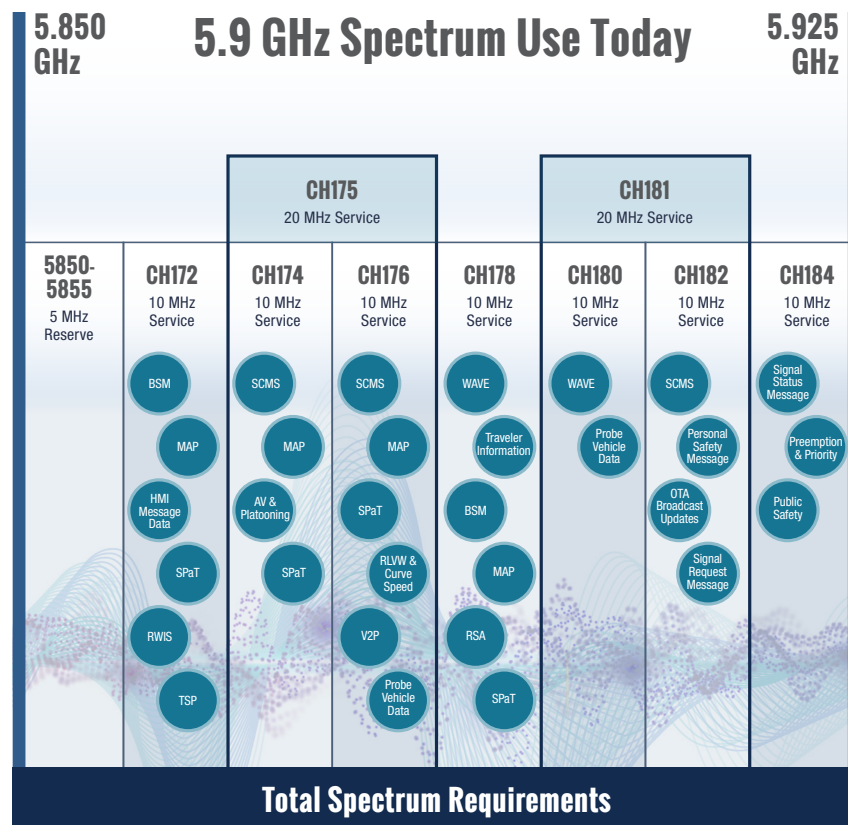


# THE 5.9 GHZ SAFETY BAND

## Current Channel Use

The Safety Band consists of seven adjacent 10 MHz channels starting at 5855 MHz (even channel numbers 172 to 184) with special designations for channels 172 and 184, limiting their use to specific, safety-oriented communications. Channel 172 in particular is critically important. It was designated “exclusively for V2V [vehicle-to-vehicle] safety communications for accident avoidance and mitigation, and safety of life and property applications.”

The automotive industry, states, and many municipalities are already deploying vehicle-to-everything (V2X) technology and actively utilizing all seven channels of the 5.9 GHz band. There are more than 80 active deployments of V2X communications, with thousands of vehicles already on the road.



**Channel 172:** Basic Safety Messaging (BSM), Road Weather Information System (RWIS), Human Machine Interface (HMI) Message Data, MAP, Signal Phase and Timing (SPaT), Transit Signal Priority (TSP)

**Channel 174:** Security Credential Management System (SCMS), MAP, Automated Vehicle and Platooning, SPaT

**Channel 176:** SCMS, MAP, SPaT, Vehicle to Pedestrian (V2P), Red Light Violation Warning (RLVW), Curve Speed Warning, Probe Vehicle Data

**Channel 178:** BSM, WAVE, Traveler information, MAP, Roadside Alert (RSA), SPaT

**Channel 180:** WAVE, Probe Vehicle Data, Signal Request Message (SRM)

**Channel 182:** SCMS, Over-the-Air (OTA) File Broadcast Updates, SRM, Personal Safety Message (PSM)

**Channel 184:** Public Safety, Signal Status Message/Signal Status Message, Preemption and Priority