COVID-19 IMPACT ON INDIANA PSAPS
January-June 2020
COVID-19 IMPACT ON INDIANA PSAPS

A Message from the Executive Director

The purpose of this report is to capture how the COVID-19 pandemic impacted 911 services across the state of Indiana during the first six months of 2020. Because of this unprecedented time of not knowing when this crisis will end, it is necessary to collect and share information in six-month segments as we continue to evaluate 911 services within our state.

The Statewide 911 Board sincerely appreciates the support and collaboration that went into compiling information for this report:

- PSAP directors as we worked through a variety of issues and for voluntarily completing the Survey Monkey.

- INdigital Team who tirelessly provided data from the IN911 network.

- AT&T for their cooperation and support as we continue to build out one of the most unique ESinets in the country.

Indiana’s NextGen ESinet project would not be where it is today if it wasn’t for the unwavering support we receive from our consultants; 911 Authority, Ritter Strategic Services, Legal counsel, and Board Chair Treasurer Kelly Mitchell and her staff.

The first six months of 2020 were challenging at every level of 911 service. Having two major weather events and civil unrest during this period contributed to an even greater need to have high-tech equipment combined with well-trained telecommunicators.

Thanks to all the Telecommunicators who are serving on the front line of Indiana’s 911 services.

Edward A. Reuter
BACKGROUND & HISTORY

In December 2019, an outbreak of COVID-19 was detected in mainland China, and this highly contagious disease has affected millions in over 200 countries worldwide. On February 12, 2020, the World Health Organization named the disease as Coronavirus Disease 2019 (COVID-19).

The first US death occurred in Santa Clara, California, on February 6, 2020, which was one of three deaths that were determined by the medical examiner. Initially, there were two deaths in King County, Washington, on February 26th.

On March 6th, the Indiana State Department of Health (ISDH) confirmed the first case of a resident in Marion County who had recently traveled to Boston, MA. The second case in Indiana was from Hendricks County. The first Hoosier death occurred on March 15, 2020, in Indianapolis. By March 31, Indiana’s death toll had reached over 100.

By the end of June 2020, Indiana recorded 2,448 deaths, with 45,594 positive cases detected.

As the positive cases were being determined across the country, Public Safety Agencies began to update protocols for something they had never experienced before.
ADMINISTRATIVE

When the COVID-19 outbreak began in Wuhan, China, it was unimaginable to believe the U.S. would be impacted as it did, much less impact the State of Indiana. The Statewide 911 Board staff, including the Board accountant, began working remotely on March 16th by setting up operations at their residences. Initially, daily staff calls were implemented to enhance internal communications among the staff. This enabled the staff to keep a pulse on all aspects of the Board’s responsibilities, including collecting surcharges from communications service providers, distributing funds to local governments, overseeing the operations of the statewide ESInet network buildout, and managing the Federal Grant.

IN911 staff travel was suspended except for the mission-critical functions for network operations. PSAP directors also placed restrictions for outside visitors to isolate their staffs from potential COVID-19 exposure.

Revenues remained relatively stable for this period, as shown in the graph below. The blue represents the revenues from pre-paid purchases from the previous month (Jan is Dec). The brown graph represents revenues from wireless, wireline, and VOIP.
The following chart shows the expenses and distributions paid by the Board from January through June 2020. Because of the economic downturn, revenue funds were moved from the Sweep accounts to stable savings accounts. The IN911 Board fulfilled the financial responsibilities as required by the statute.

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold Harmless</td>
<td>$45,583,573.00</td>
</tr>
<tr>
<td>Network cost (Text to 911, Language Line, MEVO, ECatS, Interconnectivity, NOC)</td>
<td>$9,096,869.97</td>
</tr>
<tr>
<td>Legacy (AT&amp;T)</td>
<td>$857,755.00</td>
</tr>
<tr>
<td>Training</td>
<td>$450,637.00</td>
</tr>
<tr>
<td>Federal Grant</td>
<td>$498,763.63</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$55,988,834.97</strong></td>
</tr>
</tbody>
</table>

Zoom meetings became the new trend of communications. For the health and welfare of members and stakeholders, the June 30th quarterly board meeting of the Statewide 911 Board was conducted virtually.

The Board office participated in national virtual conference meetings with NASNA (National Association of State 911 Administrators). NASNA represents 48 states which conducted weekly meetings which allowed 911 administrators an opportunity to share critical information with other states 911 systems and how they were impacted across the country.

