

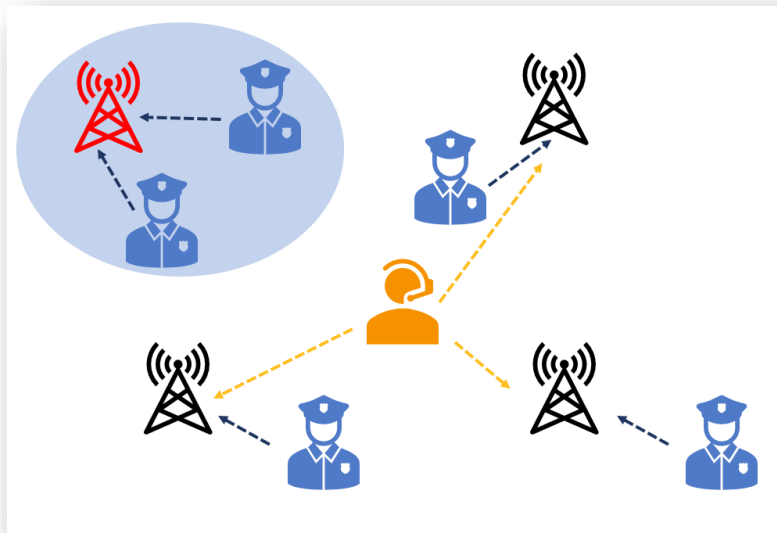
SITE TRUNKING INFORMATION

What is SITE TRUNKING?

SITE TRUNKING is a safeguard operating mode common to trunked, multi-site radio system such as the IPSC Statewide 800 MHz system. Users of conventional public safety radio systems will be unfamiliar with this term and may find the concept difficult to understand. To begin with, it is important to understand that **SITE TRUNKING DOES NOT MEAN THE SYSTEM IS DOWN!** It is critical for users to train to recognize and appropriately respond to site trunking events.

All sites on the statewide system are connected by telephone (telco) lines—we currently have a mixture of fiber and T1 lines. When sites are operating normally via telco lines, they are operating in a condition known as Wide Area configuration. Wide Area allows users to communicate with users that are both affiliated with the same site as the user and those that are affiliated with other tower sites within the tower ecosystem. Hence, users can communicate across cities, counties and even across the State.

However, when telco connectivity is broken, the particular site is no longer able to communicate with the system and the other sites on the system. This condition is known as **Site Trunking**. The site is still working, operational and able to pass radio traffic, but not in "wide area" mode.



In this image, the tower at the top left is in site trunking. It has lost its telco connection to the tower ecosystem. Despite all of the police officers and dispatcher being on the same talkgroup, the two police officers near the red tower can only hear each other. This is why having a site trunking plan is critical to ensure that all users are heard when site trunking occurs.

What to do when in SITE TRUNKING?

Users/agencies do not need to report the Site Trunking problem to either IPSC or Motorola. The system is monitored 24/7 by either IPSC or Motorola Network Management personnel and any interruption in service is immediately recognized and the proper technicians are dispatched.

The IPSC Connection Center (ICC) is available for questions Mon-Fri from 7 AM to 10 PM (EST) at icc@ipsc.in.gov and 24/7 by phone at 317-234-1540.

IPSC does not control the telco lines which are required to connect to the radio system core. We do monitor the repair progress and escalate problems with the telco vendors when repairs exceed normally expected timelines.

If you have questions during site trunking please don't hesitate to call our 24/7 number!

SITE TRUNKING PLANS

From the Dispatcher perspective:

- ♦ If you are utilizing a Wire Line console, you should have at least one (1) portable or mobile radio as a backup to your console and as an indicator of Site Trunking conditions at a site in your immediate area. Even with a stand-alone radio in the dispatch center however, you still may not be aware of a site being in Site Trunking if that site is some distance from your location.
- ♦ If you are utilizing an RF console configuration, you should have at least two (2) radios on separate external antennas, pointed toward different sites. Each of these radios should be configured and programmed to only allow one site access. One of the sites selected should be the closest site. The other site can be one of multiple sites available at farther distance. Depending on the dispatch location in relation to tower sites it may be harder for some PSAPs to reach a second site. IPSC can run reports to show which sites the majority of a county's radio system users affiliate to when in wide area trunking. These reports may help make the decision of what towers should be a priority when programming the radios to be utilized for site trunking.

The dispatcher should now be equipped with the ability to talk to both the users who are affiliated with Wide Area sites and the few who may remain affiliated with the local site when it is in Site Trunking. This configuration may need to be duplicated depending on the number of console locations, the number of radios linked to the console(s) and the number of talkgroups that need to be monitored in your dispatch center.

From this configuration (dependent upon the console resources available), it may be possible for a dispatcher(s) to create a temporary console patch between both the Wide Area and the Site Trunking sides of the conversations. Available resources may also allow the dispatcher to SimulSelect both radios to dispatch to both scenarios at once.

From the field user perspective:

Your radio will show an indicator of "site trunking", if you are affiliated to a site that is not in Wide area trunking. Field users should have a basic knowledge of the Site Trunking plan and be prepared to operate within the plan—possibly reducing talkgroups and with the understanding that dispatch may not be able to hear all first responders as they would under normal conditions. Responders may have to help relay information back to the dispatch center until the site trunking plan is enacted.

Things to consider when making a plan:

- ♦ Which IPSC tower site provides the best overall coverage within the designated agency's service area
- ♦ Which IPSC site(s) can the dispatch center reach with their configuration—taking into consideration with dispatch being a fixed location they may be limited in their ability to reach multiple tower sites.
- ♦ Policies can be developed within the agency to move users to designated talkgroup(s) for the duration of the Site Trunking event—to accommodate what the dispatch center is capable of listening to.
- ♦ All first responders should be aware of site trunking and what the plan is when a site trunking event is occurring.

If agencies need assistance with making a site trunking plan they should contact IPSC at 317-234-1540 or icc@ipsc.in.gov and someone from the training staff will meet with them. The training staff also offers Radio System Training to all First Responder Agencies.