



A photograph of two white telephone handsets with coiled cords, resting on a light blue surface. The handsets are positioned horizontally, one above the other.

THE HISTORY AND ACCOMPLISHMENTS OF 911 IN INDIANA

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INTRODUCTION

The purpose of this document is to provide a detailed history of the growth and development of 911 in Indiana. Throughout the last nearly 60 years, Indiana has been an innovator and leader in 911. Providing the best possible 911 service to all callers in Indiana remains the unchanging goal of the Indiana Statewide 911 Board (Board) and all Public Safety Answering Points (PSAPs). This document can serve as a resource to understand the evolution of 911, and how the Indiana 911 system operates today. Where possible, specific individuals' contributions are noted. However, untold numbers of individuals on the Board, Board staff, telecommunicators, PSAP staff and administrators, legislators, and others have contributed their time and expertise to making Indiana's system the nationwide example that it is today.



INDIANA'S MODERN 911 SYSTEM

IN911

The Indiana Statewide 911 Board provides the statewide private Indiana 911 (IN911) network to handle 911 calls. A self-healing Synchronous Optical Network (SONET) serves as the transport network for a diverse IP-based ‘mesh network’ that delivers 911 voice and ALI data using IP technology. Many Indiana PSAPs are next generation enabled and have direct IP connections. However, when required, Internet Protocol signaling is converted to analog voice and traditional RS-232 data communications to serve legacy equipment in the back room of the local PSAP. The IN911 network is fully redundant at all levels, with redundant, paired selective router tandems and multiple IP-based selective routing services, redundant ALI links, and controllers. The underlying IP transport is fully redundant to each PSAP, and the connections to all legacy local exchange carrier network elements used for 911 service are redundant as well. In addition, tertiary connections are being added at critical network points where the unreliability of legacy circuits has been observed. The IN911 network is a fully private network that makes extensive use of IP security protocols and procedures. In addition to these precautions, the network is monitored to automatically detect any operational abnormality. All system circuits are registered with the federal government for Telecommunications Service Priority (TSP).¹

In addition to the redundant nature of the IN911 network design, the Board has implemented tertiary connections from third party service providers. Tertiary connections are added to the 911 network as high-speed broadband networks are established in the PSAPs’ communities. These connections, where available, are used to connect multiple providers’ networks for improved delivery of 911 calls.

Initially, the network was only within Indiana, however, to better serve residents and visitors, the Board has extended the IN911 network across state boundaries. The IN911 network now

¹ TSP is a program within the federal Department of Homeland Security (DHS) that authorizes national security and emergency preparedness (NS/EP) organizations to receive priority treatment for the restoration of vital voice and data circuits or other telecommunications services in the event of a widespread outage.

connects with Michigan, Ohio, and Kentucky to enable call transference across state lines along with the location information associated with the call. Interconnectivity with Illinois is in progress.

The IN911 network is the result of decades of innovation in 911 services and efforts by Indiana to provide the best, most reliable and cutting-edge technology available to its citizens and visitors. This document explores the creation and general evolution of 911, 911's specific history in Indiana, and some of the many noteworthy accomplishments from along the way. In short, it explains how 911 in Indiana got to where it is today.



HISTORY OF 911 IN THE UNITED STATES

The history of 911 in the United States began in 1967. On May 23 of that year, Indiana Congressman, Mr. J. Edward Roush, attended House subcommittee hearings on the Comprehensive Fire Research and Safety Act of 1967. In response to testimony unfavorably comparing the rate of fire deaths in the U.S. with other nations and linking that high rate with response times, Representative Roush recommended a single, nationwide telephone number for reporting fires. That same year, President Johnson's Commission on Law Enforcement and Administration of Criminal Justice recommended a nationally uniform three-digit emergency telephone number. In November 1967, the Federal Communications Commission (FCC) met with AT&T; and, shortly thereafter, AT&T announced it had reserved the numbers 911 for emergency use nationwide. That press conference was held at Representative Roush's D.C. office; cementing Indiana's ties to the birth of 911.

The Alabama Telephone Company implemented the nation's first 911 system in Haleyville, Alabama. On February 16, 1968, Alabama Speaker of the House, Mr. Rankin Fite, made the first 911 call from the Haleyville City Hall. Congressman Mr. Tom Bevill answered the call on a red-colored telephone located in the police department.

Early 911 technology had limited capability and 911 calls had to be delivered to an answering point within the caller's telephone exchange. Since there was (and is) little correlation between a telephone exchange boundary and the emergency responder's jurisdiction, a 911 call could end up at a PSAP that did not serve the caller's location. This basic 911 service, as it has since been defined, did not provide any telephone number or location information with the call—it was a voice service only—and the caller had to provide his or her location and call-back information.

Significant advancement in 911 technology occurred with the introduction of Enhanced 911 (E911) in the early 1980s. Using existing circuit-switched technology, E911 added the capability of selectively routing 911 calls to the PSAP serving the caller's location and delivering that call with the caller's telephone number and location. However, by the 1990s, the use of cellular technology increased dramatically. This consumer-driven change posed

serious challenges for public safety because landline E911 systems did not have the capability of providing location information for cellular callers.

