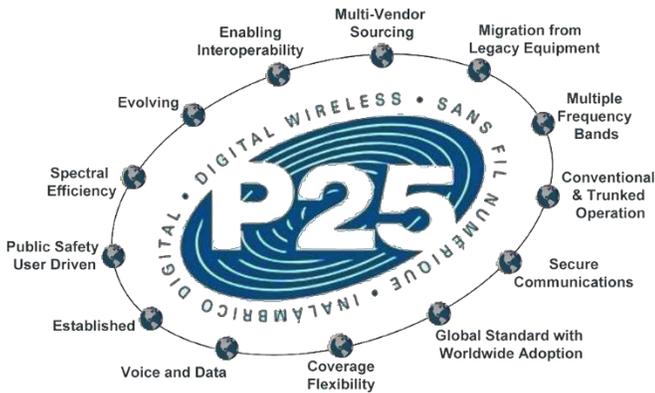


Pennsylvania Statewide Radio Network

Public Safety Radio for Pennsylvanians

PA-STARNet: Overview and Fact Sheet



Infrastructure: P25: 85 VHF sites, 30 800-MHz sites

Coverage: Mobile radio coverage is greater than 95% in all 45 counties installed as of December 2019.

Users: 22 commonwealth agencies; both houses of the legislature; federal, county, and municipal agencies; utility and public transit companies.

Interoperability: P25 provides expanded options to connect to all county 9-1-1 centers, and local agencies with P25 systems are finally able to easily interoperate or simply join.

Pilot I (2017)



Pilot II (2017-2018)



Pennsylvania's challenging terrain was the reason the early pilot programs were deployed in the northwest. Testing proved that coverage improved and infrastructure could be reduced from what the legacy proprietary system provided. During the pilots and statewide rollout, counties have taken a keen interest in partnering with this industry-standard radio system.

Statewide Rollout

January – June 2018



July 2018 – June 2019



July 2019 – June 2020



June 2021



The P25 rollout is on time and on budget, is demonstrating increased interoperability, and is generating interest by counties wanting to join. Also, agencies, such as DOT and PGC are benefiting from participating with PSP in the rollout.

Sharing: The public-safety-grade microwave data network (the STARNet backbone) continues to be connected to more county networks, for both data and land/mobile radio, thereby enabling more critical interoperability in the Commonwealth. In 2019, connections were made with Butler, Susquehanna, Pike, Chester, Bucks, McKean, Tioga, and Adams counties, bringing the total to 28 counties that use STARNet microwave for network connectivity.

Capabilities: Voice and data traffic flow in a robust Internet Protocol (IP) network throughout the state. A network backbone links sites through a statewide, high-availability, microwave network using MPLS, with secure network access both at a primary gateway and at a remotely-located alternative gateway. Interoperability technology includes external radio system gateways, internetworking, and frequency band overlays.

Background: In 2016 the P25 Land Mobile Radio (LMR) contract was awarded to Motorola Solutions to upgrade from a proprietary technology to P25 public safety open standards. The cost to upgrade the statewide land mobile radio infrastructure is \$44.5 million. The upgrade project has never waived from being on time and on budget.

Responsibility: The Statewide Radio Network Division, Bureau of Communications and Information Services, Pennsylvania State Police, builds, operates, and maintains PA-STARNet, as per Management Directive 245.15.

Investment: The legacy OpenSky radio system will be phased out in 2021. But the investments in high-profile radio towers and the statewide microwave network will continue to be leveraged in the P25 system.