Regional V Virtual ESF2 weekly meetings with Illinois, Wisconsin, Minnesota, Michigan, Ohio, and Indiana also shared critical information about how COVID-19 impacted their states.
The Statewide 911 Board also participated in District 5 REST Team – COVID-19 response briefings that focused on 211 “Hot Lines.” The primary goal for 211 operators was to assist citizens with their mental health needs as well as reduce the number of mental health calls that may be directed to 911 centers. Additionally, a First Responder (Law enforcement, Fire, EMS & Telecommunicators) “Hot Line” was developed which served as a Critical Incident Stress Management peer support group.

211 calls increased in the first six months of the year from 150,448 in 2019 to 184,593 in 2020; a 23% increase. 211 operators also collaborated with 911 centers multiple times once it was determined the caller may have suicidal tendencies.

211 operators were provided Public Safety Answering Points (PSAPs) administrative telephone numbers for direct contact to pass along emergency situations.
The Board also participated in White House Briefings.

Other agencies the Statewide 911 Board collaborated with during this time included the Indiana Department of Health, Indiana Department of Homeland Security, Indiana Public Safety Commission (IPSC), Indiana Department of Mental Health, and PSAPs from across the state.

The Board office provided support to PSAP directors as they developed “call delivery” protocols if there would be a need to evacuate their centers. Because of the magnitude of this crisis, many of the directors updated their Continuity of Operations Plans (COOP).

Marion County, which includes Indianapolis, contacted the Indiana Statewide 911 Board on March 16th, expressing concerns about the high volume of calls (180 per hour) their center processes to explore other options of alternative call delivery. Indianapolis serves a population of approximately 875k, and there are no other single PSAPs that could process all of Marion County’s 911 calls without becoming overwhelmed.

In 2019, INdigital upgraded to the G-19 network. The G-19 upgrades support new standards and technologies available for NG9-1-1 services. This allows the ESInet, in an overflow situation, to identify the available PSAPs programmed into a template and then route 911 calls accordingly. It is like having Automatic Call Distribution (ACD) functionality or smart call distribution, but at the ESInet level. 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 the type or location of the caller. A predefined distribution plan developed by the PSAPs makes the delivery point of calls seamless to the public. In Marion County one PSAP was designated to receive all 911 wireline calls while the other four PSAPs would receive 911 wireless calls using the call distribution models, which would send the calls to the least busy PSAP within the group.

The diagram below illustrates the call flow in this alternate routing scenario.

On March 25th, a virtual meeting was conducted with the PSAPs representing the eight largest Indiana counties (Allen, Clark, Elkhart, Hamilton, Lake St. Joseph Vanderburgh, and Marion). These agencies processed over 48% of the total 911 calls in 2019, representing 2.9 million of the 6.7 million citizens in the state.

The purpose of the meeting was to share this technology with these PSAPs who may have similar concerns as Marion County. The intent of the meeting was not to change the agency’s existing “Call Delivery” contingency plans but to make the PSAP directors aware of the pre-planning process that must occur before activation.
Representatives from INdigital, AT&T, 911 Authority and Ritter Strategic Services, Indiana Department of Homeland Security, IPSC, Board attorney, and the Board staff attended this virtual meeting.

Other PSAPs took measures to separate their staff by opening a secondary backup center to prevent all their employees from becoming ill with COVID-19.

Eighty-two PSAP directors completed a Survey Monkey with the intent to gain an internal review of how 911 centers were impacted by the pandemic from January through June 2020.

The graph below shows the steps PSAP directors took as they revised their COOP plans for the pandemic. The two high priority steps taken were they separated staff from non-911 personnel and checked their employees’ temperatures. Six percent of the reporting PSAPs separated staff members in back up operation centers while 11% updated call routing policies.
This graph reveals over 85% of the 82 reporting 911 directors collaborated with their local law enforcement, Fire, EMS, and local health department. Approximately 80% worked with EMA and local government officials, and 48% were in contact with their local medical director.

It is believed that approximately 95% of the PSAPs implemented COVID-19 screening protocols. However, depending on the agency size and local policies, some may have only screened EMS calls for service, while others screened a combination for each of the public safety disciplines.
The graph below reveals 41% of the 82 reporting PSAPs experienced staffing shortages as a result of COVID-19, while approximately 54% updated their Continuity of Operations Plans (COOP).

After screening incoming calls for service, Telecommunicators notified First Responders by radio 86% of the time, 61% of the time using CAD notes, and 27% of the time by telephone.
In 2014 the Indiana Statewide 911 Board initiated a procurement to build out a NG911 network that would provide an equal level of service to all PSAPs to meet or exceed the level of service offered by the IN911 network. The Board awarded bids to INdigital and AT&T for the network call delivery services and the third contract to ECaTs for the statewide data analytics system. By 2015, INdigital completed their ESinet buildout by delivering all wireless 911 calls for the state.