In 1996, the FCC released its First Report and Order on Docket 94-102 mandating wireless E911. The cellular industry devised two solutions to identify the longitude and latitude of the caller's location: a global positioning system (GPS) chip within the handset itself or networked triangulation from cellular towers. Implementation was to occur in two phases. Phase I provided the caller's callback number and the address of the receiving antenna tower. Phase II provided a more accurate latitude/longitude coordinate for the calling device. Phase II accuracy requirements varied depending on technology. Although less-than-perfect and inherently less reliable than landline technology, wireless E911, where it had been implemented, represented a huge improvement in the PSAP's ability to get help to a wireless caller's location.

Not long after wireless E911 implementations began to reach maturity at the majority of PSAPs, Voice over Internet Protocol (VoIP), text messaging, picture messaging, video messaging, and other new technologies appeared on the market. These technologies added a host of new issues, challenges, and opportunities for 911. Consumers have adopted these technologies for their everyday communications, and expect to be able to use them to communicate with 911. The nation's legacy 911 system has reached the end of its ability to adapt to new modes of communication, particularly those based on Internet Protocol (IP) or which require greater capacity to transmit the rich data streams and content so integral to modern communications.

In response to the changing technological landscape and challenges facing 911, Congress passed the ENHANCE 911 Act of 2004 (The Act) and amended it twice through the NET 911 Improvement Act of 2008 and the Next Generation 911 Advancement Act of 2012.² The Act, as amended, established an Implementation Coordination Office (ICO), or National 911 Program, as a joint program of the National Telecommunications and Information

² The Next Generation 911 Advancement Act of 2012 was passed as part of the Middle Class Tax Relief and Job Creation Act of 2012.

Administration (NTIA) in the US Department of Commerce and the National Highway Traffic Safety Administration (NHTSA) in the US Department of Transportation (USDOT). It further charged the ICO with managing a grant program and creating a national plan "...for migrating to a national IP-enabled emergency network capable of receiving and responding to all citizen-activated emergency communications and improving information sharing among all emergency response entities." That plan was released in September 2009.

In August 2014, the Federal Communications Commission adopted an order requiring all wireless carriers and other text messaging providers that enable consumers to send text messages to and from U.S. phone numbers, to deliver emergency texts to PSAPs that request them. Wireless carriers and other text messaging providers that were not already supporting text-to-911 were required to be capable of delivering texts to PSAPs by the end of 2014, and respond to PSAP requests to deliver text-to-911 six months from the date of the PSAP's request.

HISTORY OF 911 IN INDIANA

On March 1, 1968, just a few days after the first 911 call in Haleyville, Alabama, AT&T implemented Basic 911 in Huntington, Indiana. The Board celebrated 50 years of 911 in Huntington Indiana in March 2018. Former Indiana Congressman J. Edward Roush's family participated. Not only was Representative Roush active on the federal level regarding 911, but he also championed Indiana's adoption of the three-digit number.

Since the first 911 call in 1968, Indiana has been aggressively developing ways to enhance emergency services to its citizens. In 1988 legislation was passed to create the Indiana Wireless 911 Board. Senator Bob Meeks (R) carried the bill to the Senate. The bill was carried to the House by Representatives Dale Sturtz (D), and Nick Gulling (R), and the bill passed unanimously.

The original 911 Board consisted of five members, Ken Lowden (Region 1), Sue Moser (Region 2), Gerald Gagne (Region 3), Randy Kent (Region 4), and Jack Spriggs (Region 5). In the early years, Chris Ternet (1999-2005) was appointed as the first Wireless 911 Board Executive Director and Ken Lowden was appointed as the Vice-Chairman. Upon Mr. Ternet's departure, Mr. Lowden was appointed as Executive Director, serving from 2005 to 2010. Barry Ritter was appointed as the third Executive Director in 2010, serving until 2017. In 2012, with the ever-changing growth in technology and a need for stabilized funding, the Indiana 911 Wireless Board through legislation became the Statewide 911 Board. From 2017 to the present, Ed Reuter has served as the Executive Director.

E911

Although no public records exist documenting the exact date or location of the first landline E911 system in Indiana, New Paris Telephone's records indicate that E911 began in Elkhart County on November 30, 1987. The 911 Director at Elkhart County, Ms. Shelia Malone, was an early proponent of 911, which initially presented automatic number identification (ANI, the caller's telephone number) to the call-taker and later presented automatic location



identification (ALI, both the caller's phone number and the civil address). Funding for Elkhart's 911 system was provided through a property tax made legal by the Indiana state legislature, but all other counties were required to fund 911 through a fee on monthly phone bills. In 1988, legislation to provide funding through telephone user surcharges was enacted, and E911 was deployed throughout much of Indiana. E911 service was originally provided by Indiana Bell (later Ameritech, then SBC and now AT&T); General Telephone (later Verizon and now Frontier); and United Telephone of Indiana (later Sprint, then Embarq and now Century Link).

WIRELESS

In 1987, the first cellular systems began to appear, and cellular 911 calls were typically routed to the closest district post of the Indiana State Police. On February 27, 1998, Indiana became the first state to pass wireless E911 legislation (Public Law 98-1998 Section 1), providing liability parity for wireless carriers and landline carriers, cost recovery for wireless carriers and local governments, and creating the Indiana Wireless Enhanced 911 Advisory Board. Governor O'Bannon signed the new law in March 1998. 911 fee collections began at the start of the new fiscal year (July 1998) and the first PSAP payout occurred in October 1998. According to the National Emergency Number Association (NENA), the first wireless Phase I E911 call in the US was made in Allen County, Indiana, on March 31, 1998. The wireless carrier involved was Centennial Communications, the third-party location company was XYPOINT and the telephone provider was GTE Wireless. Lake County, Indiana, was the second county in the nation to accept Phase II calls in 2001.

