician or a police vehicle would respond and deliver the victim to the hospital. Hospital personnel rarely had any prior knowledge of what they might face when injured victims arrived. Precious time was lost in transport of critical injuries and lack of preparation at the hospital.

Cuyahoga County initially became involved with emergency communications some time before 9-1-1 came into existence in this region. In the mid-1970s, with funding from the Robert Wood Johnson Foundation (CEO of Johnson & Johnson) and the Greater Cleveland Hospital Association, Central Medical Emergency Dispatch (C-MED) was formed.

Forty-three regions in 32 states were chosen out of 251 applications to receive funding from the Robert Wood Johnson Foundation. Cuyahoga County Regional EMS Response Program received a total of $398,580 between July 1974 and June 1977. These funds were used to purchase two-way radios for hospitals and ambulances and to build out a central communications center (C-Med). Cleveland EMS Medic 9 (based out of University Hospitals at that time) responded to its first call at 9:00 a.m. on October 13, 1975.

Establishing communications between “first responders” and hospitals was a critical step in trauma survival support. Housed at 1021 Euclid Avenue, and staffed by Emergency Medical Technicians, C-MED’s main function was to coordinate communications between ambulances and hospitals for the City of Cleveland. By the late 1970s, C-MED was performing this function for the majority of jurisdictions in Cuyahoga County.

The Robert Wood Johnson Foundation continued to fund the backbone infrastructure nationally and facilitate cooperation with large corporations and telecommunications providers throughout the 1970’s to form the nation’s first 9-1-1 system. During the early 1980’s C-Med partnered with Military Assistance to Safety and Traffic (MAST) to provide communications and coordination between EMS units and Army medical helicopters stationed at Cleveland Hopkins Airport to provide med-evac services throughout the county.

In early 1985, Cleveland EMS decided to take their EMS communications in-house. C-MED became Cuyahoga Emergency Communications System (CECOMS) and was moved to the first floor of 1255 Euclid Avenue. While still taking calls for Cleveland EMS and surrounding communities, their priority during this time was to assist Cleveland with training and migration to their own EMS dispatch, coordinating records, and creating the Master Street Address Guide (MSAG) for Cuyahoga County.

On July 1, 1985, Cuyahoga County’s 9-1-1 Planning Committee was established by the Board of County Commissioners’ Resolution No. 523321, as amended by Resolution No. 526327.

In January 1986, “The Proposal for the Implementation of a Countywide 9-1-1 System” was presented by the 9-1-1 Planning Committee to the Cuyahoga County Board of

Commissioners. Prior to this date, there had been no organized system of 9-1-1 anywhere in the county. This document was prepared pursuant to the requirements specified in the Ohio Revised Code (ORC). It provided the County's Board of County Commissioners, municipal corporations and boards of township trustees with written description of the proposed Countywide 9-1-1 System, the proposed Public Safety Answering Point (PSAP) territories, the location of the PSAPs, the System's features and operations, and the initial and recurring costs. The Ohio Bell Telephone Company estimated that the 9-1-1 System could be implemented county-wide 14-18 months after the plan was approved making it feasible that 9-1-1 services would be available to individuals in the County during the last quarter of 1987.

A one-time cost of installing the 9-1-1 Network and establishing the Data Management System's database was estimated to be $3,650,218. The State of Ohio paid these costs via a tax credit to Ohio Bell. The estimated annual cost of maintaining the 9-1-1 Network and Data Management System's database was $938,856. All telephone subscribers in the county would equally contribute to this ongoing monthly cost at a rate of 12 cents per line.

Costs for each Public Safety Answering Point (PSAP) were primarily related to the equipment installed and maintained at the Primary, Secondary and Default PSAPs. It was determined the cost savings derived from leasing equipment from Ohio Bell as opposed to purchasing and maintaining equipment from another vendor was significant. Initial one-time installation fees were estimated to be $1,256,673 and monthly lease and maintenance fees totaled approximately $59,713. These costs included all Primary, Default and Secondary PSAPs and included the following functions and services: selective routing, default routing, automatic number identification (ANI), call transfer, call hold, call return, forced disconnect, alternate routing, automatic location identification (ALI), hard copy with and without address. This plan was adopted and executed on March 24, 1986. Cuyahoga County's 9-1-1 system went live in November 1987.

As cell phone service proliferated during the early 1990s, CECOMS became the Primary Safety Answering Point for all wireless 9-1-1 calls made in the County. CECOMS staff would establish the location of the caller and then route the call to the appropriate PSAP for dispatch.

In addition, CECOMS became a regional information gathering and deciphering point for AMBER Alerts, mutual aid coordination, severe weather alerts and telephone support for county PSAPs.

In 2012, Cuyahoga County contracted with Attevo to complete a detailed assessment of the 48 PSAPs that existed at that time. The purpose of the study was to determine where overlaps between PSAPs existed and to develop a plan for efficiencies including PSAP consolidations. Overall, the study concluded that Cuyahoga County should work to significantly reduce the number of PSAPs countywide. Cuyahoga County made the reduction of PSAPs a priority while furthering the County's mission for regional collaboration in 2011.

In order to support these collaborations, Cuyahoga County invested over 15 million dollars to provide state of the art Next Generation 9-1-1 (NG9-1-1) equipment with built-in redundancies such as dual connections to both the Cleveland and Columbus host.

When the NG9-1-1 System went live in 2015, 140 workstations were deployed to 37 primary and 2 secondary PSAPs throughout the county.

In addition to the NG9-1-1 equipment and 10-year maintenance and support contract, Cuyahoga County entered into a five-year contract with AT&T to supply the backend infrastructure to support network connectivity. The costs for both ECW and AT&T are currently supported by Cuyahoga County's portion of the Wireless Government Assistance Fund.

During 2014, Cuyahoga County began implementation of NG9-1-1 network for all Cuyahoga County PSAPs. Under contract with Emergency Call Works (ECW) and AT&T, PSAP cutovers to this new technology continued through mid-2015. This technology features a hosted system with redundant technology that allows agency users to log in from any ECW station and receive their calls.

On July 1, 2017, Cuyahoga County deployed a web-based Text-To-911 service, allowing anyone within the boundaries of Cuyahoga County to be able to text message 9-1-1.

Currently, there are 22 Primary PSAPs throughout the county. CECOMS continues to provide support through wireless call answering and routing, Text-To-911 coordination, AMBER alerts, weather advisories, assistance to PSAPs in locating callers, MABAS support, media alerts, , license plate reader program management, back-up EMD for all PSAPs, countywide dispatcher training, hospital restrictions and over-rides, HAZMAT reporting, Radio Communications/MTAC assignments, mass notifications coordination, major emergency incident communications coordination, State of Ohio Emergency Response Plan and mass casualty incident coordination.

The county entered into a contract with Mission Critical Partners in 2022 and is currently working on a county-wide emergency communications assessment, due to be complete in October 2022.

1.2 9-1-1 Coordinator Responsibilities

Legislation requires each county to appoint a county 9-1-1 coordinator to serve as the administrative coordinator for all PSAPs participating in the countywide 9-1-1 final plan. The coordinator must also serve as a liaison with other county coordinators and the 9-1-1 Program Office.

The County 9-1-1 Coordinator, after consultation with representatives of the county, the municipalities and local public safety agencies shall:

- Maintain a county plan for 9-1-1 enhanced service throughout the county. The plan shall specify:
  - The number and locations of all PSAPs serving municipalities within the county;
  - The procedure each PSAP will employ for continuing essential 9-1-1 services during the loss of commercial power;
  - The number of lines and call-taker position that each PSAP will utilize
- Monitor for compliance with the standards and report the results on a regular basis to the 9-1-1 Program Review Committee.

- Ensure that address and mapping data is updated in the emergency services communication system database and mapping system within thirty days of receipt of notice or request for change.
- Management and maintenance of the 9-1-1 database is a primary responsibility of the County 9-1-1 Coordinator. A very important component of this task is the information provided by the call takers and dispatchers at each PSAP. PSAPs shall provide information about erroneous location information provided on the ALI screen and any corrections provided by the caller. Each PSAP shall complete a Trouble Report/Inquiry Form for every 9-1-1 call that experiences problems (ANI failures, database errors, etc.). These trouble reports shall be routed to the 9-1-1 Coordinator who shall ensure that 9-1-1 trouble reports are consistently completed and incorporated into the Master Street Address Guide (MSAG) database.
- In order to maintain an accurate MSAG, the governing body of each municipality shall provide the data necessary for the Automatic Location Identification capability of the 9-1-1 Emergency Telecommunication System as follows:
    - Correct or verify the accuracy of the street and address information;
    - Where necessary, supplement the street and address information;
    - Label the map to indicate political boundaries, fire service zones, emergency medical service zones and police service zones;
    - Advise of any new developments, streets and or addresses
- Provide for a complete annual review of the emergency services communication system land line database by obtaining current records from the appropriate telecommunications companies.
- Oversee training for PSAP operators on various issues.
- Ensure PSAP equipment works correctly and efficiently.
- Evaluate new equipment.
- Work with addressing authorities, telephone companies, and GIS personnel to provide for the accuracy of the 9-1-1 database.
- Maintain the law enforcement, fire, and emergency medical service response boundaries for the public safety answering point service area.

2 CURRENT COUNTYWIDE 9-1-1 SYSTEM

Under the 9-1-1 system in Cuyahoga County, persons in need of police, fire and/or emergency medical services dial or text 9-1-1. In Cuyahoga County CECOMS is the only wireless PSAP. This means that all 9-1-1 wireless and VoIP calls and texts within the County automatically route to CECOMS, which then directs the call to the appropriate PSAP.

Selective alternate and default routing are 9-1-1 call routing methods that use an E9-1-1 control office/selective router to send wireline calls to the appropriate PSAP based on the location of the caller.

Basic 9-1-1 systems have an inherent disparity between central office/tandem/LEC boundaries and public-safety agency jurisdictional boundaries. Selective routing overcomes this problem by routing calls to appropriate PSAPs based on the caller's telephone number (ANI) and its associated Emergency Service Number (ESN). The ESN designates a specific geographical area having a unique combination of law enforcement, fire and medical response agencies.

Alternate routing provides call handling at a pre-selected PSAP, when the identified primary PSAP is incapable of handling traffic due to being too busy or offline. Default routing is the capability of routing the 9-1-1 call to a pre-designated default PSAP, when the 9-1-1 call cannot be selectively routed due to ANI failure or unavailable ALI.

Cuyahoga County currently has 22 Primary and 1 Secondary PSAP Territories. Each PSAP position is equipped with network connectivity, CPU with software installed, keyboard, and two monitors. In addition, the NG9-1-1 System will display at the Primary PSAP the Automatic Number Identification (ANI) and Automatic Location Identification (ALI) from which the 9-1-1 call is originating along with mapping and GPS coordinates.