AT&T is currently building out an independent ESinet which will connect at the core with INdigital with the same capabilities.

This will allow each system to serve as backup Service Providers for each other. AT&T’s buildout was scheduled to be completed by September 2020; however, it was delayed on March 19th, 30 days, due to COVID-19 restrictions limiting technicians’ access to PSAPs for final preparations. This was agreed on by all stakeholders and consultants, which allowed additional time to evaluate local safety protocols. INdigital, AT&T, and Intrado continued to collaborate by internally testing the systems. On June 24th Lawrence County and Bedford Police Department were successfully converted to the NNI network together, testing the NNI interconnectivity between the networks. This was a major milestone for the project.

On March 25th, Governor Holcomb issued a “Stay at Home Order.” INdigital provided statistical data comparing the trends during the same time frame in 2019. As shown below, the call trends dipped in April 2020. however, they increased as the stay at home restrictions were relaxed.
The graphs below compare how Indiana measured up to Michigan and Alabama. Initially, 911 directors reported call volumes were lower than the previous year in April during the stay at home order. However, the bottom graph reveals an increase in Indiana of 29.8% in call activity over the Memorial Day weekend.
The overall 911 call trends for the first six months of 2020 were very similar compared to 2019. While in March and April, dispatch centers experienced a lower volume of inbound calls than average, over the Memorial Day weekend, there was a significant increase. Additionally, the civil unrest that stemmed from the death of George Floyd, in addition to one major weather event, had a significant impact on call volume.

Text-to-911 and Text-from-911 sessions increased by approximately 2.6% during this time period.

911 CALLS & TEXT TO 911 SESSIONS

**2019**

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inbound</td>
<td>1,699,237</td>
<td>1,699,237</td>
</tr>
<tr>
<td>Abandoned</td>
<td>197,518</td>
<td>197,518</td>
</tr>
<tr>
<td>Abandoned %</td>
<td>10.41%</td>
<td>10.41%</td>
</tr>
<tr>
<td>Unparsed</td>
<td>843</td>
<td>843</td>
</tr>
<tr>
<td>Total</td>
<td>1,897,588</td>
<td>1,897,588</td>
</tr>
<tr>
<td>Avg Call Duration</td>
<td>106.3</td>
<td>106.3</td>
</tr>
<tr>
<td>Total</td>
<td>1,899,903</td>
<td>1,899,903</td>
</tr>
</tbody>
</table>

**2020**

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inbound</td>
<td>1,621,982</td>
<td>1,621,982</td>
</tr>
<tr>
<td>Abandoned</td>
<td>189,931</td>
<td>189,931</td>
</tr>
<tr>
<td>Abandoned %</td>
<td>10.48%</td>
<td>10.48%</td>
</tr>
<tr>
<td>Unparsed</td>
<td>652</td>
<td>652</td>
</tr>
<tr>
<td>Total</td>
<td>1,812,565</td>
<td>1,812,565</td>
</tr>
<tr>
<td>Avg Call Duration</td>
<td>111.7</td>
<td>111.7</td>
</tr>
<tr>
<td>Total</td>
<td>1,814,939</td>
<td>1,814,939</td>
</tr>
</tbody>
</table>
CALL VOLUME BY MONTH

The data for the following call volume charts were pulled from ECATS starting March 15th.
The Computer-Aided Dispatch 2019-2020 comparisons for EMS and Fire were relatively unchanged, with a slight decrease in the number of Law Enforcement calls for service during the “Stay at Home” orders. The bottom chart shows an increase in welfare checks with minimal differences in suicide and overdose calls for service. Not all agencies classify “suicide threats” under the same nature code. An example; suicide threat calls may be categorized under welfare check.
The graph below depicts 56% of staffing in PSAPS is between 11-20 telecommunicators. Twenty-two percent of the PSAPs have between 5-10 telecommunicators. The loss of any telecommunicators from the smaller PSAP’s shift rotations significantly impacts their ability to sustain their 911 operations. Only 1% of PSAPs have more than 101 telecommunicators employed at their agency.

Fifty-seven percent of the PSAP Directors reported between 1-5 telecommunicators were exposed to COVID-19, and only 30% had none. Twelve percent of PSAPs had 1-5 telecommunicators test positive for COVID, while 87% reporting having none.
Thirty percent of the PSAP Directors reported between 1-5 administrative personnel were exposed to COVID-19, and 65% were not. Six percent of Directors reported that 1-5 members of their administrative personnel tested positive for COVID while 94% reported that none of their administrative staff tested positive.

