911 GENERAL INFORMATION

Type of Change:	Long Form Modification Plan	Short Form Modification Pla	an
Current System Na	ame:	Population Served	Land Area in Sq Miles
Brown County 9-1-1		6330	307

List PSAPs:	Primary	Secondary
Brown County 9-1-1	X	

911 System Contact: Brian J. Gallaher

Street Address: 835 Route 24 West

City, State and Zip Code: Mount Sterling, IL 62353

Office Telephone: (217) 773-2113

Cellular Telephone: (217) 242-0590

Email: b.gallaher@browncoil.org

Wireless Coverage for Consolidated System:

100% Phase II compliant

_____% Phase I compliant

Please check if applicable:

- _____ Receive 9-1-1 Text
- _____ Receive 9-1-1 Video

VERIFICATION

I, Brian J. Gallaher _____, first being duly sworn upon oath, depose and say that I am <u>9-1-1 Coordinator</u> , of <u>Brown County 9-1-1</u>; that I have read the foregoing plan by me subscribed and know the contents thereof; that said contents are true in substance and in fact, except as to those matters stated upon information and belief, and as to those, I believe same to be true.

Hallaher) Dian

Brian J. Gallaher, 9-1-1 Coordinator

Subscribed and sworn to before me

this 19 day of April

OFFICIAL SEAL LORI K ROBERTS NOTARY PUBLIC, ILLINOIS NOTARY PUBLIC, STATE OF ILLINOIS n 3/15/27 My Com

9-1-1 SYSTEM PROVIDER LETTER OF INTENT

April 19, 2023

(Date)

Robert Finney

(9-1-1 System Provider Company Representative)

Frontier

(9-1-1 System Provider Company Name)

Robert.Finney@ftr.com

(Street Address)

Bloomington, IL

(City, State, Zip Code)

Dear_Robert Finney

This letter is to confirm our intent to modify our 9-1-1 System. Enclosed is your copy of our modification plan to be filed with the Department of the Illinois State Police for approval. Thank you for your assistance in this matter.

Sincerely,

Brian J. Hallaher (Name) Brian J. Gallaher (Title) 9-1-1 Coordinator

enclosure: Modification Plan

NARRATIVE STATEMENT:

(Provide a detailed summary of system operations for a modified 9-1-1 plan. Also, if incorporating an NG9-1-1 solution, please include the additional items listed below pursuant to 1325.205 b)12).

- 1) Indicate the name of the certified 9-1-1 system provider being utilized.
- 2) Explain the national standards, protocols and/or operating measures that will be followed.
- 3) Explain what measures have been taken to create a robust, reliable and diverse/redundant network and whether other 9-1-1 Authorities will be sharing the equipment.
- 4) Explain how the existing 9-1-1 traditional legacy wireline, wireless and VoIP network, along with the databases, will interface and/or be transitioned into the NG9-1-1 system.
- 5) Explain how split exchanges will be handled.
- 6) Explain how the databases will be maintained and how address errors will be corrected and updated on a continuing basis.
- 7) Explain who will be responsible for updating and maintaining the data, at a minimum on a daily basis Monday through Friday.
- 8) Explain what security measures will be placed on the IP 9-1-1 network and equipment to safeguard it from malicious attacks or threats to the system operation and what level of confidentiality will be placed on the system in order to keep unauthorized individuals from accessing it.

Plan Narrative:

The Brown County 9-1-1 System is transitioning from E9-1-1 to Next Generation 9-1-1 (NG911). AT&T is the 9-1-1 System Provider ("SSP").

The Brown County 9-1-1 System will comply with all Federal and State laws and with National Emergency Number Association Standards (NENA) that pertain to NG911 including the NENA i3 Standard for Next Generation - NENA-STA-010.3a-2021.

The State of Illinois has selected AT&T to provide a statewide Next Generation 9-1-1 System. AT&T's ESInet combines AT&T's network capabilities with technology from Intrado Life &Safety, Inc. (Intrado). The AT&T ESInet solution will facilitate an efficient transition from legacy 9-1-1 networks to networks capable of supporting the growing demands of a mobile society. With AT&T ESInet, the State is taking advantage of AT&T's investment in a pre-built, cloud-based solution that delivers next-generation functionality. AT&T is also providing their industry-leading AT&T VPN MPLS network for primary access to all PSAPs.