In 2003, the Indiana legislature enacted legislation to remove the wireless carrier cost recovery provision of the statute and reduce the surcharge from 65 cents to 50 cents per wireless access line. Other important changes included the creation of an annual equal distribution of the fund to each eligible county in addition to the existing population-based distribution. The legislation also created a technology sub-account that permitted the Board to enter into vendor arrangements, such as the Wireless Direct project, and to plan for future technology applications. The Board immediately set to work to modernize wireless E911 service delivery. It hired a consultant to develop a Request for Information (RFI) for a wireless

direct network using modern, digital technology and assist with evaluations and vendor selection.

Within 24 months, INdigital (an entity owned by 12 independent Local Exchange Carriers [LECs]) had built a statewide, IP-based network with the potential to provide the NG911 network backbone for the State of Indiana. The next major milestone in legislative policy was enacted in 2008 to limit counties to no more than two PSAPs after December 31, 2014. A 2010 change in statute imposed the 911 fee on prepaid wireless services at the point of sale.

In 2012, the Indiana legislature passed major legislation that transformed the Indiana Wireless E911 Advisory Board into the Statewide 911 Board, changed the membership of the Board, and gave it broader authority. The legislation, discussed further below, also replaced county E911 fees with a uniform statewide fee of \$.90 on all devices to be collected and administered at the state level; established the hold harmless rate structure and provided for prepaid collections.

TEXT

In 2013, the Board voted to adopt the Indiana 911 (IN911) Text-to-911 Program (texTY) in response to a national plan for major national wireless service providers to begin to provide SMS Text-to-911 services. The FCC later required all wireless carriers and other text messaging providers to begin delivering emergency texts to requesting PSAPs.

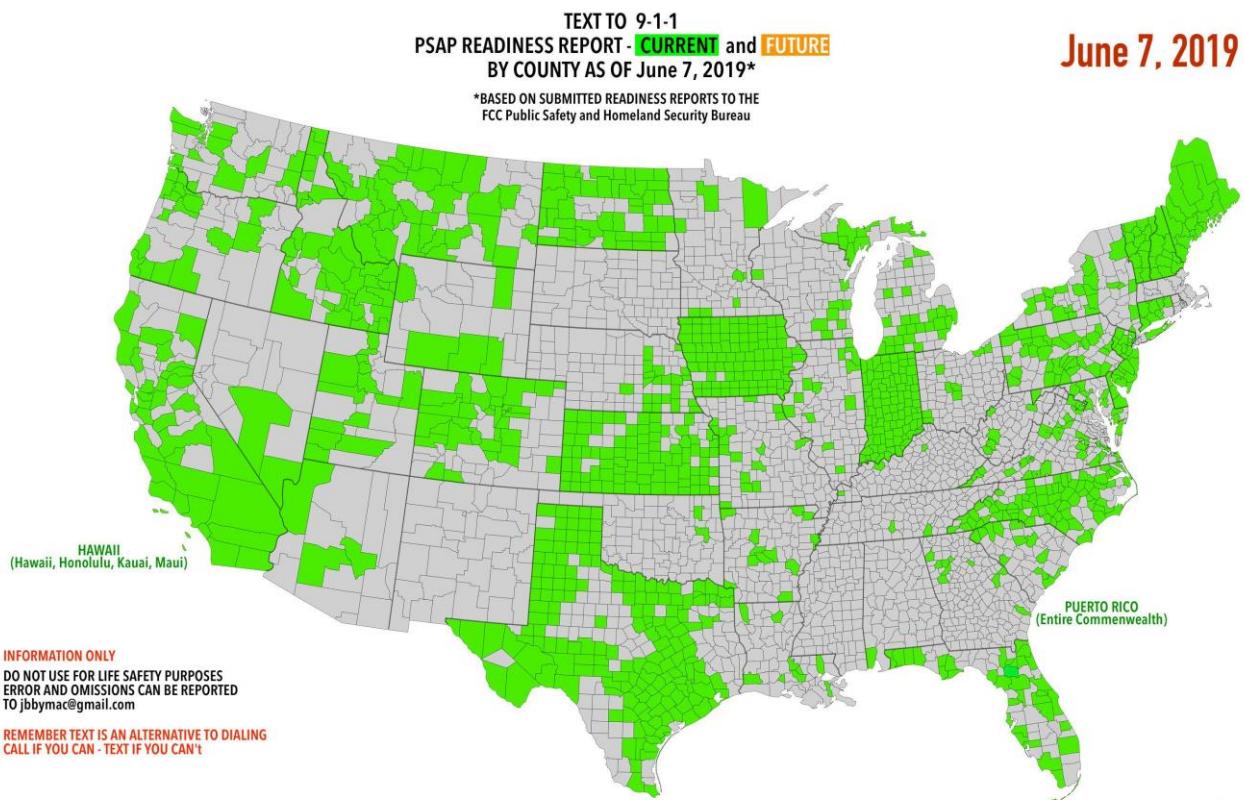
The Board continues to provide a statewide text-FOR-911 program, texTY, to PSAPs throughout Indiana. The program is specific to the state of Indiana and is designed to assure a coordinated, valid, and timely deployment of Text-to-911 services on behalf of the PSAPs in Indiana. The texTY application allows the public to send text messages to 911 from any cellular device with an active SMS service plan. In addition, texTY allows 911 centers to convert voice calls to text sessions if the situation requires. Additionally, Indiana has the ability via the IN911 system to text-FROM-911 to the public. This service has improved communication capabilities between 911 centers and the public.