Seventy-eight percent of the PSAPs reported they had between 1-4 employees quarantine; thirteen percent reported between 5-10 employees, seven percent between 11-20. One PSAP director said their agency had more than 50 telecommunicators on quarantine over the course of several weeks.
Approximately 10% of the reporting PSAPs indicated their 911 centers were impacted as a result of the civil unrest. On May 24th during the peak hours, Marion County 911 Center received approximately 32% of all emergency 911 calls for the entire state.

The graph below shows the call volume was consistently higher than Alabama and Michigan.
LESSONS LEARNED

- The Statewide 911 Board needed to move vendors to ACH payment plans to eliminate check writing as much as possible.
- US Mail was forwarded to the Executive Directors' home. Deliveries were delayed 10-15 days.
- Working remotely, the Statewide 911 Board maintained seamless operations meeting funding obligations of Hold Harmless.
- Most public safety agencies were unprepared to respond to a global pandemic and needed to update their COOP plans.
- Not all PSAPs had defined back up plans for call delivery if there is a need to vacate their dispatch centers.
- The pandemic revealed the need for preparedness, prevention, protection, and mitigation from the effects of COVID-19 and the value of keeping 911 Telecommunicators working.
- The pandemic also revealed the need for procurement of PPE, bulk cleaning, and disinfectant supplies in addition to the need for increased professional deep cleaning of dispatch centers.
- Telecommunicators needed to isolate and restrict other personnel from entering PSAPs.
- 911 calls required screening to determine COVID-19 symptoms for First Responders; Law, Fire, and EMS.

RECOMMENDATIONS

- Collaborate with PSAP directors to ensure back-up centers are in place.
- Share this report with PSAP directors to guide and assist with their ongoing COOP plans.
- Monitor revenues to ensure Hold Harmless monthly distributions are met.

SUCCESSES

- Throughout the revisions of PSAP COOP plans, there were no reports of any network failures or lost calls.
- Because of the relationship already established between the Board and the PSAPs there was a lot of collaboration supporting 911 services.
- Revenue funding remained consistent.
- The ESinet and NNI network buildout has remained on schedule.
PARTICIPATING PSAPS

The following PSAPs voluntarily participated in sharing information about their PSAP in the survey.

Adams County Sheriff's Office
Bartholomew Co 911 Emergency Operations Center
Batesville PD
Bluffton Dispatch Center
Boone County
Brown County 911 Emergency Dispatch Center
Cass County Central Dispatch
Clark County 911
Clay County
Clinton County Central Dispatch
Columbia City PD
Consolidated Communications Partnership
Dearborn County Communications
Decatur County Communications
Dekalb County Central Communications
Dubois County
Elkhart City 911 Communications
Fayette Co RDC
Floyd County Sheriff's Department
Fountain Warren Regional Dispatch Center
Franklin County Regional Dispatch
Gibson County Sheriff's Office
Grant County Central Dispatch
Greene Co Sheriff's Dept
Hancock County 911
Harrison County Central Dispatch
Hendricks County Communications Center
Howard County Sheriff's Office
Huntington County Public Safety Dispatch
Indiana State Police RDC-6
Indiana State Police RDC-5 Indianapolis
Indiana State Police Region 3
Indiana State Police Region 4
Indianapolis Fire Department Communications
Jasper County 911 Center
Jasper Police Department
Jefferson County Central Dispatch
Jennings County 911
Knox County Central Dispatch
Kosciusko County 911 Communications
Lafayette Police Department
LaGrange County Communications
Lawrence PSC
Lake Co EC
Madison County Central Dispatch
Marion County Police Dept
Marion County Sheriff's 911 Center
Marshall County Sheriff's Office
Monroe County Central Emergency Dispatch
Montgomery County Central Communications Center
Mooresville Police Department
Morgan County Public Safety Dispatch
Newton County Communications Center
Noble County Communications
Ohio County Communications
Orange County 911 Dispatch
Owen County Communications Center
Perry County 911 Communications
Pike County 911
Porter County Central
Posey County Dispatch
Pulaski County Communications Center
Purdue University
Putnam County 911
Randolph County E911 ECC
Ripley County Communications
Rush County Sheriff's Department
St Joseph County Public Safety Communications
Starke County Sheriff's Office
Steuben County Communications
Sullivan County 911
Switzerland County 911
Tipton County E911
Union County 911
Vigo County E911
Wabash Co Central Dispatch
Warrick County Sheriff's Office
Washington County 911
Wayne County Emergency Communications
West Lafayette Police
White County Communications/E911
Whitley County Sheriff's Department