AT&T's ESInet solution is a combination of their IP network and Next Gen Core Services (NGCS) components that includes industry leading SLAs, management services and tools to help ensure that they provide the best possible service.

The design is based on building redundant systems to avoid any single point of failure (SPOF) in the ESInet and the overall NG9-1-1 Network Architecture. The NG9-1-1 system will provide flexibility in the routing of calls. The ESInet being deployed has all PSAPs connected and can route calls based on not only location, but also by availability. In a Next Generation solution, a call will be answered through intelligent routing. Additionally, there will be more available positions to answer calls because all connected and tested PSAPs will be technically able to answer the call and will be able to dispatch or transfer the call to another PSAP.

AT&T's ESInet defense-in-depth security is built into the architecture. AT&T's Global IP network is monitored by 8 different Security Operations Center (SOC) facilities located across the world. AT&T uses its security portfolio capabilities to protect their data centers and networks.

AT&T's ESInet provides six (6) geographically diverse and fully redundant facilities to increase resiliency and survivability in natural and man-made disaster scenarios, with scalable capacity capable of supporting more than twice the 9-1-1 busy hour call for the entire United States. AT&T has documented business continuity and restoration plans, including complex disaster and evacuation contingencies. The 24x7 operations center employs an Incident Handling process modeled on FEMA's Incident Command System,

Plan Narrative:

with notifications built into the process.

The ESInet is monitored 24x7x365 from a NOC with tier 2 and tier 3 technical resources dedicated to the AT&T ESInet. AT&T's 9-1-1 Resolution Center has dedicated public safety resources.

The AT&T ESInet provides a flexible routing platform that supports both ESN (tabular) and GIS (spatial) routing on the same Emergency Call Routing Function (ECRF).

The AT&T ESInet solution will interconnect to legacy selective routers as defined per NENA standards. AT&T provides redundant, public safety grade points of presence in each LATA for OSP ingress locations for Legacy Network Gateways (LNGs).

AT&T will interconnect to Legacy Selective Routers to transfer and/or receive calls with Automatic Number Identification (ANI) and Automatic Location Identification (ALI) information to the State's NGCS via legacy means through the Legacy Selective Router Gateway (LSRG). Interconnections will also allow legacy PSAPs served by legacy selective routers to serve as the abandonment route for PSAPs served by the AT&T ESInet solution.

Connectivity extends beyond the internal ESInet transport to external network and OSP interfaces. The ESInet supports both TDM and IP OSP ingress at geographically distributed Points of Interconnection (POI's). The ESInet supports standards-based protocol interfaces to external ESInets for call hand-off and call transfers. With pre-established connectivity capabilities, PSAPs on the ESInet have the ability to transfer calls to PSAPs on other ESInets or PSAPs that have not yet transitioned off legacy selective routers.

AT&T will coordinate getting the OSPs records into the AT&T ESInet database. AT&T will also jointly plan the interconnecting network with the OSP. Circuits will be ordered and implemented between the OSP and the ESInet POI. The ESInet POI may reside in an AT&T office or hub. AT&T will cooperatively test and turn up all trunking arrangements with the OSP. Traffic migrations from the legacy to new AT&T infrastructure will follow. Integrated Text-to-911 is supported by the ESInet.

AT&T is responsible for negotiating interconnection agreements and trunking arrangements with each service provider. Interconnection agreements will include the roles and responsibilities of the Parties related to the exchange of 9-1-1 traffic including but not limited to, split rate centers, tandem to tandem and IP connections.

GIS data is submitted to the AT&T ESInet via a web-based spatial interface (SI) portal. The portal provides secure GIS file transfer. 9-1-1 Authorities can maintain their local database schema and configure database changes using attribute field mapping tools.

The Spatial Interface (SI) validation engine logs errors and refers errors back to the originating 9-1-1 Authority in comprehensive reports that are retrieved in the 9-1-1 Enterprise Geospatial Database Management System (9-1-1EGDMS). Validation errors are corrected by the 9-1-1 Authority within their own GIS database. Updates are submitted and processed on an on-going basis.