The Program consists of four components:



- 1) Request Text-to-911 service from the wireless carriers
- 2) Coordinating the request and approval process for PSAPs
- 3) Providing a single source of information and status regarding Text-to-911 deployment in Indiana
- 4) Educating and managing public expectations of the new service

Indianapolis became the first metropolis in the nation to deploy Text-for-911 services on October 23, 2015. By June 2016, all 92 counties had implemented texTy services for both in-bound and out-bound sessions. Marion County has had over 110,000 text sessions with 11,012 of them initiated by citizens. Since 2014, Hoosiers have participated in over 1,087,573 text sessions and citizens initiated 74,207 of those sessions. On average, Hoosiers are using Text-for-911 services over 500 times per day. The map below shows Indiana's progress in this area on a national level.



NEXT GENERATION 911

Historically, it was not typical for counties or municipal units of government to coordinate on a regional basis for the provision of 911 service except for back-up PSAP arrangements. The deregulation of telephone services by the Indiana Utility Regulatory Commission, combined with the initiatives of the legislature and the availability of a statewide IP-network make such collaboration easier for local authorities. Economic factors and the advent of NG911 have created an environment where coordination among multiple counties is increasing. Regional consortia have been established for procurement advantages and redundant operational purposes. Many of these counties operate on the existing statewide Emergency Services IP Network (ESInet) and are fully interoperable. The Board's strategic plan included making Indiana completely Next Generation capable from the provider across the IN911 network to the PSAP.

To achieve that strategic outcome, the Board initiated a procurement in 2014 to build out an NG911 network to provide an equal level of service to all PSAPs, meeting or exceeding the level of service offered by the then-existing IN911 network. The Board awarded bids to three vendors, contracting with INdigital and AT&T for network call delivery services for 911 traffic, and ECaTS for a statewide comprehensive data analytics system. INdigital and AT&T each provide independent and diverse IP-enabled ESInets, but when the networks are integrated at the core, together they become the IN911 network. ECaTS was deployed in 2016 and has been collecting, logging, and reporting data using the IN911 system ever since.

NG911 Evolution and Upgrades

The Board has continually moved forward to improve IN911 and procure the latest technologies for Indiana. In 2015, the network was upgraded to Generation 2015 (G15). This was done through an RFP process and focused on upgrading key components of the core. The upgrades focused on better diversity, Next Generation standards-based services, and universal access to 911 services for citizens. Improvements made during the G15 project include:

- ✓ MEVO Disaster Recovery at all PSAPs
- ✓ Upgraded bandwidth to all PSAPs



- ✓ Universal logging and reporting
- ✓ Upgraded legacy 911 to an ESInet for all PSAPs
- ✓ Language Line integration to text to 911 services
- ✓ ESInet to ESInet integration

The original INdigital contracts with the Board were based on the Board purchasing the necessary equipment and INdigital repaying those capital costs through credits over time. In 2015, the Board changed the contractual arrangement with INdigital to a 911-as-a-service model.

The initial AT&T network was a custom built, geographically diverse, IP-based call routing and delivery Time to Market (TTM) ESInet. The TTM ESInet had core locations in Indianapolis, Indiana; Crown Point, Indiana; and Louisville, Kentucky. The TTM provided a secure IP-based network with enhanced call routing capability and no single point of failure. The fully i3 compliant TTM ESInet utilized AT&T's global Multi-Protocol Label Switch (MPLS) Network, the largest and most reliable fully integrated MPLS implementation in the world. The architecture was completely software-based and had the ability to evolve as new technologies become available. The solution included two ESInet data centers located at AT&T facilities. The TTM ESInet enabled public safety agencies to accept any emergency IP-delivered content and to share information between and among Indiana PSAPs. The TTM solution enabled call delivery and Text-to-911 into a legacy PSAP environment, an IP-enabled 911 PSAP, or to peer/regional ESInets. Through a Network to Network Interface (NNI), the TTM ESInet transferred calls and shared information with other ESInets.