Cuyahoga County shall determine the number of 9-1-1 workstations allocated to each PSAP based on several factors including call volume, staffing and back-up responsibilities. In addition to the number of designated workstations, a PSAP may elect to purchase additional workstations from the 9-1-1 system vendor. All costs for additional workstations – including initial purchase and recurring maintenance – will be the responsibility of the PSAP.

2.1 Text To 9-1-1

Cuyahoga County implemented Text-to-9-1-1 on July 1, 2017 utilizing a web-based application through Comtech. As with 9-1-1 calls, text messages sent within the jurisdictional boundaries of Cuyahoga County are routed directly to CECOMS. CECOMS identifies the sender location, gathers pertinent dispatch information and relays it to the appropriate PSAP

In November of 2018, Cuyahoga County completed an upgrade to an improved i3 solution for Text-To-9-1-1 enabling CECOMS to transfer verified text to 9-1-1 calls for service to the appropriate PSAP.

2.2 Advanced Location Services

In October 2018, Cuyahoga County integrated Rapid SOS into the NG9-1-1 system. This integration allows for enhanced location accuracy with inbound wireless 9-1-1 calls by providing precise handset location from a variety of sensors on modern devices such as GPS, Wi-Fi access points, cell towers, Bluetooth beacons and barometric pressure sensors. This technology provides more accurate location identification of callers which is essential in providing fast and accurate processing of 9-1-1 calls.

2.3 ESINet

An Emergency Services Internet Protocol Network (ESINet) is a network capable of receiving and relaying emergency calls, texts and other forms of media to PSAPs. As of the date of this plan, the State of Ohio is in the planning stages of implementing a statewide ESINet.

In Ohio, nearly twelve million 9-1-1 calls are made each year by residents and visitors. The legacy 9-1-1 system, although once highly effective, is often incapable of transferring data and location information. Today's modern communications devices utilize protocols that are incompatible with legacy 9-1-1. Additionally, current 9-1-1 infrastructure is inadequate to support even modest increases in bandwidth.

In order to maintain a high level of service, Ohio's future 9-1-1 systems must be capable of accepting "calls" from any communication device. Most Ohio PSAPs are not equipped to accept or respond to calls from large segments of the population who utilize the ever-expanding spectrum of communications devices. In addition, some of the key infrastructure on which the legacy system depends is aging and will become progressively vulnerable if it is not maintained, upgraded or replaced by newer, more resilient technology.

For these reasons, the Ohio General Assembly recognized the importance of transitioning to NG9-1-1 system that uses an Emergency Services Internet Protocol Network to deliver and process 9-1-1 traffic.

As the State of Ohio moves closer to implementing statewide NG9-1-1, the County will work to devise a long-term plan for implementation while being cognizant of the needs for the daily operations and any additional impacts a NG9-1-1 environment will have on infrastructure, policies, call routing and training. We will partner with our chosen call handling equipment (CHE) vendor, local exchange carriers, Internet service providers and wireless carriers to assist with a successful transition to NG9-1-1.

The increase in data that will be available to PSAPs will likely result in PSAP staff needing additional skill sets that may be overlooked in today's 9-1-1 environment. The County will work closely with PSAP's help prepare for upcoming changes. PSAP managers should be prepared to deal with telecommunicators now having the ability to view photos and/or videos of an incident that may be disturbing. And lastly, we will keep stakeholders informed about project tasks and milestones, and any possible impacts that can be expected throughout the transition.

The NG9-1-1 PSAP environment, from new technology, capabilities and job skill requirements, may potentially create a more stressful work environment for 9-1-1 professionals. PSAP managers should be aware of this and the need to ensure that best practices regarding training, staffing and wellness programs are understood and followed.

In an integrated NG9-1-1 environment, it will be more likely that calls are routed to alternate PSAPs, which may impact the ability of telecommunicators to interact in the same localized manner with callers. PSAP managers should be aware of this and work with their personnel to provide the appropriate support to minimize any negative impacts to call processing for those emergency calls which are answered by an alternate PSAP.

PSAP managers should ensure that their personnel are fully trained on the steps to take to successfully process calls from other PSAPs, including the process necessary to dispatch the appropriate resources when the normal PSAP is unavailable for any reason.

3 OPERATIONAL CONSIDERATIONS

The continued success of the countywide 9-1-1 system is dependent upon maintaining high standards and standardized processing of 9-1-1 calls. To provide and maintain the highest possible quality of public safety service to Cuyahoga County, the Cuyahoga County 9-1-1 Program Review Committee shall review, recommend, and facilitate updates in the policies and procedures of the Public Safety Answering Point (PSAP) operation relative to 9-1-1 operations, and upgrades in equipment and facilities. The Cuyahoga County 9-1-1 Operating Procedures Manual approved by the Program Review Committee shall provide guidance to all PSAPs for the operation of the Cuyahoga County 9-1-1 System.

All PSAPS operating in Cuyahoga County shall comply with applicable law. This Plan strives to recognize a variety of options for the organization of 9-1-1 services throughout the County. The following terms describe the types of 9-1-1 services currently being utilized in Cuyahoga County via Public Safety Answering Points (PSAPs). Cuyahoga County recognizes multiple types of PSAPs:

Primary PSAP

The Primary PSAP is a fully operational and staffed 24/7 answering point that receives incoming 9-1-1 land-line based calls from the public and typically but not always directly dispatches police, fire, and emergency medical service personnel in response to the call. For each call, the dispatcher will be able to view the caller's telephone number and address when received via a landline, as well as the police, fire, or emergency medical jurisdiction for that address. The PSAP will dispatch appropriate personnel for the departments and jurisdictions it serves or will transfer the call to a PSAP Associate with independent dispatch. There can only be one Primary PSAP per PSAP Territory. Refer to Appendix 1 for a list of the Primary PSAPs in Cuyahoga County. The following outlines required standards for a PSAP in Cuyahoga County:

- Primary PSAP that operates 24-hours-per-day and seven-days-a-week; capable of answering all three types of calls: police, fire, and EMS.
- Each PSAP must have a written 9-1-1 protocol.
- Each PSAP must utilize standardized, technically compatible 9-1-1 hardware and software for PSAP installations.
- All PSAPs must coordinate with their alternate PSAPs, so backup for loss of emergency communications can occur immediately.

Secondary PSAP

The PSAP to which the Primary PSAP may transfer 9-1-1 calls. A Secondary PSAP may be a Primary PSAP in a different PSAP Territory and may serve as a secondary PSAP

for a number of Primary PSAPs. Section 6.0 identifies the recognized Secondary PSAPs in Cuyahoga County.

Alternate PSAP

A PSAP to which 9-1-1 calls are routed when the lines are busy or there is an equipment failure at a Primary PSAP. An Alternate PSAP may be a Primary PSAP in a different PSAP service area.

Subdivision PSAP

Located within the territory of a municipal corporation or township that serves as a Primary PSAP and dispatches emergency services. May operate as a Secondary PSAP if a Memorandum of Understanding (MOU) has been established between the Subdivision and the Primary PSAP regarding the transfer of 9-1-1 calls to the Subdivision.

Default PSAP

The PSAP to which the 9-1-1 calls are routed when the network system cannot determine the PSAP Territory from which the 9-1-1 calls are originating, and thus, the Primary PSAP to which the 9-1-1 calls should be routed. The CECOMS Center PSAP shall serve as the default PSAP for Cuyahoga County.

Consolidated or Regional PSAP

Consolidated or Regional PSAPs are a result of merging multiple PSAPs into a single, unified team with common operating platforms. This includes the sharing of space, personnel, equipment and procedures for 9-1-1 services among Primary PSAP territories and/or by providing countywide services. A consolidated or regional PSAP provides 9-1-1 call answering and emergency service dispatching to all portions of the joint service district. The administrative organizational structure can be memorialized by contractual agreement or Council of Governments (COG).

For the purposes of this plan, any consolidation of two to four primary PSAPs shall be considered "Consolidated" and five or more as "Regional".

Each physical location, whether it operates under contractual agreement or COG will be recognized as a separate PSAP, operating in separate facilities, with separate ORI's, separate MPLS and separate operating authorities.

Wireless PSAP

A Wireless PSAP is a Primary PSAP wherein wireless and VoIP calls are routed directly. CECOMS is the only Wireless PSAP in Cuyahoga County.

Remote Dispatch

The NG9-1-1 system supports the virtual PSAP Operator position capability as a standard function of its client software. This feature allows any installed and configured operator position in the network to securely access the system by logging in at another PSAP to receive calls for their "home" PSAP. The capability does not require software to be installed or any configuration of the workstation, as all users and respective settings are loaded to the remote workstation from the server. In effect, this feature provides a

telecommunicator with access to distinct PSAP settings, resources, and configurations anywhere in the network.

3.1 State of Ohio Operational Requirements

In order to maintain funding through the NG9-1-1 Assistance Fund, all PSAPs must achieve compliance with Ohio Administrative Code (OAC), which requires adherence to certain technical, training and operational standards and promotes best practices that ensure consistent, quality 9-1-1 service delivered by well trained personnel to all residents of, visitors to, and individuals who work in Cuyahoga County. These disbursements benefit all Primary and Secondary PSAPs in Cuyahoga County as the funding provides support for costs of the system's equipment, call-taking application, and connectivity.

The Ohio Revised Code requires the 9-1-1 Steering Committee to establish operational standards for public safety answering points eligible for wireless reimbursement. The 9-1-1 Steering Committee adopted such standards on April 26, 2016. The office of the 9-1-1 administrator, in partnership with the local 9-1-1 coordinators and PSAP managers, review these standards every five (5) years and make recommendations for addition, deletion, and/or revision to the state 9-1-1 steering committee. The last update occurred in 2021.

3.2 Cuyahoga County Operational Requirements

Cuyahoga County receives monthly disbursements from the State NG9-1-1 Assistance Fund. These disbursements benefit all Primary and Secondary PSAP's in Cuyahoga County as the funding provides support for costs of the system's equipment, call-taking application and connectivity.

The Cuyahoga County 9-1-1 Program Review Committee believes the best interest of public safety is served by utilizing these standards for all 9-1-1 calls including calls transferred within the system. Additionally, ORC 128.021 requires PSAP's not originally required to be compliant, to comply with all OAC 5507 standards not later than two years after the effective date of October 2, 2023.

It is the intent of this document to maintain compliance with OAC 5507. Authority over compliance is maintained by the Ohio Department of Administrative Services, 9-1-1 Program Office. Any changes or revisions to OAC 5507 will be reflected within this document upon approval of the Cuyahoga County 9-1-1 Program Review Committee.

