



## Emergency Voice Communications for Public Parking Garages

The Dithridge Street Parking Garage is an eight-floor public garage in the heart of Oakland, Pittsburgh's university and technology district. The garage, which is owned and operated by Carnegie Mellon, is open to the public twenty-four hours a day, seven days a week. Entries and exits are managed by automated pay stations and access gates.

Parking garages tend to be high-crime areas, so most have some type of emergency communications system. At Dithridge Garage, emergency communications consisted of panic buttons that triggered a localized alarm and strobe. Parking garages usually have a sparse occupancy, thus the chance of this local alarm notifying anyone was very slim.

Safety and police personnel responsible for the thousands of people who use Dithridge Garage annually knew the old buttons weren't enough. They wanted to ensure that people could speak directly with University Police, in seconds—and they wanted the ability to send emergency alerts and instructions to people in the garage.

### The Solution: The Metis Secure Emergency Communications System

To protect Dithridge Garage and the people who use it, the old panic buttons were replaced with a network of Metis Secure Emergency Help Stations. Now, anyone who presses a Help Station button can speak with University Police via a hands-free connection. Police monitor the system remotely with easy-to-use software.

### Redundant Wireless Mesh Network

For the back-up wireless mesh network, Metis Secure leveraged an adjacent building's existing Building Supervisory Unit (BSU), which is a Metis Secure gateway device that connects the wireless mesh network to the hardwire Local Area Network. Each Help Station wirelessly connects to the BSU and acts as a network repeater, forming an independent wireless mesh network that continues to work if an emergency incident takes down phone and internet networks.

### The Process: Flexible, Cost-Effective Installation

Metis Secure Help Stations were mounted on walls throughout the Dithridge Garage. In addition, a pole-mounted Help Station was installed outside the garage entrance. Each Help Station has a built-in, automatic switchover to a long-life battery, so the system still works when power goes out.

Metis Secure Help Stations operate on either Ethernet or wi-fi networks, with a back-up wireless mesh network that works when phone and internet fail. Because the Dithridge Garage is not equipped with wi-fi, the Metis Secure Emergency Communications System was installed using Ethernet, plus redundant wireless mesh.

### IP Communication with Minimal Wire Runs

Like many large parking garages, the Dithridge Garage has sparse, isolated data closets with a limited number of network ports in each. To help minimize wire runs, Metis Secure provided a network switch in strategically located Help Stations. This made it possible for the installer to daisy-chain the Help Stations together vertically from floor to floor, instead of running wires from each Help Station back to a data closet—some of which are more than 300 feet from a Help Station location. This saved the installer time and effort, and kept installation costs to a minimum.

#### About Desktop Alert