

**ILLINOIS STATE POLICE**  
**Office of the Statewide 9-1-1 Administrator**



**State of Illinois**

**Application for**  
**9-1-1 Modification Plan**

# 911 GENERAL INFORMATION

DATE:

Type of Change:	<input checked="" type="checkbox"/> Long Form Modification Plan	<input type="checkbox"/> Short Form Modification Plan
Current System Name:	Population Served	Land Area in Sq Miles
Deerfield United Consolidation 9-1-1 System	31,445	17

List PSAPs:	Primary	Secondary
Deerfield United Consolidated 9-1-1 Center	X	

911 System Contact: Mary Anne Glowacz

Street Address: 850 Waukegan Road

City, State and Zip Code: Deerfield, IL 60015

Office Telephone: (847) 945-8636

Cellular Telephone: (847) 343-3686

Email: mglowacz@deerfield.il.us

- |   |   |
|---|---|
| <p><b>Wireless Coverage for Consolidated System:</b></p> <p><u>  100  </u> % Phase II compliant</p> <p><u>  100  </u> % Phase I compliant</p> | <p><b>Please check if applicable:</b></p> <p><u>  X  </u> NG9-1-1 capable</p> <p><u>  X  </u> Receive 9-1-1 Text</p> <p><u>    </u> Receive 9-1-1 Video</p> |
|---|---|

# VERIFICATION

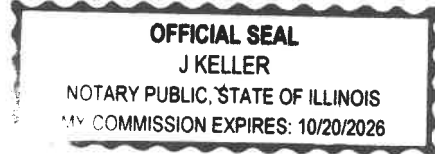
I, Mary Anne Glowacz, first being duly sworn upon oath, depose and say that I am Communications Center, of Deerfield United Consolidated 9-1-1 Ctr.; that I have read the foregoing plan by me subscribed and know the contents thereof; that said contents are true in substance and in fact, except as to those matters stated upon information and belief, and as to those, I believe same to be true.



Mary Anne Glowacz

Subscribed and sworn to before me

this 10 day of April, 20 23.

  
NOTARY PUBLIC, ILLINOIS

# 9-1-1 SYSTEM PROVIDER LETTER OF INTENT

April 10, 2023

(Date)

Ms. Lisa Wirtanen, 9-1-1 System Provider Company Representative

(9-1-1 System Provider Company Representative)

AT&T- 9-1-1 System Provider

(9-1-1 System Provider Company Name)

4918 West 95th Street

(Street Address)

Oak Lawn, IL 60453

(City, State, Zip Code)

Dear Ms. Wirtanen \_\_\_\_\_:

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,



(Name) Mary Anne Glowacz

(Title) Communications Director

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 Deerfield Police Department 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 Deerfield Police Department 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, with notifications built into the process.

## Plan Narrative:

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.

The Deerfield Police Department 9-1-1 System will be maintaining our current back-up configuration: Glenview Public Safety Dispatch Center- North (our current Alternate Public Safety Answering Point). When an overflow of emergency calls are produced at the Deerfield Police Department 9-1-1 System, the overflow will transfer to Glenview Public Safety Dispatch Center- North. In the event our Center has to evacuate, we would manually turn our emergency calls over to Glenview and relocate to their Center, once we are clear to return, we would have Glenview transfer our calls back to our Center. Absent the need to evacuate, calls for service, received by Glenview, would be relayed to Deerfield for dispatch via the Starcom Radio Network.

Text to 9-1-1 has been available in the Deerfield area since 2016 through Gem/Comtech. Citizens are made aware of this capability through public education. It is our intent to accept native Text to 9-1-1 messages when delivered via the State of Illinois ESInet, to our Zetron Call Max solution which will auto populate to our Tyler CAD system. All text to 9-1-1 calls will be handled in a TTY fashion.

# FINANCIAL INFORMATION

Annual recurring 9-1-1 network costs prior to modification	\$ _____	\$ 0.00
Projected annual recurring 9-1-1 network costs after modification	\$ _____	\$ 0.00
Installation cost of the project	\$ _____	\$ 0.00
Anticipated annual revenues	\$ _____	\$ 0.00

# 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:

Existing plan, filed 2019, still in place.



