911 Service in Pennsylvania
Impact of Supportive Legislation and Statewide Planning

pennsylvania
EMERGENCY MANAGEMENT AGENCY

in partnership with

CCAP
COUNTY COMMISSIONERS
Association of Pennsylvania

KEMA EM

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PENNSYLVANIA APCO
Leaders in Public Safety Communications

Preparing for the Future of Emergency Communications

PRIOR TO ACT 12 OF 2015:

In 2015, the environment surrounding Pennsylvania's 911 system was much different than it is today. Statewide 911 planning and coordination between PEMA and our county partners was minimal. Efforts were primarily county-based, with very little focus on regional or statewide initiatives or programs. Legislative requirements and PEMA's administrative processes were inefficient and provided minimal opportunities to invest in system improvements or future technologies.

> *"Pennsylvania's 911 [Program] is systematically broken and must be fixed by a re-write of the 911 legislation."*
>
> **Lawrence County Director of Public Safety**
> Senate Veterans Affairs and Emergency Preparedness Hearing
> **February 2015**

SINCE ACT 12 OF 2015:

[1]The passage of Act 12 of 2015 was a significant legislative accomplishment for Governor Wolf and the Pennsylvania General Assembly. The legislation provided a framework of requirements related to funding, governance, oversight, and planning that led to improvements in Pennsylvania's 911 Program, helped increase the capabilities of our 911 systems, and facilitated Pennsylvania's transition to a Next Generation 911 (NG911) system to address issues with the current 911 system's age and design.

PEMA, our county partners, the 911 Advisory Board, and 911 system stakeholders have built a collaborative relationship because of Act 12 and continue to implement many 911 system enhancements. Together, we are prepared to usher Pennsylvania into a new emergency communications era with the continued support of the General Assembly.

> *"We found PEMA to be a wise steward of the [statewide interconnectivity] funding, allocating the revenue to both the full intent of the statute and in the best interests of the state's 911 system. The counties used this money to strengthen their regional relationships, which was one of the primary goals of Act 12 overall[1]."*
>
> **Pennsylvania Legislative Budget and Finance Committee**
> *A Study Pursuant to Senate Resolution 96: 911 Communication Services*
> **September 2022**

ACT 12 – KEY ACCOMPLISHMENTS:

Under Act 12 of 2015, Pennsylvania 911 stakeholders have benefitted from many notable accomplishments at the state, regional, and county levels. Below are examples of some achievements because of this legislation:

- **Statewide 911 Plan.** Working with the 911 Advisory Board, PEMA adopted a Statewide 911 Plan that prepares us for NG911 and establishes priorities for Pennsylvania 911 systems. The Pennsylvania 911 community has completed many of the action steps outlined in the

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[1] http://lbfc.legis.state.pa.us/Resources/Documents/Reports/721.pdf

Plan – which has increased the capabilities of the 911 system and advanced Pennsylvania towards modernization of its 911 system statewide with the migration to NG911.

- **Statewide NG911 System.** We achieved a historic milestone in September 2022 when the first Pennsylvania PSAP was migrated to NG911 service. The transition to NG911 is necessary to upgrade decades-old technology, enhance the 911 system to meet the public's needs and expectations, and strengthen our commitment to making emergency services more accessible for people in at-risk communities, such as those who have speaking or hearing impairments.

  - The non-recurring & recurring costs of the NG911 contract will be **fully funded** with statewide interconnectivity funds

  - The recurring costs for the NG911 service are **fixed and level** through December 2030

  - **47 of 61 PSAPs have been migrated** to NG911 service as of October 2023

  - The remaining PSAPs will be migrated to NG911 service in an approach by region working from west to east with **estimated completion in mid-2024**

- **Statewide 911 Management Information System.** A priority of Pennsylvania 911 system stakeholders has been to implement a statewide MIS solution that would provide a comprehensive management and statistical reporting tool that displays current and historical information for 911 service activity. **One notable accomplishment is that a statewide MIS is being implemented as part of the NG911 upgrade.** The MIS will provide each PSAPs with near real-time information about the NG911 system and Emergency Service Internet Protocol Network (ESInet), access to service ticket information, and allow for standardized reporting among all PSAPs.

