

BROADBAND FIRST

A Strategic Investment Framework for Public Safety Communications

One-page briefing for 911 directors, police chiefs, and fire chiefs · MACC911 field test, August 2026

In August 2026, MACC911 in Grant County, Washington, hosted an interoperability field test with more than 60 responders across four radio systems and three states. The systems linked over blended broadband. Vehicles with gateways worked as communications nodes. The resulting white paper argues that public safety communications should be organized around resilient broadband connectivity and that this produces greater capability at lower cost. You can keep your radios. Put them on the internet. Then plan the next five years with a Broadband First strategic framework.

<u>The opportunity</u>	<u>The roadblock</u>	<u>The shift</u>
Broadband can carry the voice that LMR already handles, plus CAD, location, live video, maps, and what comes next. Connectivity is the new electricity.	Agencies write specifications around the radio system they already own. They get a newer version of it, then buy the capabilities they wanted separately, on top.	The radio system is not the network. It is one part of it. Keep LMR funded for tactical voice. Put new capital in the option that best meets the requirement.

Cost comparison — same spreadsheet, same dollar

Traditional path	Broadband path
New LMR tower: \$2–3 million. Full LMR system replacement: \$25–50 million. One vehicle, traditional radio package: \$20,000–\$25,000.	One vehicle, resilient broadband package: about \$10,000. \$1 million equips roughly 100 vehicles with voice, CAD, video, location, messaging, and remote access.

In many settings that fleet is a substitute for a tower, at a fraction of the cost, with data a tower cannot carry. Sometimes the tower still wins. It should have to prove it.

What the Field Test Actually Did

Four systems. Three states. One talkgroup. Two unconnected agencies joined in 10–15 minutes. No radio reprogramming. A live transmission was held while Verizon, FirstNet, AT&T, T-Mobile, and Starlink were pulled one at a time. A jail with no cellular and no trunked LMR stayed connected through the vehicle outside. Push-to-talk held at 4.7 miles from that vehicle, back to dispatch and all four systems.

Do this now. Then plan five years of Broadband First.

This month — under \$5,000	If you go further	The rule
One radio you already own, a low-cost gateway, a commercial PTT app. One talkgroup. An opinion in a month. No bond measure. No procurement cycle.	A phased five-year plan for a mid-sized regional agency: about \$1.3–2 million. Each phase earns the next. Keep LMR in service the whole time.	Keep what works. Build broadband alongside it. Move a capability when there is an operational reason. Measure. Do not spend the next dollar on a guess.

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Whitepaper



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