# 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.

*USE ADDITIONAL SHEETS AS NECESSARY*

City, Town or Village	Street Address, City, Zip Code
Deerfield	850 Waukegan Road, Deerfield IL 60015
Bannockburn	2275 Telegraph Road, Bannockburn, IL 60015
Riverwoods	845 Saunders Road, Riverwoods, IL 60015
Lincolnshire	1 Olde Half Day Road, Lincolnshire, IL 60069

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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.

*USE ADDITIONAL SHEETS AS NECESSARY*

City, Town or Village	Street Address, City, Zip Code

# 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
Deerfield	850 Waukegan Road, Deerfield 60015	(847) 945-8636	X		
Bannockburn	2275 Telegraph Road, Bannockburn 60015	(847) 945-9490	X		
Riverwoods	845 Saunders Road, Riverwoods 60015	(847) 945-1130	X		
Lincolnshire	1 Olde Half Day Road, Lincolnshire 60069	(847) 883-9900	X		

# 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

# ADJACENT AGENCIES LIST

Provide a list of public safety agencies and existing 9-1-1 Systems 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
NWCDS	1975 E. Davis, Arlington Heights, 60015	(847) 398-1130
Glenview Public Safety South	2500 E. Lake Ave., Glenview, 60026	(847) 724-1700
Glenview Public Safety North	1677 Old Deerfield Rd, Highland Park, 60035	(847) 432-7730
Wheeling Police	1 Community Blvd., Wheeling, 60090	(847) 459-2632
ISP Troop 3	9511 W. Harrison, Des Plaines, 60016	(847) 294-4400
ISP Troop 15	2700 Ogden, Downers Grove, 60515	(630) 241-6800
Lake County Sheriff	25 S. M.L.K. Jr. Ave., Waukegan, 60085	(847) 549-5200
Vernon Hills Police	740 Lakeview Parkway, Vernon Hills, 60061	(847) 362-4449
Northbrook Police	1401 Landwehr Rd., Northbrook, 60062	(847) 564-2060
Cook County Sheriff	3026 S. California, Chicago, 60608	(847) 635-1188

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AGENCY	STREET ADDRESS, CITY, ZIP CODE	TELEPHONE NUMBER

# 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
AT&T		(888) 243-1911
SBC		(866) 730-8154
CLEC		(217) 824-6398
ALLEGIANCE		(800) 421-3872
CBEYOND		(866) 424-9233
CIMCO		(630) 691-8080
FOCAL		(877) 453-8353
FRONTIER		(877) 262-6822
GLOBAL COM		(888) 859-1531
GLOBAL CROSSING		(888) 859-0911
INTERMEDIA		(650) 641-4000
LEVEL 3		(888) 404-9750
MCI		(800) 275-0014
MCLEOD		(800) 332-2385
MFS-INTELENET		(312) 580-0170
MGC		(480) 719-9556
MPOWER		(585) 218-6550
PAETEC		(800) 345-4484
SPRINT		(913) 928-4107
TDS METROCOM		(888) 790-1216
WORLDCOM		(800) 844-1001
XO COM		(888) 575-6398
VERIZON WIRELESS		(800) 922-0204
CRICKET		(800) 274-2536
T-MOBILE		(866) 735-7700
COMCAST		(800) 934-6489

# 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



# TEST PLAN DESCRIPTION

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

Attached

2) List wireline exchanges to be tested.

AT&T

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

AT&T Mobility  
T-Mobile  
Verizon Wireless  
Comcast (VOIP)  
Vonage (VOIP)  
Intrado (VOIP)

### Test Plan Description i3

TEST #	TEST CASE	TYPE
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 edge router at PSAP	Failover
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 bridge to i3 PSAP if available – willing PSAP)	Call Handling
14	S/R Transfer: Selective Bridge Conferencing Confirmation, if used by the PSAP	Call Handling
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