  - **47 of 61 PSAPs have access** to the MIS as of October 2023

  - The remaining PSAPs will be onboarded to the MIS during their migration to NG911 service

- **NG911 GIS Strategic Plan.** Geographic Information Systems (GIS) data plays a pivotal role in NG911 service. PEMA worked with the Pennsylvania GIS community (State Geospatial Coordinating Board, State agency partners, and County GIS Professionals Association) to develop a NG911 GIS Strategic Plan. The Pennsylvania GIS community has completed many of the action steps outlined in the Plan, which has enabled Pennsylvania to be **one of the few states to utilize geospatial routing** as part of our migration to NG911.

- **Statewide NG911 GIS Data Gap Analysis.** A GIS data gap analysis was performed on every county's GIS data to determine their level of compliance with NG911 standards. High quality, accurate, current, and authoritative GIS data layers (developed and maintained by our county partners) is essential for enabling NG911 geospatial call routing. Detailed

results were provided to each county that identified the specific areas that need to be addressed to support NG911 call delivery.

- **Statewide Aerial Imagery.** As part of the NG911 GIS Strategic Plan, PEMA solicited feedback from county GIS professionals to determine what assistance would be the most beneficial to support NG911. The most common response was aerial imagery since this data is cost prohibitive for many counties. PEMA executed a contract to obtain statewide aerial imagery of Pennsylvania. All counties have been provided new imagery to date.

- **Developed Common GIS Processes to Support NG911 Service.** Under Act 12, counties have made tremendous progress in developing robust GIS data layers that meet the rigorous standards set for supporting geospatial call routing in the NG911 system. PEMA and the Commonwealth's NG911 vendors have worked with counties to provide an array of supports and tools. A NG911 spatial interface has been deployed that allows counties to upload their NG911 GIS data layers for quality control (QC) review and aggregation into the NG911 system to support 911 call delivery. PEMA and the NG911 vendors continue to provide counties with technical support through monthly regional GIS checkpoint calls and one-on-one meetings with county GIS and 911 staff.

  - **47 counties** are currently using their NG911 GIS data to support 911 call delivery

  - All counties are making notable progress toward having all five required NG911 GIS data layers ready for NG911 service

  - On our website, **PEMA provides a variety of resources** to assist county GIS data stewards with meeting NG911 requirements, such as best practice guides, training videos, and data model templates

- **New Training and Quality Assurance Requirements.** PEMA has adopted new minimum training and quality assurance requirements for 911 personnel in Pennsylvania. Developing the new requirements was a collaborative effort with the 911 Advisory Board over a two-year period. The previous requirements were adopted in 2000. It is believed Pennsylvania's minimum requirements are **one of the most comprehensive sets of requirements in the country**, which will ensure consistency in call taking and dispatching statewide. PEMA has also developed and deployed a new software application to assist PEMA and the PSAPs with administering these new requirements.

- **New Technology, Operations, and Planning Requirements.** PEMA has adopted new minimum requirements for technology, operations, and planning. In the same manner as the new requirements for training and quality assurance, developing these requirements was a collaborative effort with the 911 Advisory Board over a three-year period. The previous requirements were adopted in 1991. Pennsylvania's minimum requirements will ensure consistency in technology and operational capabilities among PSAPs as we make the transition from Enhanced 911 service to NG911 service. PEMA's

software application and processes to administer these new requirements were featured in July 2023 by the National 911 Program from the US Department of Transportation.

- **New 911 Fee Collection and Distribution Procedures.** Act 12 of 2015 changed the 911 fee rate along with requirements for assessment, collection, and distribution. A significant effort was required between PEMA, counties, service providers, PA Treasury Department, and PA Office of the Budget to develop and implement the processes to meet Act 12's requirements. The new processes were developed and implemented over a 3-month timeframe and have successfully supported the administration of 911 fees since August 2015. Under Act 12, PEMA has 30 days after the end of a calendar quarter to make disbursements of 911 revenue to the counties. We **consistently average 24 days** to accomplish this task.