3.3 Cuyahoga County – Current 9-1-1 System Requirements

The equipment installed at a PSAP determines the Enhanced 9-1-1 features that will be available to the individual answering the 9-1-1 call. The minimum system requirements for the Cuyahoga County 9-1-1 network includes Selective Routing, Alternate (overflow) routing, Default routing, ANI/ALI delivery, redundant infrastructure to include voice and data delivery to each PSAP. Overflow conditions at a Primary PSAP, or conditions requiring evacuation or other temporary change in routing of 9-1-1 calls, will result in the use of an alternate PSAP.

The minimum ANI equipment for a PSAP is the ANI Controller, the ANI Transfer/Display unit/computer screen, and a regular telephone instrument or phone system (computerized) on which the call is actually answered. In addition, an ANI auxiliary controller and ANI additional trunk equipment may be required dependent upon the number of incoming trunk lines and the number of ANI Transfer/Display units at the PSAP.

ANI equipment is needed for the 9-1-1 system to display at the PSAP the telephone number from which the 9-1-1 call is being made, and for the alternate routing call transfer, forced disconnect, call hold, call return, and hard copy record features.

ANI equipment is a prerequisite for the ALI equipment which, at a minimum, would consist of the ALI Controller and the ALI display unit. In addition, miscellaneous wiring is needed for each ALI display unit. Also, an ALI auxiliary controller may be needed depending of the number of ALI display units at the PSAP. The ALI equipment is needed in order for the 9-1-1 system to display at the PSAP the address from which the 9-1-1 call is originating.

TRUNK AND TELEPHONE LINES

A PSAP must maintain at least one ten-digit telephone number. All PSAPs must be equipped with a minimum of two CAMA trunk lines dedicated to 9-1-1 call processing.

SELECTIVE ROUTING

This feature automatically routes the 9-1-1 call to the PSAP serving the area in which the 9-1-1 call originates.

ANI – AUTOMATIC NUMBER IDENTIFICATION

This feature displays the telephone number from which the 9-1-1 call is being made.

ALI – AUTOMATIC LOCATION IDENTIFICATION

This feature displays the telephone number, address, and type of telephone (residential, business, cellular, or pay) from which the 9-1-1 call is being made, and also displays the police, fire, and emergency medical service providers for the listed address. Primary PSAP CPE (customer premise equipment) minimum requirements include ANI/ALI receipt/display, a database of 9-1-1 call data, one button transfer, and abandoned call display.

3.4 Special Call Handling

Misrouted Calls

Calls initially misdirected to the wrong PSAP may be transferred to the appropriate PSAP via one-button transfer when possible. If one-button transfer cannot be made, all information shall be obtained and dispatched or relayed to the proper dispatch point/PSAP via most expeditious method – radio or telephone. If the misdirection is a result of an improper transfer, the caller shall NOT be transferred again. All information shall be obtained and, via most expeditious method, dispatched or relayed to the appropriate agency.

- 9-1-1 Calls may be transferred to the appropriate PSAP when required.

- When a 9-1-1 Call is transferred from one PSAP to another the transferring PSAP must announce the transfer. The announcement must include the name of the PSAP making the transfer and the Name of the PSAP that is receiving the transfer.
- The transferring PSAP must remain on the line to verify that the receiving PSAP has the caller and the address. For PSAPS who cannot remain on the line during a transfer they must contact the receiving PSAP to verify the call has been received.
- In instances where the ANI/ALI information is not transferred between PSAPS the transferring PSAP shall give the receiving PSAP any location and call back number information they have available.
- In any instance where the call is not able to be transferred the PSAPS shall gather all information from the caller as to the nature of the call and provide any pre-arrival instructions required. The information shall then be transferred to the appropriate dispatch point via the most expeditious method available (radio or telephone).
- Misdirected calls that indicate a data base error shall be reported to the 9-1-1 Coordinator by completing an ANI/ALI discrepancy form and emailing it.

Abandoned Calls

An abandoned call, sometimes referred to as a hang-up call or a short duration call, occurs:

- When the caller disconnects before the call has been received at the PSAP or can be answered by the telecommunicator, and,
- When the telecommunicator does not have enough information to determine if the call is an emergency.
- If a valid callback number is available, the PSAP receiving an abandoned call shall attempt to re-establish contact.

Disconnected Calls

A disconnected call occurs:

- When the caller disconnects after the call has been received at the PSAP or answered by the telecommunicator, or
- When the telecommunicator does not have enough information to determine if the call is an emergency.
- If a valid callback number is available, the PSAP receiving an abandoned call shall attempt to re-establish contact.

Non-Responsive / Silent Voice Calls

A non-responsive call is an open voice line call or a non-voice communication where the caller is not responding to the telecommunicator. All non-responsive calls MUST be interrogated with a TTY/TDD to determine if the caller is attempting to report an emergency using a special communications device for deaf, hard of hearing, or speech impaired individuals.

On a non-responsive call, if the telecommunicator hears background noises that indicate an emergency is occurring, such as domestic violence or difficulty breathing, the telecommunicator SHALL initiate the appropriate response. The telecommunicator should continue to monitor the open line until contact is established or the call is disconnected. If the call is disconnected, the telecommunicator SHOULD attempt to re-establish contact once, at a minimum, to determine if assistance is needed. If no direct contact (line busy, no answer, voice mail) is made after the initial attempt, any additional attempts to contact the caller should be made in accordance with local policy.

Regardless of the type or source, if a valid callback number is available a PSAP should attempt to reestablish contact with all hang-up, abandoned, or disconnected 9-1-1 calls for service once, at a minimum.

9-1-1 Misdialed Calls

A call is classified as a 9-1-1 misdial when the caller stays on the line and admits to the misdial. The telecommunicator, at a minimum, should verify the location of the caller and attempt to verify that the call is actually a misdial.

Repetitive Harassing 9-1-1 Callers

Repetitive 9-1-1 callers create a type of denial of service (DoS) where their calls intentionally tie up a Telecommunicator as well as potentially block out legitimate 9-1-1 calls. Pursuant to ORC 128.96 (G), “No person shall knowingly use a 9-1-1 system for a purpose other than obtaining emergency service.” Violation of section 128.96 of the Ohio Revised Code is guilty of a misdemeanor of the fourth degree on a first offense and a felony of the fifth degree on each subsequent offense.

3.5 Cuyahoga County PSAP Training Program

CECOMS PSAP training program provides PSAPs with support needed to maintain the highest standards in emergency call processing. Cuyahoga County provides training in Public Safety Telecommunications (PST), CPR, First Aid, Emergency Medical Dispatch (EMD) and NG9-1-1 system specific user training. PSAPs are required to advise the County 9-1-1 Coordinator when new dispatchers are hired as they will be required to take the NG9-1-1 system application training. PSAPs who are enrolled in the county EMD program will have opportunities throughout the year to enroll new and existing staff for PST and EMD training. All PSAPs are invited to participate in the county training program.

4 NETWORK EQUIPMENT

As of the approval of this Plan, each PSAP is equipped with a designated number of positions that include NG9-1-1 system with mapped ALI, dual monitors, keyboard, CPU, Genovation keypad and a telephone handset. All positions are connected to the network which includes two geo-diverse hosted servers located at secure data centers.

County-owned positions are those positions currently covered under the County’s monthly maintenance contract with the NG9-1-1 system vendor. Furthermore, only those County-owned positions that were installed during the period commencing with contract execution through the end of 2017 will be eligible for the upgrade. Equipment purchased after 2017 does not qualify for the contractual upgrade.

In addition to the equipment provided to the PSAP's and data center hosts, 10 remote positions were purchased. The remotes can be connected back to the primary 9-1-1 call handling system controller using a virtual private network (VPN) via wireline, wireless or satellite Internet connection.

The County currently bears the financial responsibility for maintenance to the system not covered under the NG9-1-1 system contract including Text-to-9-1-1 capabilities and upgrades to maintain the highest industry standards. The County will continue to maintain this baseline commitment through March of 2025.

4.1 Additional Equipment

Establishing an integrated countywide 9-1-1 system demands the equipment each PSAP uses on that system is compatible with the other equipment in use. To establish a mechanism for assuring the compatibility of new, upgraded, and replacement equipment with the County's 9-1-1 System so that public funds are not spent on incompatible equipment. Any PSAP wishing to install new, upgraded, or replacement equipment, hardware or software shall be reviewed and approved by the 9-1-1 Coordinator in order to verify:

(a) Its Necessity to Maintain Current Operations,
(b) Its Compatibility with Future County 9-1-1 System Architecture,
(c) Its Consistency with Past Reimbursement Requests, and
(d) The Availability of Funds for Reimbursement.

In the event of a disagreement this shall be decided by the 9-1-1 Program Review Committee.

5 COMMUNICATIONS SERVICE PROVIDERS

Any wireless service, multiline telephone system, and voice over internet protocol system to which a service or system is registered to a subscriber's address within the state of Ohio or the subscriber's primary place of use is in this state **and** the service or system is capable of initiating a direct connection to 9-1-1.

MULTILINE SYSTEM

Each operator of a multiline telephone system that was installed or substantially renovated on or after the effective date of October 3, 2023 shall provide to the end user the same level of 9-1-1 service that is provided to other end users of 9-1-1 within the state. That service shall include the provision of Legacy automatic number identification and automatic location identification;

Each operator of a multiline telephone system that was installed or substantially renovated on or after the effective date of October 3, 2023, shall provide an emergency-response-location identifier as part of the location transmission to the public safety answering point, using legacy private-switch automatic location identification.

Each operator of a multiline telephone system that was installed or substantially renovated on or after the effective date of October 3, 2023, shall identify the specific location of the caller using an emergency response location that includes the public

street address of the building from which the call originated, a suite or room number, the building floor, and a building identifier, if applicable.

All locations provided shall be master-street-address-guide 9-1-1-location-validation-function valid.

These requirements do **not** apply to a multiline telephone system in a workspace of less than seven thousand square feet in a single building, on a single level of a structure, having a single public street address.

BUSINESS SERVICES

Beginning not later than one year after the effective date of October 3, 2023, a business service user that provides residential or business facilities, owns or controls a multiline telephone system or voice over internet protocol system in those facilities, and provides outbound dialing capacity from those facilities shall ensure both of the following:

- In the case of a multiline telephone system that is capable of initiating a 9-1-1 call, the system is connected to the public switched telephone network in such a way that when an individual using the system dials 9-1-1, the call connects to the public safety answering point without requiring the user to dial any additional digit or code.
- The system is configured to provide notification of any 9-1-1 call made through the system to a centralized location on the same site as the system. The business service user is not required to have a person available at the location to receive a notification

A business service user to which all of the following apply is exempt from these requirements until two years after the effective date of October 3, 2023:

- The requirements would be unduly and unreasonably burdensome.
- The multiline telephone system or voice over internet protocol system needs to be reprogrammed or replaced.
- The business service user made a good-faith attempt to reprogram or replace the system.
- The business service user agrees to place an instructional sticker next to the telephones that explains how to access 9-1-1 in case of emergency, provides the specific location where the device is installed, and reminds the caller to give the location information to the 9-1-1 call taker.