When the Board first contracted with AT&T in 2015, AT&T did not have a national contract with Intrado, and the Indiana TTM ESInet was a unique, standalone network. However, AT&T moved to a national model network (known as the AT&T ESInet) and in May of 2018, the Board and AT&T executed a contract amendment to move Indiana from the TTM network to the AT&T ESInet. The AT&T ESInet is a fully managed service that provides end-to-end support from project implementation to life-cycle support. The network was designed and built using a geographically diverse six (6) core architecture with nine (9) diverse aggregation sites. The system is a nationally distributed geo-diverse solution utilizing NENA i3 standard

framework with no single point of failure. The AT&T ESInet was built to deliver 99.999% availability and the capacity to support 200% of the entire national 911 call volume. This ESInet also uses AT&T's global MPLS network and can transfer calls and share information through the NNI. The solution also includes a Customer Management Portal (CMP) that displays Alternate, Abandonment, and Backup Routing information for each PSAP. The CMP is accessed via a web portal using two factor authentication and provides data both at a local PSAP, regional level, and a state level based on the user's permissions. The table below highlights the differences between the two types of networks:

TTM	AT&T ESInet
Custom-Built Solution	Nationwide Offering
Two Core Architecture	Six Core Architecture
Three Aggregation Sites	Six Aggregation Sites
	Allows for twice the daily national 911 call volume
	Customer Management Portal

In 2019, INdigital upgraded to the G19 network. The G19 network upgrade improves 911 service reliability based on lessons learned from ongoing network operations, and supports advancement of the NENA i3 protocol. Service improvements focused on core network upgrades to support better carrier diversity, redundancy, network throughput, and system failover convergence time. The IN911 network now supports call functions related to geographic location call routing, logging advancements, and several other related service improvements. During the G19 upgrade, PSAPs were invited to provide feedback, resulting in guidance to improve service transparency and communication of network services to the local community. New communication policies were created, and a statewide notification system was deployed to improve access to information. These types of efforts have continually improved service levels in Indiana.

A particularly helpful feature of the G19 upgrades is automatic call routing. This feature allows the ESInet, in an overflow situation, to identify available PSAPs in a preprogrammed template and then route 911 calls accordingly. Should a PSAP ever need to close temporarily for cleaning or become incapacitated due to a catastrophic event, their calls would not overwhelm a single 'partner' center. Calls are distributed by type or location of the caller. A predefined distribution plan developed by the PSAPs make the transition of the delivery point of calls seamless to the public.

CURRENT 911 TECHNOLOGY

Dual ESInets are currently deployed by AT&T and INdigital for network call delivery services for 911 traffic. As of November 2020, there are 87 Indiana PSAPs connected to the IN911 system. In total, there are four 911 System Service Providers providing 911 service in Indiana:

- AT&T Indiana
- Century Link
- Frontier
- INdigital

Legacy 911 Infrastructure

Most, if not all, legacy 911 system service providers use out-of-band Signaling System 7 (SS7) signaling to transport a 911 call from the caller's serving Central Office (CO) to the tandem or selective router. From there to the PSAP, the landline 911 network consists primarily of circuit switched, analog technologies using in-band signaling (centralized automatic message accounting [CAMA]). All legacy 911 service providers operate ALI database platforms that use IP technology for transport and then convert to low-speed data transmissions (1,200-to-9,600 baud data lines) if the PSAP premises equipment is not capable of supporting IP ALI links.

Local Exchange Carrier 911 Selective Routers

Frontier, CenturyLink, AT&T, and INdigital provide E911 services using selective routers which also serve as tandem switches. These are located throughout the state and serve the majority of Indiana PSAPs. Selective routers perform the function of routing an E911 call to the correct PSAP and are critical components of the existing landline delivery network.

Selective routing for 911 uses the local exchange carriers (LEC's) regional or Local Access and Transport Area (LATA) tandems, which do not operate as mated pairs. Therefore, survivability of the tandem as a selective router relies on survivability of the same switch to provide service for landline calls of all types, including 911 calls. Frontier uses multiple Nortel

DMS central office-based tandem switches for the selective routing function; these are connected to 12 CML ECS-1000 selective routers, which function as ANI/ALI controllers. Century Link uses one Nortel DMS-500 tandem switch. INdigital uses two mated pair Siemens EWSD class 4 switches and is utilizing three paired Emergency Services Routing Proxy (ESRP's) for geospatial routing of E911 voice and non-voice calls using NENA i3 standards.

Local Exchange Carrier Automatic Location Information Database

AT&T-served PSAPs currently receive wireline, wireless, and VoIP automatic location information (ALI) data through Intrado. This ALI platform transports ALI data and selective router Application Programming Interface (API) links over a private, redundant, self-healing IP network. ALI is provided when calls are transferred among AT&T PSAPs statewide, as well as, to AT&T-served PSAPs in Michigan and Illinois. The IP ALI data links are converted back to analog circuits if the PSAP premise equipment is not capable of supporting IP ALI links. Most Frontier-served PSAPs also receive ALI data from Intrado. Century Link provides their own ALI management service to all but three of the counties they serve. INdigital customers receive ALI via a distributed IP ALI system (INDB). This will change with the full deployment of the dual ESInets. Certain other PSAPs in Indiana receive landline ALI via local ALI database servers or via IP networking provided as a parallel overlay to the IN911 wireless ALI network.

Wireless Carrier Network

Among the nine CMRS carriers, there are 36 mobile switching centers (MSC) located throughout the Midwest. All 36 of them connect to the two redundant mated-pair tandem selective routers on the IN911 network or to redundant and geo-diverse legacy network gateways (LNG is a NENA i3 NG911 functional element). From there, calls are selectively routed by the IN911 network and then delivered to the appropriate PSAP either directly or via a functional direct-connect to the network of the PSAP's 911 system service provider.

Wireless ALI Database

IN911 provides wireline and wireless ALI service where required. ALI records sync between service providers and are transferrable to four adjoining states.