AT&T's ESInet cyber security policies, standards, and guidelines are consistent with industry best practices as defined by International Organization for Standardization and Control Objectives for Information and related Technology. The AT&T ESInet is a highly secure, privately managed IP network providing IP based call routing services for next generation 9-1-1 call delivery. All inbound and outbound traffic interactions are with pre-authorized entities, utilize agreed upon protocols and traverse controlled access points. Call processing and real-time data delivery are protected through both physical and logical controls.

Sensitive data resides in trusted data centers that employ logical and physical access controls. All hardware and software elements deployed in a production environment go through stringent release management processes that incorporate thorough penetration scan testing. Corporate and development environments are separate from production and are not used in development or system test environments. Inter-zone traffic is restricted to only that of authorized personnel and the necessary protocols destinations used to support the management and applications of the ESInet with all other traffic implicitly denied by way of redundant and diverse Session Border Controllers (SBC) and stateful firewalls.

A Network Operations Center (NOC) staffed 24 hours a day, seven days a week, 365 days a year to actively monitor and manage the AT&T ESInet end-to-end service is provided. When a potential or actual Customer-affecting issue is detected, the Incident Administration team is engaged by the NOC. The team uses established processes that are ISO 9001:2008-compliant for immediate escalation, notification, resolution, and reporting. All buildings, NOC and Data Center access are monitored by 24x7 security and access control systems.

We are currently not taking Text to 911 calls. We will be able to take text to 911 calls when the EsiNet is in place and connected to the new Zetron equipment. Public Education will be addressed through local media as well as social media.

Our transfer method is utilizing the Star Code transfer list.

Our backup/overflow call center is West Central Joint ETSB in Morgan County. Update - The backup PSAP for Brown County has changed to Quincy/Adams County 911 system. 05/20/24

FINANCIAL INFORMATION

Annual recurring 9-1-1 network costs prior to modification

Projected annual recurring 9-1-1 network costs after modification

Installation cost of the project

s_na_	
s_TB0_	
s TBD	
s na	

Anticipated annual revenues

FIVE YEAR STRATEGIC PLAN FOR MODIFIED PLAN

(Provide a detailed summary of the proposed system's operation, including but not limited to, a five-year strategic plan for implementation of the modified 9-1-1 plan with financial projections)

Narrative:

N/A

For the purpose of effective handling and routing of 9 -1-1 Emergency Calls, 9-1-1 Authority <u>Quincy/Adams County 911 System</u> and 9-1-1 Authority <u>Brown County 911 System</u> have entered into this Agreement pursuant to a framework established between participants of the 9-1-1 System (hereinafter the "Parties").

911 System Manager directs the of This Backup Agreement authorizes and 911 System Manager Quincy/Adams County 911 System of the and Brown County 911 System 9-1-1 **Authorities** Backup to enter into а Agreement ("AGREEMENT") to establish the procedures that enable management of emergency calls during prearranged, unanticipated, and exigent circumstances.

This AGREEMENT establishes the procedures to follow during such circumstances.

The headings contained in this AGREEMENT are for convenience of reference only and shall not affect in any way the meaning or interpretation of this AGREEMENT. As the Public Safety Answering Point's (PSAPs) name will be used to describe the PSAPs that answer 9-1-1 calls.

I. DEFINITIONS

Abandoned Call - A call placed to 9-1-1 when a PSAP is in an abandonment state/offline.

<u>Contingency</u> <u>Diversion</u> – The capability of routing 9-1-1 calls to a designated alternate location(s) if all 9-1-1 trunks are busy or out of service due to a service interruption. May be activated upon request or automatically, if detectable, when call volume exceeds a designated threshold, 9-1-1 equipment fails, the PSAP itself is disabled, or other conditions causing the processing and answering of a 9-1-1 call to be compromised.

<u>Exigent Circumstances</u> – Situation impacting 9-1-1 call processing in which the PSAP authority determines is sufficiently significant and pressing to divert calls from the PSAP to a predetermined alternate PSAP.

<u>Primary [Diverting] PSAP</u> – The PSAP which, by agreement, reroutes 9-1-1 calls to an alternate PSAP under prearranged, unanticipated, or exigent circumstances.