6 FUNDING

The countywide 9-1-1 system is funded by the 9-1-1 Government Assistance Fund. ORC 128.57 stipulates that disbursements from the State Wireless Fund shall be used for:

- Designing, upgrading, purchasing, leasing, programming, installing, testing, or maintaining the necessary data, hardware, software, and connectivity required for the public safety answering point or points of the 9-1-1 system to provide wireless, enhanced or next generation 9-1-1 service;

- Processing 9-1-1 emergency calls from the point of origin to include any expense for interoperable bidirectional computer aided dispatch data transfers with other public safety answering points or emergency services organizations and transferring and receiving law enforcement, fire, and emergency medical service data via wireless or internet connections from public safety answering points or emergency services organizations to all applicable emergency responders, exclusive of mobile radio service costs.
- Any costs of training the staff of the public safety answering point or points to provide wireless enhanced 9-1-1.

CECOMS is currently the only wireless PSAP in Cuyahoga County.

SYSTEM COSTS

There are two segments of cost associated with the implementation and operation of the Enhanced 9-1-1 System. The first is the network costs consisting of one-time start-up costs and monthly maintenance. The other segment is local-government PSAP costs also comprised of start-up and monthly costs. Ohio House Bill No.491 clearly defines the responsibility for these various cost elements. Ohio House Bill No.361 clearly defines the responsibility for various cost elements associated with wireless funding.

NETWORK COSTS

As stated, the county's 10-year contract with Motorola CallWorks will expire in March, 2025. During that period, obligations for the countywide system are the sole responsibility of Cuyahoga County. Cohesiveness and interoperability are and will continue to be the focus of the county. Coverage of AT&T ASE circuits is covered in Section 7 of this plan.

PUBLIC SAFETY ANSWERING POINT COSTS

The PSAP costs for wireline 9-1-1 calls are funded through local government budgets. Costs are primarily related to the equipment installed and maintained at the PSAP locations. This plan does not address anything outside of items mentioned in Section 8.2.

6.1 Fund Disbursements

Funds received from the State of Ohio 9-1-1 Government Assistance Fund shall be placed in a separate fund at the Cuyahoga County Treasurer's Office. Funds shall be disbursed to Cuyahoga County to cover costs associated with implementing and maintaining the countywide NG911 system.

7 PSAP OVERVIEW

Cuyahoga County is comprised of 38 cities, 19 villages and 2 townships and recognizes the benefits of consolidating PSAPs and regionalizing emergency dispatch to provide more efficient and cost-effective emergency services for residents and visitors. A PSAP number is an identifying number assigned to each PSAP by AT&T that is used to electronically identify the equipment number and respective destination of each 9-1-1 call.

Each PSAP is also assigned a three-digit Emergency Service Number (ESN) by the telephone company. The ESN identifies a unique combination of emergency service

agencies designated to serve a specific range of addresses within a particular geographical area, or Emergency Service Zone (ESZ). In summary, the ESN facilitates selective routing and selective transfer, if required, of calls to the appropriate PSAP and the dispatching of proper service agency(ies).

There are multiple public safety answering points to serving the residents of Cuyahoga County. There is one Wireless PSAP. Ohio Revised Code permits a County's Final Plan the authority to adjust the territory served by a Public Safety Answering Point. PSAP service area alignment may require minor changes to reflect technological changes and requested changes by governmental jurisdictions. Such changes may be accomplished as long as they are consistent with the general purpose and intent of the Final Plan.

Existing contractual arrangements, user fee-structure, and determination of operational costs unrelated to 9-1-1 are not subject to the provisions of this plan

.7.1 PSAP Notification Methods

There are four primary methods available to process a 9-1-1 call to the emergency responder or appropriate agency.

1. DIRECT NOTIFICATION is used when the PSAP initially receiving the 9-1-1 call is the dispatch point for the agency that is the proper emergency responder for the type and location of the 9-1-1 call.
2. CALL TRANSFER is used when the initial PSAP is not the dispatch point for the appropriate emergency responder therefore the caller is transferred to the appropriate PSAP or dispatch point.
3. CALL RELAY is used when a PSAP obtains information from a caller and notifies another PSAP about the information received.
4. CALL REFERRAL is used when the PSAP receives a non-emergency call for an agency and provides the caller with the appropriate phone number to contact that agency.

When the territory served by a PSAP changes by Plan amendment, appropriate changes in wireline 9-1-1 call routing will be made by the 9-1-1 coordinator.

7.2 PSAP Consolidation

Although PSAP consolidation is a local decision made by each municipality, formation of PSAPs that serve multiple municipal emergency response agencies is encouraged. As stated, consolidation, where municipalities combine and operate multiple public-safety agencies in a single E911 facility, reduces costs and increases efficiency. E911 system capabilities, which provide the caller's telephone number, location and respective jurisdictional response agencies, have reduced the need for municipally-based PSAPs. Community and county leaders should work together to consolidate PSAP facility and equipment resources.

Any PSAP(s) planning to relocate or consolidate are required to submit the new PSAP physical address to the county 9-1-1 Coordinator at least six (6) months prior to actively receiving 9-1-1 calls.

Appendix 4 summarizes the assignment of costs under various scenarios of PSAP relocation.

7.3 PSAP Redundancies

Each Primary PSAP shall establish a back-up PSAP or have an arrangement for back-up provided by another PSAP. Agencies may also pool resources and create regional back-up centers. Alternate methods for receiving and processing 9-1-1 calls may include interlocal agreements among one or more PSAPs for sharing physical resources, entail a use of portable equipment that may be implemented wherever secure network connectivity is accessible, construction and maintenance of a back-up PSAP facility that would only be utilized when the Primary PSAP is inoperable, or other alternative solution.

The back-up PSAP shall be:

- Capable, when staffed, of performing the emergency functions performed at the primary PSAP.
- Separated geographically from the primary PSAP at a distance that ensures the survivability of the alternate center.
- Annually tested back-up PSAP plan.
- Capable of operation long enough to enable the transfer of operations to the back-up PSAP in the event of an emergency in the PSAP or in the building that houses the PSAP.
- The back-up PSAP shall be capable of executing a local management approved, written, dated, and annually tested back-up PSAP plan.

The plan shall include:

1. Any local agreements which may exist, or which are anticipated, that provide for the back-up PSAP.

2. The ability to reroute incoming 9-1-1 call traffic to the back-up center and to process and dispatch 9-1-1 calls at that center.

A list of Primary and Secondary PSAPs and their back-up centers is available in Appendix 1.

7.4 Annual PSAP Assessment

The County has established an annual PSAP assessment program. Through the assessment program, the County 9-1-1 Coordinator assesses each PSAP in Cuyahoga County annually. During the assessment, the County evaluates the PSAP according to a checklist of criteria to verify compliance with the requirements of the State PSAP Operations Rules (OAC 5507), as adopted by the 9-1-1 Steering Committee in 2016 and updated in 2021. The checklist is also used to identify and provide additional information and technical service that is of value to the PSAP client.

8 FUTURE OPERATIONS

The overall goal is to ultimately route wireless 9-1-1 calls to eligible PSAP's. In order for a PSAP to be considered eligible, the PSAP must be:

1. 100% compliant with all State of Ohio Administrative Rules;
2. In compliance with the County's 9-1-1 PSAP Audit.

PSAP's that are not deemed eligible will continue to receive wireless 9-1-1 calls from CECOMS.

Relative to the transition to NG9-1-1, Cuyahoga County will continue the process of collecting data to determine the path forward and examine the most effective and efficient method to implement wireless 9-1-1 call handling at eligible PSAP's.

8.1 NG9-1-1 System Equipment Refresh

The contract between Cuyahoga County and the NG9-1-1 vendor included a hardware refresh 60 months after the initial implementation date in April, 2015. Beginning in July, 2022, the vender replaced the existing "Front-End" (User) hardware with new hardware to keep the system current. In September, 2022 the County & Motorola agreed to replace the "Back-End" equipment and software with Vesta 9-1-1 instead of CallWorks. Installation of Vesta 9-1-1 was completed in October 2023.

During this refresh, a review of staffing, call volume and use of current positions by the County 9-1-1 Coordinator was done and position counts were adjusted at some sites. As future changes to the County's Call-Handling solution occur, additional assessments may be necessary. Per the L.R. Kimball report on 10/31/2014, each PSAP will have a minimum of two positions funded via Ohio Wireless Fund through January 1, 2025. PSAP's that desire to maintain additional workstations, may elect to self-fund the position(s) through the County's current contract with Motorola under the following conditions:

- The PSAP is responsible for the purchase, installation and engineering of any additional 9-1-1 workstations.
- The PSAP agrees to reimburse Cuyahoga County on a quarterly basis, the sum of $525.00 per workstation, per month for support and maintenance fees associated with the NG9-1-1 equipment, software and licensing.
- The PSAP agrees to pay these maintenance costs until the end of the contract period between vender and Cuyahoga County, approximate date of April 2025.
- The PSAP agrees to reimburse Cuyahoga County for any/all move, decommission and/or termination fees charged by vender.
- The PSAP will be responsible for all contractual and financial obligations with AT&T for installation, maintenance and monthly fees for any additions or upgrades to the current AT&T OPT-E-MAN Silver ASE Circuit.
- The PSAP agrees to reimburse the County for any installation, maintenance, and monthly recurring costs and/or administrative costs charged by AT&T in excess of their current monthly rate per month.

- In the event the PSAP were to terminate AT&T circuits early, the PSAP will be responsible for any and all early termination fees charged by AT&T.
- The PSAP is responsible for contacting NG9-1-1 system vender directly to address any system technical issues.

8.2 Future Consolidation and Cost Structure

Due to the increased cost of operating the enhanced 9-1-1 system, combined with the stagnant amount of state funding, Cuyahoga County will continue to pursue consolidation of emergency dispatch centers. Currently, Cuyahoga County pays 100 percent of the cost for the following system resources utilized at each PSAP:

- NG9-1-1 system Positions (varies per dispatch)
- Text-To-911 Services
- AT&T data Circuit
- AT&T IPFlex / Admin Line Options (SIP trunking service that provides unified access for analog or PBX systems through a combination of voice & data to a single provider, transport method, and application management platform)
- DS1 (Also known as T1 - refers to a carrier system that transmits information, such as the voice signals of a telephone call and the video signals of television)
- AT&T Switched Ethernet Services

Beginning in 2023[2], only the following entities will receive funding for the aforementioned AT&T OPT-E-Man Silver ASE Circuits:

- Wireless PSAP
- City of Cleveland
- Regional PSAPs (comprised of five (5) or more municipal agencies)

  Under that criteria, the following PSAPS will qualify for ASE Circuit funding:

- **CECOMS**
  - Wireless Call Taking
  - Cuyahoga County Municipalities (1)
- **City of Cleveland**
  - Cuyahoga County Municipalities (1) - Cleveland
- **Chagrin Valley Dispatch – Bedford**
  - Cuyahoga County Municipalities (16) - Bedford, Bentleyville, Bratenahl, Chagrin Falls, Chagrin Falls Township, Euclid, Gates Mills, Glenwillow,

[2] These changes were originally slated to take effect on July 1, 2022. The original date was deferred by vote of the 9-1-1 Program Review Committee due to several fluid changes taking place at both the county and state level. Additional planning meetings throughout 2022 and 2023, along with the completion of the county-wide emergency communications assessment and ongoing data collection efforts, will assist in determining in the status of this recommendation into 2024.