PSAP INTEGRATION

PSAPs function independently of each other. There is limited integration of 911 and radio systems with one another or with other related or unrelated public safety systems. Indiana's Fiber Network backbone carries a network of networks that form a secure ESInet supporting a variety of Public Safety functions, including IN911, connections to the National Crime Information Center/Indiana Data and Communications (NCIC/IDACs), the Automated Fingerprint Identification System (AFIS), and Criminal Justice Information Services (CJIS).

IN911 serves public safety needs and PSAPs by providing access to other state agencies. Additionally, IN911 serves the public interest by reducing the costs of 911 paid by local governments. Finally, the IN911 System is capable of adapting to technological changes and innovations as they occur.

NG911 Equipment Upgrade Project

While Indiana made strides to implement a NG911 network in the State, a major challenge was lack of NG911-capable equipment in PSAPs. The Customer Premise Equipment or Call Processing Equipment (CPE) must be able to receive and process IP-based calls and information. Thus, while a robust next generation infrastructure was available to provide NG911 services, the services many PSAPs could provide to callers and first responders were limited by outdated CPE. A project to collect and catalogue 911 equipment in 2013 found that 44 percent of counties needed to replace their CPE to become NG911 capable, that 182 call answering positions in the State were not capable of NG911, and that 106 CPE upgrades were required. There was no identified funding to rectify this issue.

However, in 2019, Indiana was awarded \$2.8 million in federal grant funds through the U.S. Department of Commerce and the U.S. Department of Transportation to help PSAPs upgrade to NG911 capabilities. This award was the culmination of substantial in-state efforts. As early



as August of 2018, in anticipation of the grant, the Board worked to identify and prioritize eligible projects. The Board was willing to apply for the grant and then disburse the funds to PSAPs as subgrantees. Under this plan, the Board would facilitate the disbursement of federal grant funds by developing and implementing a state-level grant program modeled after and in compliance with the rules for the federal grant program. The eligible uses of the state-level grant would be aligned with the eligible uses defined in the anticipated federal grant rules. The Board would manage the coordination, reporting, and disbursement of these state-level grants in alignment with the federal rules and the State's responsibilities for reporting to the federal government.

Having developed a plan and having identified the needs of PSAPs in Indiana, the Board required PSAPs to submit a Grant Certification Letter indicating their intent to submit a grant application to the Board. When the federal grant application opened in February of 2019, the subgrant application was finalized and released to the PSAPs with a March deadline. A Grant Review Committee was formed to review applications and make award recommendations. In the end, 36 projects in 29 counties were submitted as part of Indiana's federal grant application; all of which were approved. Ten of those projects were for CPE upgrades. Thanks to federal funding and the tireless work of many, as of 2020, all Indiana PSAPs have NG911-capable CPE. The grant period does not end until 2022. If the initially awarded projects do not utilize all available funds, additional projects may be completed.



LEGISLATIVE AND REGULATORY HISTORY

Indiana's Statutory Provisions for 911 Service

Title 36, Article 8, Chapter 16.7 of Indiana Code ([IC] 36-8-16.7 Statewide 911 Services) governs 911 in the State of Indiana. Title 36, Article 8, Chapter 16.6 (IC 36-8-16.6 Enhanced Prepaid Wireless Telecommunications Service Charge) governs prepaid wireless service in the state of Indiana. IC 8-1-2.6 effectively deregulated many of the legacy 911 system service provider's 911 product offerings.

As discussed above, legislation enacted in 2008 limited the number of PSAPs to no more than two in each county, with limited exceptions provided for in IC 36-8-16.7-47. The initial 2014 procurement of ESInet providers in Indiana was in compliance with 2012 legislation requiring that new contracts for operation of a statewide ESInet be competitively bid in an open procurement process. In that same watershed legislative year, Senate Enrolled Act 345 of 2012 required that the Board provide a guaranteed minimum level of funding to counties on an annual basis and established a single statewide fee. The monthly statewide 911 fee is assessed uniformly on each standard user having a place of primary use in Indiana. A separate 911 fee is assessed on prepaid wireless services at the point of sale by retailers and remitted to the Indiana Department of Revenue.

This enactment came toward the end of approximately five years (roughly 2007-2012) of on-going and significant decreases in landlines fees. Indiana averaged an 18 percent loss of revenue per year during that time period. As the public moved to cell phones and discontinued their landline services, 911 entities across the country struggled to adapt their funding models to provide sufficient funding. At this time, levels have stabilized.

House Bill 1475 of 2015 increased the fee for standard users from \$.90 to \$1.00 and the fee on prepaid wireless from \$.50 to \$1.00 per sales transaction. The Bill also applied uniform fee collection on all technologies, which resulted in VoIP providers being treated like all other 911 technology providers. Initially, the Board was authorized to increase the fee in the amount of

\$0.10 once between June 30, 2015 and July 1, 2020 after review of the budget committee. That option was not exercised in the specified time, and in 2020, the dates were amended to between April 1, 2020 and July 1, 2023.³ The fee may be lowered once annually by \$0.10; any more would require legislative approval. Local government does not have authority to assess a 911 fee but can levy local income taxes as discussed in more detail below. All fees are remitted to the state and deposited into the statewide 911 Fund, which is managed by the Board. PSAPs were also required to report to the Board regarding the costs for dispatching public safety agencies to respond to 911 calls and the funding sources for those costs.

