

OUTCOME

110,000

Bismarck and Mandan citizens kept safe by integrated emergency communications.

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CASE STUDY: BISMARCK/MANDAN METROPOLITAN STATISTICAL AREA, NORTH DAKOTA, USA

THE CUSTOMER

The Bismarck/Mandan Metropolitan Statistical Area, ND, comprises the City of Bismarck, City of Mandan, Burleigh County and Morton County, with a total population 110,000. The population is steadily growing due to a booming oil industry and a strong robust local economy.

The City of Bismarck is the state capitol; the City of Mandan which lies across the Missouri River from Bismarck is the second largest city in the metropolitan area.

SITUATION

During emergencies, the region encountered constant challenges with emergency responders from different agencies and different jurisdictions. Agencies used a variety of VHF and UHF radio systems and equipment, and were unable to communicate and coordinate emergency responses effectively.

The MSA identified the need for an interoperable, multi-agency public safety radio communications project and was awarded the Federal COPS Interoperable Communications Technology grant.

They sought to:

- ▶ Replace outdated radio equipment
- ▶ Expand coverage and capabilities
- ▶ Implement new VHF radio systems using primarily P25 digital technology

“We now have the necessary infrastructure in place to operate a resilient and reliable network, which allows for secure, interoperable communications between emergency responders.”

Mike Dannenfelzer, Communications Manager, Bismarck / Burleigh Combined Communications Center

SITUATION CONTINUED

- ▶ Retain analog capability
- ▶ Migrate all agencies to VHF narrowband channels
- ▶ Ensure their existing PSAP console equipment functioned with the new radio infrastructure
- ▶ Improve communications interoperability for all agencies.

RESPONSE

Tait worked closely with the public safety agencies to develop a solution to meet their specific requirements, paying particular attention to design to reduce dead spots and increase reliability.

A 10-site, 11-channel TaitNet P25 VHF conventional simulcast solution was selected, to support the Bismarck Police and Fire Departments, Mandan Police and Fire Departments, Burleigh County Sheriff and Rural Fire Departments and Morton County Sheriff's Department.

The Tait P25 console gateway interfaces with their two existing console systems. The gateway means the agencies can re-utilize their existing console equipment and keep project costs down.

OUTCOME

Genuine interoperability has been achieved, according to Mike Dannenfelzer, Communications Manager, Bismarck / Burleigh Combined Communications Center. Mike says: "We now have the necessary infrastructure in place to operate a resilient and reliable network, which allows for secure, interoperable communications between emergency responders."

The Tait P25 infrastructure means the region can re-use their non-Tait subscriber units — another example of true interoperability that proves the APCO P25 technology open-standards promise. The new system comprises VHF 12.5 kHz narrowband channels so that the region is now compliant and well-prepared for the FCC narrowband mandate deadline in 2013.

Dan Brooks, Project Manager, Tait Communications, comments on the multi-agency partnership: "It is great to see different agencies working together. The Bismarck area will get so much more out of their new system. Interoperability and better coverage will result in well-coordinated emergency response operations and reliable communications for first responders."

MORE INFORMATION

For news, product specifications, comprehensive technical information and contact details of your nearest Tait service facility, please visit www.taitradio.com

Tait is a global leader in designing, delivering and managing innovative communication solutions that help utilities and public safety organizations to keep the lights on and communities safe.

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CUSTOMER PROFILE

The Bismarck/Mandan Metropolitan Statistical Area, North Dakota, comprises the City of Bismarck, City of Mandan, Burleigh County and Morton County, with a total population of 110,000.

APPLICATIONS

- ▶ Tait P25 Conventional Simulcast Network in VHF
- ▶ 10-sites, 11 channels
- ▶ Tait P25 Console Gateway

BUSINESS BENEFITS

- ▶ Interoperable communications for the seven public safety agencies in the area
- ▶ Tait P25 infrastructure means first responders can re-use their existing subscriber units
- ▶ Compliant to the 2013 FCC Narrowband mandate with 12.5 kHz channels
- ▶ The region can re-utilize their two existing console systems and keep project costs down the Tait P25 Console gateway