<u>Prolonged Event</u> – An exigent circumstance of a lengthy duration and condition that causes the PSAP's authority to invoke contingency diversion of 9-1-1 calls from one PSAP to a predetermined receiving PSAP.

<u>Backup [Receiving] PSAP</u> – The PSAP which, by agreement, answers 9-1-1 calls for another PSAP under prearranged, unanticipated, or exigent circumstances.

II. 9-1-1 EMERGENCY CALL HANDLING DISPATCH PROCEDURES AND PROTOCOLS

It is agreed by <u>Quincy/Adams County 911 System</u> and <u>Brown County 911 System</u> that contingency diversion of 9-1-1 calls may not be supported if the Backup PSAP is experiencing its own emergency or has its own need for overflow call handling support.

The exigent circumstances and conditions under which a contingency diversion activation may occur shall include, but are not limited to the need for PSAP evacuation, network failure, call handling equipment failure, unavailability of numerous workstations, or other conditions causing the processing and answering of a 9-1-1 call to be compromised.

The rerouting of all 9-1-1 calls to the Backup PSAP shall be done at the 9-1-1 routing level (Selective router or NG911 Core Services [NGCS]) to maintain the same level of service and information, and not routed to ten-digit lines. If this is not capable, the substitute methods must be approved by the 9-1-1 System Manager.

Quincy/Adams County 911 System	agrees to accept the following call types from
Brown County 911 System	

✓ 911 Voice

- 🕑 911 Text
- 10-digit Emergency
- CAD-to-CAD Interface
- 10-digit Non-Emergency/Administrative (Admin)

Images/Video to 911

- A. Condition 1: Call overflow due to instances such as PSAP busy condition or ring, noanswer due to full call queue.
 - i. The Backup PSAP will accept overflow calls from <u>Brown County 911 System</u> when its call queue is full, or a call goes unanswered for a period of thirty seconds (30) seconds. The Backup PSAP will make best efforts to deliver any answered call details under this provision back to the PSAP's jurisdiction for dispatch by the following manner and in the following priority order:
 - 1. Priority Method: Radio transmission on <u>N/A</u>
 - 2. 2nd Priority Method: 10-digit Non-Emergency/Admin
 - 3. 3rd Priority Method: Talk Group <u>N/A</u>

- B. Condition 2: Call diversion due to instances such as PSAP offline or evacuated (also known as abandonment) or call handling equipment is offline due to a network outage.
 - i. The Backup PSAP will accept calls from the Primary PSAP when the Primary PSAP has invoked its abandonment state in the NGCS policy routing rules and the Backup PSAP is next in the rules queue. The Primary PSAP may have multiple alternate destinations provisioned ahead of the Backup PSAP which may assist in limiting the volume of calls diverted to its call queue. The Backup PSAP will make best efforts to deliver any answered call details under this provision back to the Primary PSAP for dispatch by:
 - 1. 1st Priority Method: Radio transmission on N/A
 - 2. 2nd Priority Method: 10-digit Non-Emergency/Admin (217) 773-2341
 - 3. 3rd Priority Method: Talk Group N/A
- C. Condition 3: Call misrouted due to routing function, shared exchange, mobile caller, or other reason.
 - i. The Backup PSAP will accept calls from the Primary PSAP when misrouted calls are transferred.
- D. Both <u>Quincy/Adams County 911 System</u> and <u>Brown County 911 System</u> agree to place an overflow queue for each other on their call handling screens to manage inbound diverted 9-1-1 calls within thirty days (30) days of execution of this AGREEMENT. Each Party shall bear their own costs for equipment modification. Both Parties understand that diverted calls may be answered with a lower priority than the answering jurisdiction's – Check all that apply:

✓ Text to 911, ☐10-digit Emergency, ☐10-digit Non-Emergency/Admin Calls, and ☐ Alarm Calls.

- E. During a call diversion event the Backup PSAP will audio record answered calls from the Primary PSAP. Recordings will be made available to the Primary PSAP upon request.
- F. During an emergency event lasting longer than <u>four hours</u> (<u>4</u>) continuing hours, the Primary Party will in good faith, make best efforts to send staff to the Backup PSAP to provide operational support and subject matter expertise to minimize impact to the Backup PSAP staff and operations.
- G. Parties will share their call handling and call documentation procedures to inform one another of the specifics of each other's operation. At a minimum, Parties will gather location information, call back number, nature of the call, and known safety information.

