

Summit County 911 Builds a Radio-Over-IP Contingency Plan

How a mountain-county PSAP turned a two-channel pilot into a nine-channel backup system with Tango Tango.

Agency: Summit County 911 Center **Location:** Summit County, Colorado **Environment:** Mountainous, rural **Channels:** 9

THE PROBLEM

Summit County's agencies operate in close coordination across difficult mountain terrain. The PSAP connects to the state radio system and runs a VHF system as a backup, but 911 Director Michael Berry and Radio Systems Engineer John Mark Readle were still focused on closing every remaining single point of failure across the network.

"We're always looking for those single points of failure and ways of having some redundancy, contingency. So we started looking at radio over IP as a way to shore up some of our concerns and risks."

MICHAEL BERRY — 911 DIRECTOR, SUMMIT COUNTY

THE PILOT

After evaluating several radio-over-IP options, the team chose Tango Tango and started small: two channels, a quick demo install, and a year of real operations in the mountains to prove it out. The first donor radios took about half an hour to wire up. The pilot earned its keep almost immediately — chiefs could monitor main dispatch traffic when off-duty, and personnel who didn't need a \$3,000 portable could still be on the air.

THE EXPANSION

With funding available and a year of clean operation behind them, Summit County expanded the program to nine channels running off a rack of base stations and donor radios. Tango Tango is now wired in as a full contingency layer: when any primary or secondary system goes down, dispatchers and field staff stay on the air through the app. The web client extends that contingency to the dispatch floor itself — operators can run their channels from a laptop in transit or at a backup site, without needing a full console to be present.

"The implementation is pretty easy, and just about anyone could do it... For the cost of two talk groups for a year, it's roughly the cost of what it would be for one radio."

JOHN MARK READLE — RADIO SYSTEMS ENGINEER, SUMMIT COUNTY 911

THE ECONOMICS

P25 and VHF portables run \$2,000 to \$11,000 each. Tango Tango's talk-group-based pricing means a year of two talk groups is roughly the cost of a single hardened radio — so any user who doesn't need a mission-critical portable can move to the app, and the channels effectively pay for themselves.