Highland Hills, Hunting Valley, Maple Heights, Moreland Hills, North Randall, Orange Village, Solon, Woodmere

- *Non-Cuyahoga County Municipalities (1) – South Russell (Geauga)*

- **Chagrin Valley Dispatch – Brecksville**
  - Cuyahoga County Municipalities (9) – Brecksville, Broadview Heights, Brooklyn, Brooklyn Heights, Cuyahoga Heights, Independence, Newburgh Heights, Seven Hills, Valley View
  - Non-Municipality Agency – Cleveland Metroparks
- **Heights Hillcrest Communications Center – Cleveland Heights**
  - Cuyahoga County Municipalities (5) - Cleveland Heights, Richmond Heights, Shaker Heights, South Euclid, University Heights
- **Southwest Emergency Dispatch Center**
  - Cuyahoga County Municipalities (7) – Berea, Brook Park, Middleburg Heights, North Royalton, Olmsted Falls, Olmsted Township, Strongsville

Temporary deferments of cost for non-Regional PSAPs may be granted due to pending mergers but will require a recommendation from the County 9-1-1 Coordinator and subsequent approval of the Director of Public Safety & Justice Services. If deferments are granted, the Director of Public Safety & Justice Services will report out to the 9-1-1 Program Review Committee via email correspondence the request and subsequent basis for the decision within 30 days of the request being granted.

PSAPs may utilize the County's contract with AT&T to obtain ASE circuits under the following conditions:

- The PSAP is responsible for the purchase, installation and engineering of any additional equipment needed or costs that exceed the rate charged to the County under the most current contract with Motorola Solutions.
- The PSAP agrees to reimburse Cuyahoga County for support and maintenance fees associated with the AT&T OPT-E-Man Silver ASE Circuits.
  - This may be paid on a quarterly or bi-annual basis contingent term of a Memorandum of Understanding executed between the PSAP and Cuyahoga County.

In coordination with the funding dates, Dispatch Centers serving agencies located outside Cuyahoga County may have funding reduced by an amount proportional to agency membership attributes.

Countywide Emergency Call Handling Study (2022)

In April 2022, Cuyahoga County Public Safety & Justice Services entered into contract with Mission Critical Partners (MCP) for a study to be completed reviewing the current landscape in both dispatching and call handling in Cuyahoga County. That study was finalized with a report in 2023. That study was finalized with a report in 2023. Some of the major recommendations that came out of the study include:

- The overarching programmatic theme is that the County should continue to serve as the focal point of 9-1-1 services in Cuyahoga County for years to come.
- The County should use this responsibility by conveying and implementing state and national or even local standards to ensure a common level of 9-1-1 service across the county.
- The County should focus efforts on developing a countywide standard that ensures a consistent level of service for every 9-1-1 caller, no matter where the call is placed.
- There should also be a comprehensive and ongoing review of the standard by the County, representatives of Cuyahoga County PSAPs, and elected leadership.
- MCP recommends the County consider a review of the internal design of the CECOMS facility in alignment with its role in the future direction of the County's 9-1-1 system. It would be beneficial to maximize operational efficiencies, sound and communication management, and furnishings designed for industry needs as well as ergonomics and occupational health concerns.
- MCP recommends that Cuyahoga County's PSAPs consider the implementation of a common CAD platform for all agencies, simplifying call delivery, processing, and dispatch requirements. This
- Following completion of the VESTA refresh, MCP recommends that the County redirect wireless 9-1-1 calls to the PSAPs that can dispatch the appropriate responder agencies but only if they are able to operate within acceptable standards established nationwide, by the State of Ohio, and that they do so consistently per the County's discretion.
- As the State rolls out the new NG9-1-1 solution, the County must acknowledge that systems will need upgrades (hardware and software); there will be new equipment to install at PSAPs and in datacenters.
- All aspects of the 9-1-1 ecosystem need to be considered in order to deploy a proper ESINet foundation that is flexible and can evolve as features and technologies evolve.

Emergency Call Taking Software (2023)

On an ongoing basis, the County 9-1-1 Coordinator will work with the 9-1-1 Technical Advisory Committee to prepare review needs for future equipment and operational requirements for the county's E911 system. Once developed, a plan should be designed to provide the 9-1-1 Program Review Committee, County management and PSAP managers with a list of anticipated resources and required funding to maintain a fully-enhanced 9-1-1 system.

As noted previously in this document, the County's contract with Motorola CallWorks expires on March 31, 2025. Cuyahoga County formed a committee to develop specifications for an RFP for the next installment of the countywide 9-1-1 system beginning in June, 2023. The committee included subject matter experts in the fields of law enforcement, fire, emergency medical services, and 9-1-1 communications.

APPENDIX 1						
PSAP	**PSAP LOCATION**	**PSAP GEOGRAPHIC TERRITORY**	**SUBDIVISIONS SERVED**	**CALL ORIGINATION TYPE**	**CALL RESPONSE**	**PSAP BACKUP**
Bay Village PD	28000 Wolf Rd. Bay Village, OH	Bay Village	Bay Village Police	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Westlake
Beachwood	3777 Richmond Rd. Beachwood OH	Beachwood, Pepper Pike	Beachwood Police, Fire, EMS Pepper Pike Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Chagrin Valley - Bedford
Bedford Heights	5661 Perkins Rd. Bedford Hts., OH	Bedford Hts., Oakwood Village	Bedford Hts. Police, Fire, EMS Oakwood Vlg. Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Internal
CECOMS	88 Center Rd. Bedford, OH	Cuyahoga County	All County	Countywide Enhanced Wireless 9-1-1 calls & SMS	Call transfer to appropriate PSAP	Cleveland
Chagrin Valley Dispatch Bedford	88 Center Rd. Bedford, OH	Bedford, Bentleyville, Bratenahl, Chagrin Falls Village, Chagrin Falls Twp., Euclid, Gates Mills, Glenwillow, Highland Hills, Hunting Valley, Maple Hts., Moreland Hills, N. Randall, Orange Village, Solon, So. Russell, Woodmere	Police, Fire, EMS for all **Except** Bratenahl Police only	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Internal
Chagrin Valley Dispatch Brecksville	9018 Brecksville Rd. Brecksville, OH	Brecksville, Broadview Hts., Brooklyn, Brooklyn Hts., Cuyahoga Hts., Independence, Newburgh Hts., Seven Hills, Valley View, Cleveland Metroparks, Cuyahoga County SO	Police, Fire, EMS for all	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Internal

Chagrin Valley Dispatch Heights Hillcrest	10 Severance Circle Cleveland Hts., OH	Cleveland Hts., Richmond Hts., Shaker Hts., South Euclid, University Hts.	Police, Fire, EMS for all	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Internal
City of Cleveland	4501 Chester Ave. Cleveland, OH	Cleveland, Linndale, Bratenahl	Cleveland Police Cleveland Fire Cleveland EMS Bratenahl Fire/EMS Linndale Fire/EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS direct & transfers, 10-digit emergency & non-emergency	Direct Dispatch	CECOMS
East Cleveland	14340 Euclid Ave. East Cleveland, OH	East Cleveland	East Cleveland Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	CECOMS
Garfield Heights	5555 Turney Rd. Garfield Hts., OH	Garfield Heights	Garfield Hts. Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Chagrin Valley - Bedford
Highland Heights	5827 Highland Rd. Highland Hts., OH	Highland Heights	Highland Hts. Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Mayfield Village
Lakewood	12650 Detroit Rd. Lakewood, OH	Lakewood	Lakewood Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	North Olmsted
Lyndhurst	5301 Mayfield Rd. Lyndhurst, OH	Lyndhurst	Lyndhurst Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Mayfield Heights

Mayfield Heights	6154 Mayfield Rd. Mayfield Hts., OH	Mayfield Heights	Mayfield Hts. Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Lyndhurst
Mayfield Village	620 SOM Center Rd. Mayfield, OH	Mayfield Village	Mayfield Village Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Highland Heights
North Olmsted	27243 Lorain Rd. North Olmsted, OH	North Olmsted	North Olmsted Police, Fire, EMS Fairview Park Police	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Westlake
Parma	7335 Ridge Rd. Parma, OH	Parma, Parma Heights.	Parma Police, Fire, EMS Parma Hts. Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Southwest Emergency Dispatch Center
Rocky River	21012 Hilliard Blvd. Rocky River, OH	Rocky River	Rocky River Police	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	North Olmsted
Southwest Emergency Dispatch Center (SWEDC)	13213 Pearl Rd. Strongsville, OH	Berea, Brook Park, Middleburgh Hts., North Royalton, Olmsted Falls, Olmsted Twp., Strongsville	Police, Fire, EMS for all	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Parma
Walton Hills	7595 Walton Rd. Walton Hills, OH	Walton Hills	Walton Hills Police	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Chagrin Valley - Bedford

Warrensville Heights	4743 Richmond Rd. Warrensville Hts., OH	Warrensville Heights	Warrensville Hts. Police, Fire, EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Chagrin Valley - Bedford
Westlake	27300 Hilliard Rd. Westlake, OH	Westlake	Westlake Police	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Bay Village
SECONDARY PSAPS						
PSAP	**PSAP LOCATION**	**PSAP GEOGRAPHIC TERRITORY**	**SUBDIVISIONS SERVED**	**CALL ORIGINATION TYPE**	**CALL RESPONSE**	**PSAP BACKUP**
Westcom	29000 Center Ridge Rd. Westlake, OH	Bay Village, Fairview Park, Rocky River, Westlake	Bay Village Fire & EMS Fairview Park Fire & EMS Rocky River Fire & EMS Westlake Fire & EMS	Enhanced Wireline 9-1-1, Enhanced Wireless 9-1-1 call transfers, SMS transfers, 10-digit emergency & non-emergency	Direct Dispatch	Internal

APPENDIX 2 - GLOSSARY

911
A three-digit telephone number to facilitate the reporting of an emergency requiring response by a public safety agency.

911 Service Area
The geographic area that has been granted authority by a state or local governmental body to provide 9-1-1 service.

Abandoned Call
A call placed to 9-1-1 in which the caller disconnects before the call can be answered by the Public Safety Answering Point (PSAP) attendant.

Alternate PSAP
A PSAP designated to receive calls when the primary PSAP is unable to do so.