Parties will make a concerted effort to align with the call documentation procedures when handling calls from the other's jurisdiction.

- H. If a valid callback number is available, Parties will attempt to re-establish contact with abandoned calls. At a minimum, one callback should be performed to verify if an emergency exists when there are signs of distress, inaudibility, or a clear indication that emergency service is needed.
- I. When feasibly possible, <u>Quincy/Adams County 911 System</u> will follow up with a radio, voice transmission, or delivery of an email to <u>b.gallaher@browncoil.org</u> of the available Computer Aided Dispatch (CAD) or Call Detail Record (CDR) for Brown County 911 System calls.
- J. When feasibly possible, <u>Quincy/Adams County 911 System</u> will follow up with a radio, voice transmission, or delivery of an email to <u>b.gallaher@browncoil.org</u> of the available Computer Aided Dispatch (CAD) or Call Detail Record (CDR) for Brown County 911 System calls.
- K. Within thirty (30) days of the execution of this AGREEMENT, the Parties agree to conduct and document the appropriate training of their respective staff on the processes and procedures agreed to by the Parties.
- L. The Parties agree to notify the other Party of a return to normal conditions (such as the reoccupation of an evacuated PSAP) at the earliest possible opportunity. The Primary PSAP will be responsible for returning services back to normal conditions.
- M. If <u>Quincy/Adams County 911 System</u> or <u>Brown County 911 System</u> is compelled by Law to disclose any call information, it shall provide prompt written notice to the other Party. If the Parties cannot fail to quash the legal process requiring disclosure, both Parties understand the requested call information will be disclosed only to the extent necessary to satisfy the request.

III. UPDATES AND MODIFICATIONS TO THIS AGREEMENT

This agreement shall last for a period of one year from <u>May 30, 2024</u> through <u>May 29, 2025</u> and shall continue from year to year thereafter. If either party wishes to terminate this agreement, they shall provide the other party with at least 30 days written notice of such termination.

The Parties agree to review this Agreement on a bi-annual basis, at a minimum, to update any processes or understandings.

The Parties entering into this AGREEMENT acknowledge that any modifications must be by mutual consent, in writing, with as advanced notice as possible considering the circumstances, and will be treated as an amendment to this AGREEMENT.

The 9-1-1 Administrator shall be notified when there are any modifications to, or termination of, this AGREEMENT.

IV. EFFECTIVE DATES

This AGREEMENT shall take effect upon its signing by authorized representatives of each party.

	_
. Date:	05/20/2024
tem	_
Date:	
Date:	
	Date:

COMMUNITIES SERVED

Provide a list of all communities to be served by the proposed 9-1-1 System. Please include the name of the community and the official mailing address including street address, city and zip code.

City, Town or Village	Street Address, City, Zip Code
Mount Sterling	Mount Sterling, 62353
Ripley	Ripley, 62353
Timewell (Mound Station)	Timewell, 62375
Versailles	Versailles, 62378

PARTICIPATING AGENCIES

Provide a list of public safety agencies (Police, Fire, EMS etc.) that are to be dispatched by the 9-1-1 System. Each Agencies land area(s) in square miles and estimated population which will have access to the proposed 9-1-1 System. Do not forget to include County Sheriff's jurisdiction and Illinois State Police Districts. Each agency that appears on this list should also have signed a call handling agreement.

9-1-1 Participant Agencies	Street Address, City, Zip Code	Administrative Telephone No.	Direct Dispatch	Transfer	Call Relay
Brown County Ambulance Ser.	835 Route 24 West, Mount Sterling, 62353	(217) 773-2113	x		
Brown County Fire Prot. Dist.	835 Route 24 West, Mount Sterling, 62353	(217) 773-3031	x		
Brown County Sheriff's Office	200 E Court St, Rm 1, Mount Sterling, 62353	(217) 773-2011	x		
Mount Sterling Fire Dept.	835 Route 24 West, Mount Sterling, 62353	(217) 773-3031	x		
Mount Sterling Police Dept.	145 W Main St., Mount Sterling, 62353	(217) 773-3961	x		
Versailles Fire Prot. Dist.	101 S Main St, Versailles, 62378	(217) 225-9034	x		
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ADJACENT AGENCIES LIST

Provide a list of public safety agencies and existing 9-1-1Systems that are adjacent to the proposed system's boundaries. Each agency that appears on this list should also have signed a call handling agreement and/or aid outside jurisdictional boundaries.