- **Developed and Implemented a Single Set of Eligibility Rules.** Prior to Act 12, wireline and wireless 911 surcharge revenue had different eligibility rules. PEMA worked closely with the 911 Advisory Board to develop a single set of eligibility rules within FCC rules to meet Pennsylvania's needs and circumstances.

- **Effective Statewide Interconnectivity Funding Management**. Allocating up to 15% of 911 fee collections for statewide interconnectivity of the 911 system was a forward-thinking provision in Act 12. PEMA, working with the Advisory Board and county partners, has successfully managed statewide interconnectivity funding to address 911 center needs and incentivize efficiencies while maintaining the ability to fully fund the largest technological upgrade in the history of Pennsylvania's 911 system: NG911. A new grant program was implemented to support PSAP consolidation, regionalization, and preparedness for NG911 service. **Statewide interconnectivity funding will also cover the costs associated with Pennsylvania's NG911 service contract.**

- **Overhauled 911 Program Reporting Requirements.** Prior to Act 12, counties had multiple reporting requirements for 911 funds, which resulted in minimal useful information for statewide planning, budgeting, or oversight. 911 Program reporting requirements have been consolidated and simplified, and reporting timeframes changed to reflect a calendar year timeframe to better align with most county fiscal years. Reporting requirements had been based on a State fiscal year, which was not conducive to effective planning, budgeting, and oversight for 911 Program purposes.

- **Adopted Standardized Accounting Procedures for 911 Funds.** Under Act 12, PEMA has established accounting and financial reporting requirements for 911 funds. All PSAPs must report 911 revenue and expenditures to PEMA using a standard chart of accounts and the modified accrual basis of accounting. Pennsylvania has some of the most complete and comprehensive financial data for 911 service among states in the country. The result is **standardized financial information for 911 statewide** that can be used to make informed decisions on planning, budgeting, and oversight.

INTERCONNECTIVITY SUCCESS

- **Support consolidation and regionalization:** Four (4) physical 911 center consolidation projects have been completed under Act 12 of 2015.

- **Address PSAP infrastructure:** More than half of our PSAPs needed to replace key systems by the end of 2018. This was expected to be a significant burden on the 911 fund. By working with county partners, we addressed those system needs and are staged to maintain current systems going forward.

- **Encourage technology sharing:** 51 PSAPs are participating in a shared call-handling system as part of a regional or multi-county project to consolidate technology and find cost and operational efficiencies. In addition, there are groups of counties that have started sharing other 911 technology, such as computer aided dispatch and radio systems.

- **Enhance GIS data in support of NG911:** PEMA has provided counties with financial support for NG911 GIS data development since 2018 to prepare for NG911.

- **Published PSAP Consolidation Funding Policies.** PEMA worked with the 911 Advisory Board to develop and implement PSAP consolidation funding policies. These policies are intended to provide counties with information needed to guide a successful consolidation project while clarifying expectations for 911 funds. **Four PSAP consolidation projects have been completed since 2016.**

- **Developed and Deployed New 911 System Plan Process.** PEMA has deployed a new 911 System Plan process to meet legislative requirements and to facilitate statewide planning and coordination to support Pennsylvania's NG911 system, any regional/shared efforts, and investments in system improvements and future technologies. The software application is part of a larger, innovative, and comprehensive PSAP Portal designed by PEMA to enhance communication and reporting between the PSAPs and PEMA.

- **Expanded Public Education and Outreach.** PEMA continues to develop educational materials in both digital and printed formats to ensure 911 stakeholders and the public understand the need for (and the impacts of) the transition to NG911. PEMA has also initiated a telecommunicator awareness campaign to support county efforts with recruitment and retention of 911 personnel and has also created a dedicated webpage on PEMA's website about careers in 911 and emergency communications.