Alternate Routing
Alternate routing provides for a predetermined routing for 911 calls when the tandem office is unable to route the calls over the 911 trunks for a particular PSAP due to troubles or all trunks busy.

American Standard Code for Information Interchange (ASCII)
This standard defines the code for a character set to be used for information interchange between equipment of different manufacturers and is a standard for data communications over telephone lines. In the context of TDD/TTY this refers to both a binary code and modulation method used for 110/300 baud TDD/TTY communications.

Automatic Location Identification (ALI)
Automatic Location Identification provides for an address display of the subscriber calling 911. With ALI, the PSAP receives the ANI display and an ALI display on a screen. The ALI display includes the subscriber's address, community, state, type of service and if a business, the name of the business. The PSAP will also get a display of the associated ESN information (police, fire, rescue).

Automatic Number Identification (ANI)
Automatic Number Identification corresponds to the subscriber's ten-digit telephone number. The ANI displays at the PSAP on the digital ANI display console. ANI Failure of the end office to identify the call and provide the ANI (telephone number) to the tandem
office; or, an ANI failure between the tandem office and the PSAP.

Anonymous Call
If a subscriber misdials and dials the ten-digit number associated with the PSAP position, they will come in direct and ANI display as 911-0000 which will ALI as an anonymous call. The ten-digit numbers associated with the PSAP positions are not published even to the PSAPs.

Call Detail Record
When the 911 call is terminated by the PSAP operator, the ANI will automatically print-out on the teletypewriter located at the PSAP. The printout will contain the time the call came into the PSAP, the time it was picked up by an operator, the operator number, the time the call was transferred, if applicable, the time the call was terminated and the trunk group number associated with the call. Printouts of the ALI display are now also available, if the PSAP has purchased the required equipment.

Cell
The wireless telecommunications (Cellular or PCS) antenna serving a specific geographic area.

Cell Sector
One face of a cell antenna (typically 3-sided) that operates independently of the other sectors.

Cell Site
The location of a cell and related equipment.

Computer Aided Dispatch (CAD)
A computer-based system, which aids PSAP telecommunicators by automating selected dispatching and record keeping activities.

Data Base
An organized collection of information, typically stored in computer systems, comprised of fields, records (data) and indexes. In 9-1-1, such data bases include MSAG, telephone number/ESN, and telephone customer records.

Data Base Management System (DBMS)
A system of manual procedures and computer programs used to create, store and update the data required to provide Selective Routing and/or Automatic Location Identification for E9-1-1 systems.

Dedicated Trunk
A telephone circuit used for a single purpose; such as transmission of 9-1-1 calls.

Default Routing
Provides for routing of 911 calls when there is an ANI failure. The call will be routed to the "default" ESN associated with the he NNX the caller is calling from. Default ESNs are pre-assigned in translations and are usually the predominant ESN for a given wire center.

Digital Subscriber Line (DSL)
A subscriber loop supporting one of the digital transmission techniques.

Direct Dispatch
The performance of 9-1-1 call answering and dispatching by personnel at the primary PSAP.

E9-1-1
Enhanced 911: Features available include selective routing, selective transfer, fixed transfer, alternate routing, default routing, Automatic Number Display, Automatic Location Identification, night service, default routing, call detail record.

Emergency Location Identification Number (ELIN)
A valid North American Number Plan format telephone number assigned to the MLTS Operator by the appropriate authority that is used to route the call to a PSAP and is used to retrieve the ALI for the PSAP. The ELIN may be the same number as the ANI. The North American Numbering Plan number may in some cases not be a dialable number.

Emergency Service Number (ESN)/Emergency Service Zone (ESZ)
An ESN is a three to five-digit number representing a unique combination of emergency service agencies (Law Enforcement, Fire, and Emergency Medical Service) designated to serve a specific range of addresses within a particular geographical area, or Emergency Service Zone (ESZ). The
ESN facilitates selective routing and selective transfer, if required, to the appropriate PSAP and the dispatching of the proper service agency(ies).

Emergency Services Routing Digit (ESRD)/Emergency Services Routing Key (ESRK)
A 10-digit number used for the purpose of routing an E9-1-1 call to the appropriate Public Service Answering Point (PSAP) when that call is originating from wireless equipment. The Emergency Services Routing Digit (ESRD) identifies the cell site and sector of the call origination in a wireless call scenario. The Emergency Services Routing Key (ESRK) uniquely identifies the call in a given cell site/sector and correlates data that is provided to a PSAP by different paths, such as the voice path and the Automatic Location Identification (ALI) data path. Both the ESRD and ESRK define a route to the proper PSAP. The ESRK alone, or the ESRD and/or Mobile Identification Number (MIN), is signaled to the PSAP where it can be used to retrieve from the ALI database, the mobile caller's call-back number, position and the emergency service agencies (e.g., police, fire, medical, etc.) associated with the caller's location. If a NANP TN is used as an ESRD or ESRK, this number cannot be assigned to a customer.

Enhanced 9-1-1 (E9-1-1)
A location technology advanced by the FCC that will enable mobile, or cellular phones to process 911 emergency calls and enable emergency services to locate the geographic position of the caller.

Forced Disconnect
The capability of a PSAP attendant to disconnect a 9-1-1 call even if the calling party remains off-hook. This feature is used to prevent overloading of 9-1-1 trunks.

Geographic Information System (GIS)
A computer software system that enables one to visualize geographic aspects of a body of data. It contains the ability to translate implicit geographic data (such as a street address) into an explicit map location, query and analyze date in

order to receive the results in the form of a map. It can also be used to graphically display coordinates on a map, i.e. Latitude/Longitude from a wireless 9-1-1 call.

Global Positioning System (GPS)
A satellite-based Location Determination Technology (LDT).

Internet Protocol (IP)
The method by which data is sent from one computer to another on the internet or other networks.

Manual Transfer
The capability of a PSAP attendant to transfer a 9-1-1 call to another location by manually dialing the destination number or speed dialing code.

MSAG Master Street Address Guide
A data base of street names and house number ranges within their associated communities defining Emergency Service Zones (ESZ) and their associated Emergency Service Numbers (ESN) to enable proper routing of 9-1-1 calls.

Misroute
Any condition that results in the 911 call going to the wrong PSAP. A call can be misrouted if the ESN and associated routing information are incorrect in the E9-1-1 data base and/or tandem data base. A call can also be misrouted if the call is an ANI failure, which automatically default routes.

Multi-line Telephone System (MLTS)
A system comprised of common control unit(s), telephone sets, and control hardware and software.

Multi-line Telephone System (MLTS) Operator
The entity that either owns, or leases/rents from a third party, and operates a MLTS through which a caller/person may place a 9-1-1 call through the public switched network.

N911 Assignments
The FCC has assigned several three-digit numbers for emergency and non-emergency access, and has posted a complete explanation on their Web site.

Next Generation 9-1-1 (NG9-1-1)
Refers to an initiative aimed at updating the 9-1-1 service infrastructure in the United States and Canada to improve public emergency communications services in a wireless mobile society. In addition to calling 9-1-1 from a phone, it intends to enable the public to transmit text, images, video and data to the PSAP.

Night Service
Night service works the same as alternate routing in that the calls coming into a given PSAP will automatically be routed to another preset PSAP when all trunks are made busy due to the PSAP closing down for the night.

No ANI
This condition means the PSAP received a call, but no telephone number displayed on the ANI console. The PSAP should report this condition immediately to the SSC/MAC.

No Displays
A condition where the PSAP ALI display screen is blank. This type of trouble should be reported immediately to the SSC/MAC. If all screens at the PSAP are blank, it is an indication that the problem is in the circuits from the PSAP to the E9-1-1 computer. If more than one PSAP is experiencing no display, it may be a problem with the Node computer or the E9-1-1 computer. The SSC/MAC should contact the MMOC to determine the health of the HOST computer.

No Record Found (NRF)
A condition where no ALI information is available for display at the PSAP.

North American Numbering Plan (NANP)
Use of 10-digit dialing in the format of a 3-digit NPA followed by 3-digit NXX and 4-digit line number.

One-button-transfer
The capability of a PSAP attendant to transfer a 9-1-1 call to a pre-determined location by activating a single button.

PSAP
An entity responsible for receiving requests for emergency services sent by dialing 9-1-1 within a specified territory and processing those requests for emergency service according to a specific operational policy that includes directly dispatching the appropriate emergency service provider or transferring the request to the appropriate emergency service provider.

PSAP Not Receiving Calls
If a PSAP cannot receive calls or request retrievals from the E9-1-1 host computer, i.e., cable cut, the calls into that PSAP must be rerouted to another PSAP. The Switching Control Center must be notified to reroute the calls in the tandem office E9-1-1 translations.

Record Not Found
If the host computer is unable to do a look up on a given ANI request from the PSAP, it will forward a
Record Not Found message to the PSA ALI screen. This is caused by service order activity for a given subscriber not being processed into the E9-1-1 data base, or HOST computer system problems whereby the record cannot be accessed at that point in time

Selective Routing
The capability to route a call to the particular PSAP serving the address associated with the TN making the 911 call. Selective routing is achieved by building TN/ESN translations in the tandem central office. These translations are driven by the E9-1-1 data base which assigns the ESN to each telephone number based on the customer's address. Service order activity keeps the E9-1-1 data base updated. The E9-1-1 data base, in turn, generates recent change to the tandem office (through the SCC or RCMAC) to update the TN/ESN translations in the tandem data base.

Selective Transfer
Provides the PSAP with the ability to transfer the incoming 911 call to a fire or rescue service for the particular number calling 911 by pushing one button for fire or rescue. For example, if an incoming 911 call was reporting a fire, the PSAP operator would push the fire button on the ANI console; the call would go back to the tandem office, do a lookup for the seven-digit number associated with fire department, for the ESN assigned to the calling TN, and automatically route the call to that fire department. This differs from "fixed" transfer which routes every call to the same fire or rescue number whenever the fire or rescue button is pushed. The PSAP equipment is optioned to provide either fixed or selective transfer capabilities.

Spurious 911 Call
Occasionally, the PSAP will get a call that is not associated with a subscriber dialing 911 for an
emergency. It could be a subscriber who has not dialed 911, but is dialing another number, or has just picked up their phone and was connected with the PSAP. These problems are equipment related, particularly when the calls originate from electromechanical or step by step offices, and are reported by the E9-1-1 Center to Network Operations upon receipt of the PSAP inquiry reporting the trouble. The PSAP may get a call and no one is there; if they call the number back, the number may be disconnected or no one home. Again, these are network troubles and must be investigated. Cordless telephones can also generate "spurious" calls in to the PSAPs. Generally, the PSAP will hear conversation on the line, but the subscribers are not calling 911. The PSAP may report spurious calls to repair if they become bothersome, for example, the same number ringing in continually.