AGENCY	STREET ADDRESS, CITY, ZIP CODE	TELEPHONE NUMBER
Pike County 9-1-1	204 E Adams, Pittsfield, 62363	(217) 730-1603
Morgan County 9-1-1/ West Central ETSB	200 W Douglas Ave, Jacksonville, 62650	(217) 479-4616
Quincy/Adams County 9-1-1	222 N 52nd St, Quincy, 62305	(217) 228-4572
McDonough/Schuyler County 9-1-1	116 S McArthur, Macomb, 61455	(309) 836-3911
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CARRIER LISTING

(Wireline, Wireless, VoIP)

Provide a list of each carrier that will be involved in the proposed system.

(USE ADDITIONAL SHEETS AS NECESSARY)

CARRIERS	STREET ADDRESS, CITY, ZIP CODE	TELEPHONE NUMBER
Frontier		
Cass Communications Mgmt, Inc		
Adams Tel Systems		
AT&T		
Verizon		
T-Mcbile		
US Cellular		

TEST PLAN DESCRIPTION

1) Description of test plan (back-up, overflow, failure, database).

See Attached

2) List wireline exchanges to be tested.

(217) 773, 225, 289, 236, 696, 894, 327, 338, 667, 322, 285, 243, 245, 479

3) List of wireless and VoIP Carriers to be tested.

Cass Communications Management, Inc. Adams Tel Systems US Cellular AT&T Verizon T-Mobile

TEST #	TEST CASE	ТҮРЕ
1	Trunk Verification (SIP)	Call Routing
2	Trunk Verification (SS7 Ingress from LSR)	Call Routing
3	Trunk Verification (SS7 Egress from AGC to LSR)	Call Routing
4	Perform reboot and validation on each AT&T network edge router at PSAP	Failover test
5	Perform WAN interface shutdown and validation on each AT&T network	Failover
	edge router at PSAP	
6	Perform reboot and validation on each ATT Interface Router (between CPE	
	and AT&T router)	
7	Wireline Call Routed to PSAP through AT&T ESInet	Equipment
8	Wireless Call Routed to PSAP through AT&T Esinet	Equipment
9	VOIP Call Routed to PSAP through AT&T ESInet	Equipment
10	CPE bids i3 Components	Call Handling
11	i3 Routing Fails, Routing via SRDB for Wireline call	Call Routing
12	i3 Routing via ECRF for Wireline call	Call Routing
13	i3 Transfer: Fixed Bridge Conferencing Confirmation (Call to IP PSAP then	Call Handling
	bridge to i3 PSAP if available – willing PSAP)	
14	S/R Transfer: Selective Bridge Conferencing Confirmation, if used by the	Call Handling
	PSAP	
15	S/R Transfer: Fixed Bridge Conferencing Confirmation	Call Handling
16	S/R Transfer: Fixed Bridge Conferencing Confirmation	Call Handling
17	PSTN Transfer: Fixed Bridge Conferencing Confirmation	Call Handling
18	Manual Transfer to valid local TN	Call Handling
19	Manual conference bridging to invalid unassigned number	Call Handling
20	Manual conference bridging to a valid 8YY number	Call Handling
21	Manual conference bridging to a valid Busy number	Call Handling
22	Manual conference bridging to a Multi-Party Conference	Call Handling
23	Manual conference bridging to a valid long-distance cell	Call Handling
24	Alternate Routing	Call Routing
25	Ring no Answer Timer	Call Routing
26	No position Logged In	Call Routing
27	Abandonment Routing	Call Routing
28	Un-Abandonment Routing	Call Routing
29	Abandonment Routing – PAD Testing (if PAD available)	Call Routing
30	Un-Abandonment Routing – PAD Testing (if PAD available)	Call Routing
31	Test line appearances that appear on each CPE	Call Processing
32	TTY call	Call Handling
33	TTY conference call	Call Handling