HB 1475 of 2015 also specified the distribution of funds collected through the 911 fees.⁴

Sec. 37. (a) Subject to subsection (b), the board shall administer the fund in the following manner:

(1) In each state fiscal year, the board may retain the lesser of:

(A) ten percent (10%) of the statewide 911 fees deposited in the fund in the previous state fiscal year; or

(B) the amount of fees deposited in the fund in the previous state fiscal year that would provide for the operating expenses of the statewide 911 system during the state fiscal year for which the fees are retained;

to pay the board's expenses in administering this chapter and to develop, operate, and maintain a statewide 911 system. The board may decrease the amount of fees retained by the board under this subdivision.

(2) After retaining the amount set forth in subdivision (1), the board shall distribute to the counties the remainder of the statewide 911 fees in the fund. With respect to any state fiscal year beginning after June 30, 2015, the board shall first ensure a distribution to each county in an amount that is equal to the total amount of statewide 911 fees distributed to the county during the fiscal year ending June 30, 2014.

(3) If any statewide 911 fees remain in the fund after the distributions ensured under subdivision (2), the board shall distribute the fees as follows:

(A) Ninety percent (90%) of the fees shall be distributed to the counties based upon each county's percentage of the state's population.

³ IC 36-8-16.7-32 (a) (1) (A)

⁴ IC 36-8-16.7-37

- (B) Ten percent (10%) of the fees shall be distributed equally among the counties.
- (b) The board may not distribute money in the fund in a manner that impairs the ability of the board to fulfill its management and administrative obligations under this chapter.

Finally, House Bill 1475 of 2015 removed the requirement that a county council (for a county adjusted gross income tax) or a county income tax council (for a county option income tax) must impose certain additional tax rates as a condition of imposing an additional Local Optional Income Tax for public safety (public safety LOIT). In a county in which a public safety LOIT was not in effect on July 1, 2015, the county council or county income tax council (as appropriate) could adopt a resolution providing that up to 100 percent of the tax revenue from a public safety LOIT imposed by a county be dedicated to a PSAP in the county that is part of the statewide 911 system. In a county in which a public safety LOIT was in effect on July 1, 2015, the county council or county income tax council (as appropriate) could adopt a resolution providing that up to 100 percent of the public safety LOIT tax revenue derived from the part of the tax rate that exceeds the tax rate in effect on July 1, 2015, be dedicated to a PSAP in the county that is part of the statewide 911 system. The fiscal bodies of a county and another political subdivision that are parties to a contract under which the county has assumed the responsibility of operating a PSAP, are authorized to jointly petition the department of local government finance to adjust the maximum property tax levies of the respective units. Subsequently, the language used for these types of taxes has been updated to Local Income Tax (LIT).⁵

⁵ See IC 6-3.6-2



ADDITIONAL BOARD ACCOMPLISHMENTS

Public Awareness Campaigns

The Board is dedicated to serving the public, and providing information about the 911 resources and technology available in Indiana. This dedication has led to partnerships and innovative public information campaigns. As communications change and adapt, the Board has kept pace, utilizing both traditional media forums, and branching out into social media. During the initial rollout of Text-to-911, the Board ran a media campaign and provided every PSAP with a media packet that contained useful information and a news release they could localize for publication in local media. The initial campaign was for 90 days in key markets and Emmis Communications used radio, print, billboards, and electronic messaging to announce the implementation of text services. The focus for message delivery was large events with target audiences such as the Indianapolis 500, the Indianapolis July 4th celebration, the Indiana State Fair, and the Marshall County Blueberry Festival. Billboards were placed on high volume roadways. The earned media coverage by television stations and internet news in Indiana and surrounding states was significant as a result of the initial campaign.

The Text-to-911 public awareness campaign focuses on Indiana's Lifeline Law and involves a partnership with the Indiana Youth Services Association to target college and high school students to inform them what to do in an emergency, including alcohol related emergencies and general student safety issues. The advertisements in this campaign include text conversations with 911 to promote that service to students. The campaign also targets schools for the deaf to promote the benefits of Text-to-911 service for deaf and hard of hearing students. Geodomes cover all colleges and universities, fraternity rows, and bar districts in Indiana and allow for targeted messaging to this audience. As of October 2020, through direct testimonials, the enactment and publicizing of the Lifeline Law is credited with saving 55 lives.

The spring 2018 campaign covered all high schools and Pat McAfee, retired Colts kicker, was featured in a campaign video. The campaign for fall of 2018 included working with universities



to make students aware of alcohol poisoning signs during move-in week. The simultaneous growth and success of the Board's social media outreach is detailed in the State Plan.

Training and Policies

In 2017 the Board adopted Minimum Training Guidelines for Telecommunicators recommended by NENA and by the Minimum Training Guidelines for Telecommunicators Project. The project was a 911 community-wide work group effort that included NENA, APCO, NASNA, IAED, NFPA, PowerPhone, and industry professionals. The group carried out their work over a three-year period, and the project resulted in nationally recognized, universally accepted, standards.

