



Public Service

Executive Summary

Report Highlights

- Industry departments
- PMR Advantages
- Portable, Mobile and Repeater Options

Industry Notes

Public Service comprises numerous agencies and activities tasked with providing essential municipal services and infrastructure. In a large way, its tasks are done via mobility. Wireless communications therefore proves to be an indispensable tool used by public service and public works in day-to-day operations.

- Public transit
- Correctional facilities
- Parks and recreation
- Sewage treatment
- Public utilities
- Animal control
- Water treatment
- Waste and recycling

User Requirements

Public service users require efficiency and safety, durability and ease of use, interoperability and reliability. Users in this industry favor PMR (professional mobile radio, or “two-way radio”) over commercial cellular and PCS by distinct advantages: Military standard (MIL-STD) durability, network reliability, advanced talk groups, overall security and increased control over communications.

Among PMR’s greatest benefits are project efficiency and worker safety. The basic function and ease of use of two-way radio promotes such benefits, making the wordless communications medium a standard used by most industries. Open standards such as Project P25 (P25) ensure that public service radio equipment is interoperable with radio equipment used by fire, police and public safety.

Two-way radio provides an advantage over other types of communication by giving a form of reliable communications despite power, telephone and cellular or PCS outages. “During tornadoes, floods, hurricanes - we have people in the field who require some form of communications. Two-way radios provide these necessary communications when other networks are down,” Ed Thomas, Engineer - National Rural Water Association.

PMR is privately owned and cost-effective. There are no monthly service and usage fees commonly associated with cellular and PCS. Upfront investment is radically returned.





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The Icom Solution

Icom meets industry requirements while building for future demands in radio and efficient spectrum technologies. Icom sets the bar in the PMR industry for delivering more affordable radios with MIL-STD durability, ease of use, interoperability and world-class analog and digital features. Icom radios match today's mobile worker extremely well due to their smaller, lighter and more rugged design, making them ideal for highly mobile personnel. Please discuss your wireless communications options and radio information below with your authorized Icom representative.

Portables

A top-of-the-line, waterproof model, the **F70/F80 Series** is P25-compliant, allowing interoperable communications with nearby public safety agencies. Rugged yet lightweight, the F70 Series offers a wide frequency range and 256 memory channels with 32 memory zones. Washington State Department of Fish and Wildlife purchased 160 F70DT portable radios for its field enforcement officers, which communicate daily with local and county law enforcement agencies across the state. Likewise, Galt (Calif.) Public Works Department upgraded to the F80 portable in order to share information and coordinate efforts with the local police department.

A great choice for utilities, parks departments and public works departments, The **F50/60 Series** portable is compact and easy to use, offering IPX7 waterproof construction that can withstand rain, snow and sudden changes in temperature. The radio features a wide frequency range and 128-channel capacity with eight memory banks. With built-in CTCSS, DTCS, 2-tone and 5-tone capability, users can set up multiple talk groups as well as selective calls to individuals.

Long shifts and harsh environmental conditions are no match for the **F3021/F4021 Series**. Housed within an aluminum die-cast chassis, the radio's 2000mAh Li-ion battery pack provides 15.5 hours of operating time. Ideal for utilities and public works personnel, the portable meets IP54 requirements for dust protection and splash resistance, yet offers a lightweight compact design for all-day use.

Utilities and public works departments that require a large number of channels, great audio, and long battery life will appreciate the rugged and reliable **F3161/F4161 Series** portable. An occasional drop down the manhole won't bother this radio, which features an aluminum die-cast chassis and polycarbonate casing and meets IP54/55 requirements for dust-protection, splash and water



F3161/F4161 Series
Feature-rich portable to complement
F5061/F6061 Series mobile.

jet resistance. The F3061 Series offers analog, LTR® conventional, and 6.25 kHz digital narrowmode operation for increased spectrum efficiency.

Mobile Radios

A great choice for public service organizations with homeland security grant money, the **F1721/F2721 Series** mobile offers future migration from an analog radio system to a conventional P25 digital system. Galt (Calif.) Public Works chose the F1721 to achieve interoperability with the local police department and parks department. It was also impressed by the radio's rugged construction and great audio quality.

A popular choice for school transportation needs, the **F121/F221 Series** mobile radio is cost-effective and easy to use. It offers great audio quality and an alphanumeric display for quick channel ID. The F121S mobile is a good choice for many DOT users with its eight memory channels and LED display.



F5061/F6061 Series
Features DB25 connector, providing pin-out for connecting various external devices.

Just try and outgrow this IDAS™ mobile radio. With conventional LTR®, and 6.25 kHz digital narrowmode operation, the **F5061D/F6061D Series** mobile makes the most of available spectrum. It covers a wide frequency range in one version and offers 512 memory channels with 128 zones for a variety of flexible channel groupings.

Repeater

The **FR5000 Series** repeater is an ideal solution for the utilities industry: it is reliable and has wide-ranging functionality. Features include a built-in power supply, 5-Tone relay function, 32 channels, and DTMF remote capability.

The FR5000 repeater is part of IDAS™, the Icom Digital Advanced System, which includes the F3161D/F4161D Series portable and the F5121D/F6121D Series mobile. For larger public service operations, the FR5000 Series is compatible with MultiTrunk.

FR5000 Repeater
Compatible with IDAS Series portables and mobiles.

