

# Glossary of Technical Terms from the PSEC Staff Report

**VHF (Very High Frequency):** A range of radio frequencies from 30 MHz to 300 MHz. In public safety, VHF systems are commonly used for legacy radio communications, especially in fire and emergency services. The Corona Fire Department's current radio system operates in this band, which is being replaced due to obsolescence and interoperability limitations.

**800 MHz Public Safety Enterprise Communication (PSEC) System:** A countywide digital trunked radio system operating in the 800 MHz frequency band, managed by the Riverside County Sheriff's Department. PSEC provides enhanced interoperability, coverage, and reliability for public safety agencies across Riverside County.

**Interoperability:** The ability of different public safety agencies and their communication systems to work together seamlessly, especially during joint operations and emergencies. The transition to PSEC is intended to improve interoperability between the Corona Fire Department and other agencies.

**Motorola GTR 8000 VHF Repeater:** A specific model of radio repeater manufactured by Motorola Solutions. Repeaters receive and retransmit radio signals to extend coverage. The project includes installing these repeaters at PSEC sites to maintain VHF connectivity.

**Control Channel Gateway (CCGW):** A device or system that enables integration between different radio networks or frequency bands. In this context, CCGWs are used to connect the new VHF repeaters to the PSEC system, allowing for cross-band communication and interoperability.

**FCC License:** A license issued by the Federal Communications Commission (FCC) that authorizes the use of specific radio frequencies for public safety communications. Modifications to the City of Corona's FCC licenses are required to accommodate new equipment and frequencies.

**Coverage Maps:** Visual representations or simulations used to predict and verify the geographic area where radio communications will be reliable. PSEC will generate these maps to ensure the new system meets operational standards.

**Capital Improvement Project (CIP) Fund:** A designated fund used by the City to finance major infrastructure projects, such as the replacement of the VHF radio system.

**Rack & Tower Space:** Physical space at radio sites (towers and equipment racks) leased or used to house communication equipment necessary for the operation of the radio system.

**Legacy Equipment:** Older technology or equipment that is being phased out or replaced. In this case, the legacy VHF radio system and related hardware.

**Handheld/Mobile Radio Equipment:** Portable (handheld) and vehicle-mounted (mobile) radios used by fire department personnel to communicate over the PSEC system.

**System Redundancy:** The inclusion of backup components or systems to ensure continued operation in case of equipment failure. The report notes vulnerabilities in redundancy with the current VHF system.