Telecommunications Device for the Deaf (TDD/TTY)
A device capable of information interchange between compatible units using a dial up or private line
telephone network connection as the transmission medium and automatically detects TDD/TTY tones.

Voice over Internet Protocol, Voice over IP (VoIP)
Provides distinct packetized voice information in digital format using the Internet Protocol The IP address assigned to the user's telephone number may be static or dynamic.

Wireless Phase I
Required by FCC Report and Order 96-264 pursuant to notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 9-1-1 call with callback number and identification of the cell-tower from which the call originated. Call routing is usually determined by call-sector.

Wireless Phase II

Required by FCC Report and Order 96-264 pursuant to notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 9-1-1 call with Phase I requirements plus location of the caller within 125 meters 67% of the time and Selective Routing based upon those coordinates.

APPENDIX 3
CUYAHOGA COUNTY WIRELINE/WIRELESS CARRIERS

As of the approval of this document, the following wireless carriers are operating in Cuyahoga County:

AT&T Wireless
Sprint PCS Wireless
T-Mobile/Sprint Wireless
Verizon Wireless

As of April 27, 2022, the following wireline carriers are operating in Cuyahoga County:

Windstream Ohio

AT&T

APPENDIX 4 - FUNDING SCENARIOS RELOCATION/CONSOLIDATION

SCENARIO	COSTS TO AGENCY (all may not apply)	COSTS COVERED BY COUNTY (all may not apply)
Relocation or renovation with no change in PSAP's agency membership	Purchase of any additional 9-1-1 hardware	None
	Monthly maintenance costs for additional 9-1-1 hardware	
	Fees for relocation/decommission of existing 9-1-1 hardware	
	Installation of new or additional network circuit	
	Relocation of current network circuit, if possible	
	Circuit upgrades (increase in mbps)	
	Early termination fees for network circuit	
	Any monthly cost in excess of current paid by County	
	Cuyahoga County costs of administration and invoicing	
Relocation for the purpose of consolidation, and resulting consolidated PSAP has more than one (1) but less than five (5) agencies	Purchase of additional 9-1-1 hardware	AT&T circuit install/relocation
	Monthly maintenance costs for additional 9-1-1 hardware	Monthly costs for network circuit
	Fees for relocation/decommission of 9-1-1 hardware	Early termination fee for network circuit
	Additional network circuits (more than 1)	
	Monthly recurring cost in excess of current paid by County	
Relocation for the purpose of consolidation, and resulting consolidated PSAP has five (5) or more agencies	Purchase of additional 9-1-1 hardware	9-1-1 hardware relocation fee
	Monthly maintenance costs for additional 9-1-1 hardware	network circuit relocation/installation
	Additional/redundant network circuit (more than 1)	Monthly costs for network circuit
		Early termination fee for network circuit
		Circuit upgrade cost (mbps increase)
Relocation resulting in separation of member agencies; i.e. reduction in consolidation	Relocation or decommission of 9-1-1 hardware	None
	Monthly maintenance for 9-1-1 hardware	
	Relocation of current network circuit	
	Installation of new or additional network circuit	
	Early termination fee for network circuit	
	Cuyahoga County costs of administration and invoicing	
PSAP withdraws from the Countywide 9-1-1 system	Decommission of CH hardware	None
	Relocation or installation of network CAMA trunks	
	Network circuit early termination fees	
	Any costs associated with system transition	
Private PSAP joins the Countywide 9-1-1 system	Purchase and installation of call-processing hardware	None
	Monthly maintenance for CH hardware, per position	
	network circuit installation	
	network circuit monthly costs	
	Any misc. costs associated with integration to County system	

APPENDIX 5
OHIO ADMINISTRATIVE CODE 5507

Ohio Administrative Code 5507
Chapter 5507-1 | 9-1-1 Public Safety Answering Points

Rule 5507-1-01 | Purpose.

Effective: August 20, 2021

In the course of providing citizens with their most vital link to emergency response, 9-1-1 public safety answering points ("PSAP's") in the state of Ohio shall comply with technical and operational standards and recognize and promote best practices that will provide consistent, quality service by well trained personnel utilizing a high level of secure technology.

Last updated August 20, 2021 at 8:52 AM
Authorized By: 128.021
Prior Effective Dates: 5/12/2016

Rule 5507-1-02 | Scope.

Effective: May 12, 2016

These operational standards apply to all public safety answering points (PSAP) eligible to receive disbursements through section 128.55 of the Revised Code.

Last updated June 3, 2021 at 8:07 AM
Authorized By: 128.021

Rule 5507-1-03 | Definitions.

Effective: August 20, 2021

(A) Public Safety Answering Point (PSAP), as defined in section 128.01 of the Revised Code, means an entity responsible for receiving requests for emergency services sent by dialing 9-1-1 within a specified territory and processing those requests for emergency service according to specific operational policy that includes directly dispatching the appropriate emergency service provider, relaying a message to the appropriate emergency service provider or transferring the request to the appropriate emergency service provider.

(1) Primary PSAP: An abbreviation for a public safety answering point that operates on a 24-hour basis; and whose primary function is to receive incoming wireless and wireline 9-1-1 request for emergency assistance and relay those requests to an appropriate responding public safety responder or agency.

(2) Secondary PSAP: An abbreviation for a public safety answering point that operates as a dispatch center for a public safety agency and receives rollover and/or transferred wireless, and direct or rollover and/or transferred wireline 9-1-1 requests.

(B) Telecommunicator: Anyone who answers 9-1-1 service requests for public assistance at both a primary or secondary PSAP.

Last updated August 20, 2021 at 8:52 AM
Authorized By: 128.021
Prior Effective Dates: 5/12/2016

Rule 5507-1-04 | Periodic review.

Effective: May 12, 2016

The office of the 9-1-1 administrator, in partnership with the local 9-1-1 coordinators and PSAP managers, shall periodically review these standards and make recommendations for addition, deletion, and/or revision of these standards to the state 9-1-1 steering committee.

Last updated June 3, 2021 at 8:07 AM
Authorized By: 128.021

Rule 5507-1-05 | Minimum staffing.

Effective: May 12, 2016

A minimum of two telecommunicators must be on duty and available to receive and process calls at all times. For 9-1-1 systems with automatic rollover to a secondary PSAP, the secondary PSAP fulfills this obligation.

The PSAP shall ensure employment of a sufficient number of telecommunicators to allow for prompt receipt and processing of emergency calls in accordance with established call answering standards. The PSAP may participate in a virtual PSAP system where calls are automatically routed to one of multiple facilities within the system.

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Rule 5507-1-06 | Prioritization.

Effective: August 20, 2021 Promulgated Under:119.03

The PSAP shall provide standard operating procedures that ensure telecommunicators prioritize emergency functions over non-emergency functions and include the following:

(A) 9-1-1 requests for service are always an emergency function.

(B) When calls need to be transferred to another PSAP:

(1) An advisement to the caller to remain on the line as well as notification to the caller of the PSAP to which they are being transferred.

(2) That the transfer will be initiated without delay.

(3) That the telecommunicator will remain on the line during the transfer to ensure the caller is properly connected.

(4) A recommendation that, if at all possible, the following information be relayed to the receiving PSAP once the transfer is complete:

(a) Name of the agency making the transfer

(b) Location of the emergency

(c) Nature of the call

(d) Call back number

(e) Known safety information

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Rule 5507-1-07 | Minimum training standards.

Effective: August 20, 2021 Promulgated Under:119.03

(A) The state 9-1-1 steering committee shall oversee the development, implementation and revision of minimum training standards for telecommunicators who answer and process 9-1-1 requests for service in the state of Ohio and ensure they are kept up to date with industry standards. Resources to consult with include the national emergency number association, the association of public safety communication officials, the United States department of transportation and other industry resources.

(B) The office of the 9-1-1 administrator will establish a process for certifying that telecommunicators meet the minimum training requirements contained in this rule.

(C) Any person who answers 9-1-1 requests for service shall be trained to the minimum training standards before handling such 9-1-1 requests without direct oversight.

(D) The components of the minimum training program required are listed in this paragraph. Agencies can utilize a commercially available program that contains these components, or develop a local training program that contains the required instructional components. Training will consist of a minimum of forty hours of instruction.

(1) Component 1 - general knowledge

(a) Knowledge and awareness of population and demographics

(b) Knowledge and awareness of geography

(c) Knowledge and awareness of first responder agencies and their jurisdictions

(d) Knowledge and awareness of the incident command system (ICS), national incident management system (NIMS), federal, state and local interoperable communication plans and federal, state and local emergency operations plans

(2) Component 2 - general skills

(a) Ability to quickly process information and make logical decisions

(b) Stress management

(c) Provide good customer service

(d) Multi-task in a fast-paced environment

(e) Work effectively with others to solve problems

(f) Communicate clearly in written and oral form, especially when relaying emergency information to first responders or communicating with the public requesting emergency assistance

(g) Ability to operate and/or respond to emergency alerts, including but not limited to amber, blue, missing adult, and emergency weather alerts

(h) Ability to achieve and maintain certification and operate applications and databases necessary to answer and process 9-1-1 requests for service

(3) Component 3 - agency skills

(a) Ability to operate agency computer equipment

(b) Ability to operate agency telecommunication equipment

(c) Ability to operate agency computer applications and systems

(d) Ability to read, comprehend and apply agency policies and procedures

(4) Component 4 - call taking skills

(a) Ability to answer and process calls in accordance with established procedures

(b) Ability to obtain complete information

(c) Ability to properly classify and prioritize the request for service

(d) Ability to process available information to identify conditions that may affect safety

(e) Ability to document call details accurately

(f) Ability to accurately verify, document and relay initial dispatch information

(g) Ability to handle/de-escalate hostile, hysterical or difficult callers to obtain information

(h) Ability to initiate emergency call tracing procedures and subscriber information requests in exigent circumstances

(i) Ability to recognize phase 1 versus phase 2 location technology, understanding how to use both

(j) Understanding the procedures for processing and responding to text messages, photos and video sent to 9-1-1, if applicable

Last updated August 20, 2021 at 8:53 AM
Authorized By: 128.021

Rule 5507-1-08 | Continuing training standards.

Effective: August 20, 2021 Promulgated Under:119.03

(A) The state 9-1-1 steering committee shall oversee the development, implementation and revision of continuing training standards for telecommunicators in the state of Ohio and ensure they are kept up to date with industry standards. Resources to consult will include the national emergency number association, the association of public safety communications officials, the United States department of transportation and other industry sources.

(B) The office of the 9-1-1 administrator will establish a process to certify that telecommunicators meet the continuing training requirements established by the committee.

(C) Any person working in a PSAP and receiving 9-1-1 requests for service shall be required to meet the continuing training standards as follows:

Annually, before the first day of February of each calendar year, the office of the 9-1-1 administrator will distribute subject matter of timely, industry standard educational information. The distribution will be in the form of an instructional video, curriculum package or train-the-trainer package to all county 9-1-1 coordinators. The training will constitute a two-hour training block to be completed by all 9-1-1 telecommunicators subject to this chapter.