Telecommunicator training programs are designed and managed by each individual PSAP. Indiana requires mandatory training for Emergency Medical Dispatch (EMD) and Telephone CPR (T-CPR). The adopted Minimum Training Guidelines recommendations were forwarded to PSAPs to use as a reference. In 2015 House Bill 1182 was passed under the umbrella of the Fire and Public Safety Academy. The objective of this House Bill was to provide firefighting and emergency services, including telecommunicators, with cost effective, volunteer training opportunities. The Statewide 911 Board earmarked funds to provide certified basic training for telecommunicators in Indiana, and the Board invited 911 directors from across the state to develop a policy for which basic courses the Board would provide financial support.

Board Funding for Training

Since January 2018, costs for the following types of telecommunicator training, have been covered by the Training Program:

- ✓ Certification Courses
- ✓ Recertification Courses
- ✓ Continuing Education Courses
- ✓ Supervisory Courses
- ✓ CTO Courses
- ✓ CMCP Course

Training Totals by Course: January 2018-October 2020

Certifications

Basic Telecommunicator Course	787
Emergency Medical Dispatch	950
Fire Service Dispatch	881
Law Enforcement Dispatch	761
T-CPR	365
Total Courses	3,744

Re-Certs

Basic Telecommunicator Course	321
Emergency Medical Dispatch	1170
Fire Service Dispatch	650
Law Enforcement Dispatch	438
T-CPR	37
Total Re-Certs	2,616

Total Certifications & Re-certs: 6,360

Amount Saved by Local Authorities: \$1,350,139

The Board has also provided continuing education training opportunities such as the Denise Amber Lee Foundation, and The Healthy Dispatcher. These courses give high quality training, and allow networking with other agencies. The following page shows a representation of the advertising for optional continuing education.

Additionally, the Board joined with the Indiana Youth Services Association to train telecommunicators on the signs of human trafficking. The Board also undertook a project to collect data on active shooter policies in the State and found that fifty-five percent of Indiana's PSAPs have an active shooter policy in effect. Thirty percent of PSAPs are in the process of developing a written policy while sixteen percent have requested assistance. The Board provided policies for these PSAPs to use as a guide to update or develop their own active shooter policies.



Training Classes with **The Healthy Dispatcher**

**May 8 & 9, 2019
July 10 & 11, 2019
September 18 & 19, 2019**
8:00-17:00

Join Adam Timm for this energetic, insightful, 8-hour training class filled with proven action steps and powerful perspectives to help you thrive in your 9-1-1 career.

The Power of Resilience: How to Lead From the Front Line

Class Description:

Working in 9-1-1 can be challenging, with vicarious trauma, long hours, and difficult callers the norm. It takes a personal leadership approach to thrive in this profession. Research shows that 9-1-1 pros who prioritize their resilience embody this approach. They are happier on the job, feel more confident in their role, and make a bigger impact through their work. This presentation offers stories from the best comm centers around the country, and underscores the importance of resilience at both the personal and organizational level.

Learning Objectives:

- Understand the underlying cause of work-related vicarious trauma
- Identify three specific ways you can prioritize your personal success
- Learn how the best comm centers keep their best people
- Bring these tools and perspectives into your work day

PAST ATTENDEES ARE SAYING:

“

"Thank you for giving me tools to make life easier"

”

"Amazing! So refreshing to have a class taught by someone who was in the job and knows what they're talking about!"

"Some classes I attend are 'blah' and uninteresting...this was one of the best I've ever attended"

"Excellent class, taught speaking our language. It was exciting, fast moving and interesting. Definitely the most useful class I've been to in ages."

Event Locations:



May 8/9:

Plainfield Aquatics Center
651 Vestal Road
Plainfield, IN 46168

July 10/11:

Seymour Police Dept.
205 N Ewing Street
Seymour, IN 47274

September 18/19:

Lake County
Government Complex
2293 N Main Street
Crown Point, IN 46307

Click to register:
(or type link into your web browser)

<https://in911.net/training.html>

INSTRUCTOR

Adam Timm

is a board-certified stress management consultant, author, and full-time trainer for the 9-1-1 industry. For over a decade, he was a 9-1-1 dispatcher for the Los Angeles Police Department, where he pioneered a stress resilience program that contributed to a 45% decrease in sick time usage at his center.



Adam is a frequent keynote and breakout session speaker at NENA and APCO conferences around the country. He's written two books, including the bestselling, "Stress Is Optional! How to Kick the Habit," and the popular, "Dispatcher Stress: 50 Lessons on Beating the Burnout. Adam's third book, "0% Turnover: How the Best 9-1-1 Centers Drive Engagement, Boost Morale and Inspire High-Performance Culture," includes case studies with directors and managers from PSAPs around the country. It is scheduled for release in 2019.

IN CLOSING

One of the most exciting things about this document is that 911 is continuing to evolve and flourish in Indiana. As the Statewide 911 Plan shows, advances are continually being made to improve 911 accessibility and service to all of Indiana's citizens and visitors. This document will continue to grow as it catalogues each completed 911 achievement, while the Statewide 911 Plan continues to envision the future.

I have some enormous shoes to fill succeeding three pioneers who established high standards for Indiana's 911 services. The success of Indiana's program is because of the long-standing support from legislators and the collaborative efforts by our supporting consultants, legal advisors, communications service providers, and the Treasurer's office. However, we must never forget the men and women serving on the frontlines who are tasked with answering the 911 calls.

Ed Reuter
Executive Director
November 2020