#### Good afternoon,

As you know the Washoe County Regional Communication System has been experiencing significant interference issues over the last several months. Regional Communication Staff have been working during this time to attempt to identify the root cause of the interference. The information below summarizes our efforts, describes what we have found, and highlights the results of our work. Next week, we will convene a meeting of 800 MHz Joint Operating Committee to discuss the interference, provide more detail, and discuss ongoing and planned mitigation efforts.

#### Characterization of the Interference

- Generally, the Radio Interference issues have been identified as external to the 800MHz Radio System, and not caused by the 800MHz Radio System.
- There are two primary types of interference being experienced on the system.
  - 1. General and constant "noise" or static in certain parts of the service area
    - This interference degrades the quality of communications. This noise can be heard in 10-20% of all communications.
  - 2. Intermittent bursts of interference in certain parts of the service area
    - This interference impacts a broad spectrum of Radio Frequency users including AM & FM Radio bands, 500MHz, 700MHz, 800MHz, and 900MHz Equipment.
    - This interference is not always present but when it occurs, it completely blocks communication.
    - This primarily occurs in the area of downtown Reno, north to Parr Blvd.

### Efforts to mitigate and identify the source(s) of interference

- Created Interference team with Dispatch Centers
  - 1. Created Interference Map
  - 2. We are recording and mapping daily Radio Static Logs
- Consulted with Federal Communications Commission Field Staff
  - 1. FCC field staff visited the Truckee Meadows and utilized FCC equipment to find various sources of interference.
- Hired local Radio Frequency Engineer to conduct RF interference investigation.
  - 1. Local RF Engineer Visited over 30 different in-building amplifiers and other locations to check for interference.
- Hired national RF Engineering Firm to conduct specialized RF interference investigation.

## **Results of mitigation efforts**

- 1. Significant Improvement to the 'noise' interference
- 2. Ten (10) different in-building amplifiers were identified to be causing noise interference.
- 3. All identified amplifiers were repaired or disabled.
  - Remaining amplifiers require re-certification before they are re-enabled.

Washoe County Staff and the Radio Frequency Community are continuing to investigate and take action to mitigate and identify sources of interference in our region. As noted above, we will convene a meeting of the 800 MHz Joint Operating Committee next week to discuss our efforts in detail to get feedback and/or direction from the committee to engage in additional mitigation efforts.

Please feel free to contact me regarding this issue. Thank you,



# **Quinn Korbulic**

IT Manager | Regional Services | Technology Services <a href="mailto:qkorbulic@washoecounty.gov">qkorbulic@washoecounty.gov</a> | Office: 775.328.2348

1001 E. Ninth St., Reno, NV 89512