All 9-1-1 telecommunicators subject to this chapter will also complete six hours annually of additional job relevant training, as determined by the local PSAP manager. The PSAP operations subcommittee will annually provide a list of recommended training topics and/or resources online through the office of the 9-1-1 administrator.

(D) Each PSAP is responsible for maintaining training records for individual telecommunicators and to make those records available upon request to the county 9-1-1 coordinator and/or the office of the 9-1-1 administrator.

Last updated August 20, 2021 at 8:53 AM
Authorized By: 128.021

Rule 5507-1-09 | Emergency medical dispatching.

Effective: August 20, 2021 Promulgated Under:119.03

(A) The PSAP is required to provide emergency dispatching either:

(1) By establishing an emergency medical dispatching protocol, that provides pre-arrival instruction, through a recognized training provider that meets the standards as set forth by the United States department of transportation, and includes certified emergency medical dispatchers; or

(2) By establishing a local emergency medical dispatching protocol approved by the local medical authority, that provides pre-arrival instruction and includes specifically trained emergency medical dispatchers; or

(3) By agreement with a third-party emergency medical dispatch provider that can be conferenced on with the caller during an emergency.

(B) If the PSAP does not provide emergency medical services dispatching, the PSAP may meet this requirement by having an agreement in place to transfer the call to a center that provides emergency medical dispatching in compliance with paragraph (A)(1) or paragraph (A)(2) of this rule.

(C) Any person who answers 9-1-1 requests for service shall be trained in the agency's emergency medical dispatching protocol before handling such requests without direct oversight.

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Authorized By: 128.021
Prior Effective Dates: 5/12/2016

Rule 5507-1-10 | Emergency power.

Effective: May 12, 2016 Promulgated Under:119.03

(A) The PSAP shall have a minimum one alternate/emergency power supply capable of supporting (maintaining) 9-1-1 call handling/processing equipment and necessary related public safety (communications) services for a minimum of twenty-four hours.

(B) An uninterrupted power supply (UPS) and battery system shall be installed and sufficient enough to prevent power surges and provide continuous power to essential 9-1-1 equipment until the generator or other backup power source can fully activate.

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Rule 5507-1-11 | Security.

Effective: August 20, 2021 Promulgated Under:119.03

(A) 9-1-1 personnel and equipment shall be housed in a secure location with appropriate measures taken to allow access to authorized personnel only.

(B) A facility housing a 9-1-1 answering point shall have an emergency operation plan (EOP), evacuation plan and a continuity of operation plan (COOP) for the continued operation of the 9-1-1 center and its staff, each of which contemplates the response to all relevant natural and human made disasters that may strike the facility, including but not limited to power failure, fire, severe weather, building evacuations, and gas leaks.

Additionally, each plan should include the process for re-routing of 9-1-1 requests for service, where they will be answered, and by whom.

Last updated August 20, 2021 at 8:54 AM
Authorized By: 128.021
Prior Effective Dates: 5/12/2016

Rule 5507-1-12 | Minimum capability.

Effective: May 12, 2016 Promulgated Under:119.03

(A) A 9-1-1 answering point shall have multiple methods of notification to response agencies.

(B) A 9-1-1 answering point shall have a minimum of two 9-1-1 "lines" and two 9-1-1 answering devices in addition to a minimum of one "line" available for outbound dialing only.

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Rule 5507-1-13 | Temporary PSAP.

Effective: May 12, 2016 Promulgated Under:119.03

The temporary PSAP is a PSAP that has been established to provide 9-1-1 service for a defined geographic area for a limited time/duration under the following circumstances:

(A) A planned special event with a defined duration (example: convention, sporting event, state/county/local fair).

(B) An unplanned situation requiring a temporary relocation of an existing PSAP.

(C) Any natural or man-made disaster or public safety critical incident or special operation requiring localized incident management/command post operation where establishing a temporary PSAP would benefit citizens and/or public safety responders.

When a temporary PSAP is established for an unplanned event/emergency, mandated standards shall become best practices applicable to the temporary PSAP for the duration of the emergency.

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Authorized By: 128.021

Rule 5507-1-14 | Call processing software.

Effective: May 12, 2016 Promulgated Under:119.03

The PSAP will provide telecommunicators with software, including mapping, to assist in initiating calls for service, dispatching, and maintaining the status of responding resources in the field and the archiving of incident information.

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Rule 5507-1-15 | Logging/recording.

Effective: August 20, 2021 Promulgated Under:119.03

(A) The PSAP will have the capability of logging/recording 9-1-1 requests for service including voice, data, video and other media, if used.

(B) The PSAP will retain recordings in accordance with state law and local records retention requirements.

(C) The PSAP will provide telecommunicators the capability to instantly play back recent 9-1-1 requests.

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Authorized By: 128.021
Prior Effective Dates: 5/12/2016

Rule 5507-1-16 | Graphical information systems.

Effective: August 20, 2021 Promulgated Under:119.03

(A) PSAP's should utilize map data that meets or exceeds the Ohio location based response system data specification for road center lines and addressable structures.

(B) Geographical information systems should, at a minimum, include road center lines, emergency service zone and/or responding entity polygons, and PSAP boundary polygons.

(C) The PSAP shall have the ability to electronically accept, display and plot caller location data on an electronic map display. Any application that allows the PSAP to automatically accept, display and plot caller location data on an electronic map display is acceptable.

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Authorized By: 128.021
Prior Effective Dates: 5/12/2016

Rule 5507-1-17 | Statistical analysis.

Effective: August 20, 2021 Promulgated Under:119.

The PSAP will collect, analyze and report the following statistics:

(A) Total 9-1-1 call volume.

(B) 9-1-1 calls by hour of the day.

(C) 9-1-1 calls by day of week.

(D) 9-1-1 call ring/answer times.

(E) 9-1-1 abandoned call counts.

(F) 9-1-1 calls by type (wireline/wireless/VoIP/etc.).

(G) All other data a required by the 9-1-1 steering committee or the state 9-1-1 administrator.

The PSAP will compile and review this data and make it available to their local 9-1-1 coordinator upon request. The 9-1-1 coordinator will be responsible for reporting this data on an annual basis to the office of the state 9-1-1 administrator during their annual support and compliance review, or at other times upon request of the office of the 9-1-1 administrator.

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Authorized By: 128.021

Rule 5507-1-18 | Minimum call answering standards.

Effective: August 20, 2021 Promulgated Under:119.03

Ninety percent of 9-1-1 calls/requests received will be answered within fifteen seconds; with ninety-five per cent of 9-1-1 calls/requests received being answered within twenty seconds. For the purposes of determining compliance, all calls, including abandoned or unanswered calls, are factored in the calculation of the performance metric.

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Rule 5507-1-19 | Rules enforcement.

Effective: August 20, 2021 Promulgated Under:119.03

(A) When a PSAP is found out of compliance with any rule contained in this chapter, the office of the state 9-1-1 administrator will contact the county 9-1-1 coordinator and offer assistance in complying with the rule. The state 9-1-1 administrator will also notify the county 9-1-1 Program Review committee of a sixty-day time period to correct the issue and achieve compliance.

(B) When the state 9-1-1 administrator concludes that a PSAP has not achieved compliance within the sixty-day time period, the office of state 9-1-1 administrator will notify the county 9-1-1

coordinator that the administrator finds the county out of compliance and county 9-1-1 coordinator will be scheduled for appearance before the 9-1-1 steering committee within sixty days. The 9-1-1 steering committee will review the issue, hear from the interested parties and make a formal determination of whether the PSAP is out of compliance with the established rule.

(C) When a finding of non-compliance has been determined by the 9-1-1 steering committee as outlined in paragraph (B) of this rule, the county 9-1-1 coordinator will, within thirty days, formulate and submit a written response outlining the county's plans to reach compliance.

(D) The 9-1-1 steering committee will review the submitted plan outlined in paragraph

(C) of this rule and determine a date by which the county must come into compliance.

(E) If the county has not reached compliance by the date set in paragraph (D) of this rule, the office of the state 9-1-1 administrator will notify the department of taxation to suspend funding from the NG9-1-1 Access fund to the affected county until such time as the county returns to compliance. The funding suspension is for the entire county, as the county has sufficient authority to compel compliance at the local PSAP.

(F) Upon written notification of compliance by the county 9-1-1 coordinator, the office of state 9-1-1 administrator will, without unnecessary delay, verify compliance. If compliance is confirmed, the office of the state 9-1-1 administrator will notify the department of taxation to resume the funding to the county from the NG9-1-1 Access fund. No escrow or suspended funds will be restored to the county for the period of the suspension.

(G) The 9-1-1 steering committee serves as the final authority in determining when the PSAP has achieved compliance.

(H) For purposes of this chapter, the office of the state 9-1-1 administrator has the exclusive authority to audit and review PSAPs for compliance.

Last updated August 20, 2021 at 8:55 AM
Authorized By: 128.021

APPENDIX 6

CUYAHOGA COUNTY POPULATION BY CITY/TOWNSHIP/VILLAGE55

2020 CENSUS POPULATION

Bay Village	16,166	Maple Hts.	23,691
Beachwood	14,043	Mayfield Heights	20,347
Bedford	13,144	Mayfield Village	3,354
Bedford Heights	11,016	Middleburg Heights	16,018
Bentleyville	901	Moreland Hills	3,464
Berea	18,525	Newburgh Heights	1,861
Bratenahl	1,430	North Olmsted	32,443
Brecksville	13,642	North Randall	955
Broadview Heights	19,932	North Royalton	31,330
Brook Park	18,599	Oakwood	3,571
Brooklyn	11,358	Olmsted Falls	8,577
Brooklyn Heights	1,521	Olmsted Twp.	14,519
Chagrin Falls	4,191	Orange	3,420
Chagrin Falls Twip.	130	Parma	81,117
Cleveland	372,632	Parma Hts.	20,854
Cleveland Heights	45,315	Pepper Pike	6,796
Cuyahoga Heights	572	Richmond Heights	10,797
East Cleveland	13,788	Rocky River	21,764
Euclid	49,689	Seven Hills	11,722
Fairview Park	17,301	Shaker Heights	29,443
Garfield Heights	29,782	Solon	24,264
Gates Mills	2,266	South Euclid	21,888
Glenwillow	994	Strongsville	46,485
Highland Heights	8,721	University Heights	13,915
Highland Hills	671	Valley View	1,901
Hunting Valley	626	Walton Hills	2,034
Independence	7,584	Warrensville Heights	13,774
Lakewood	50,929	Westlake	34,238
Linndale	110	Woodmere	644
Lyndhurst	14,048	**Total Population**	**1,264,812**

Data provided by Cuyahoga County Planning April 1, 2020