

Private Wireless vs. Wi-Fi: Replacement or Complement?



Private wireless is a dedicated, on-premises network leveraging 4G/5G technology to deliver secure, high-performance, and reliable connectivity for mission-critical applications.

The Future Outlook of Private Wireless

41%

expected private 5G growth rate through 2030.¹

40K+

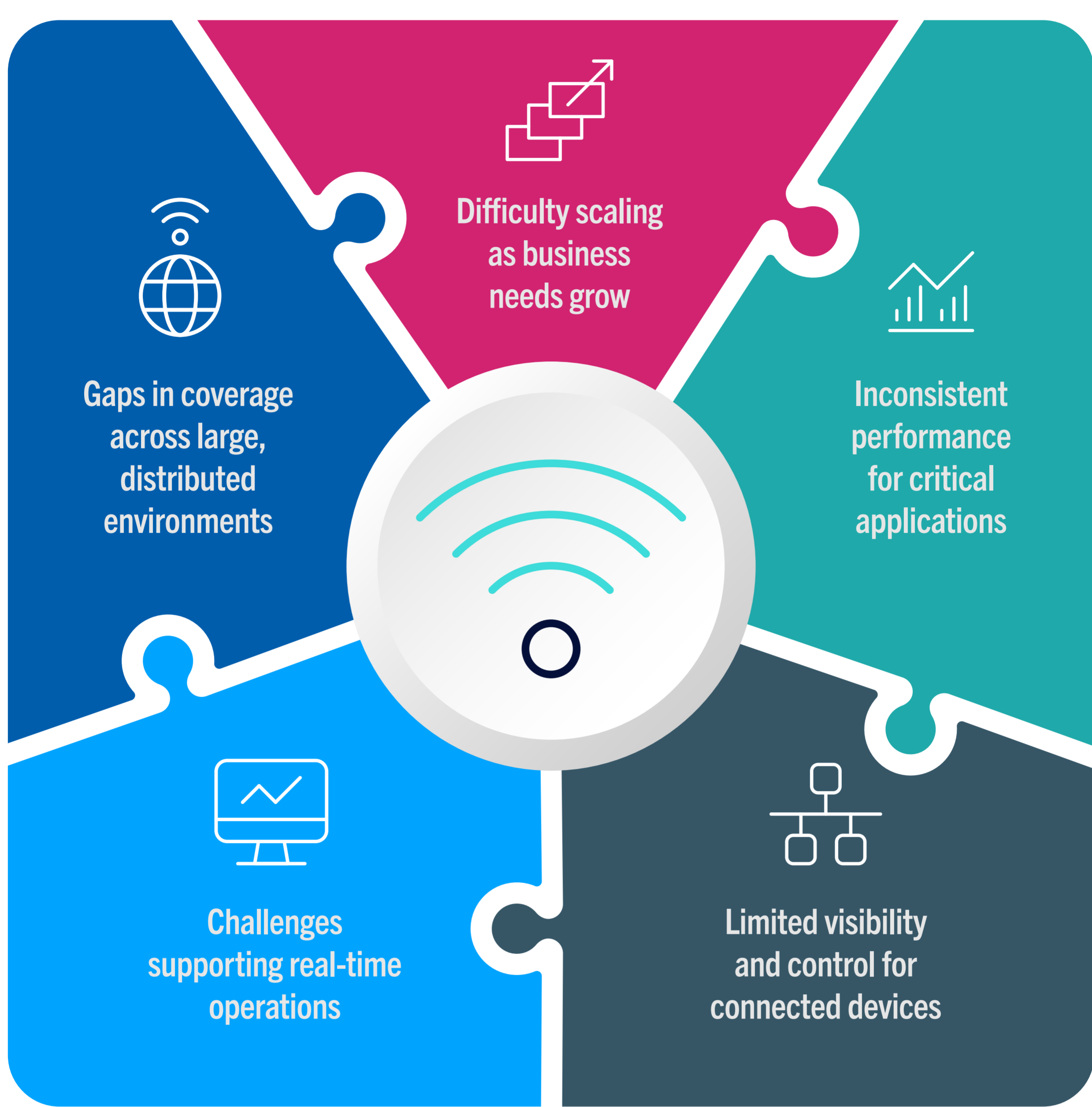
private networks deployed globally by 2030.²

up to 25%

of mobile network infrastructure spend by 2030.³

1. The Business Research Company, 2026 2. RCR Wireless News, 2025 3. Research and Markets, 2026

Wi-Fi Alone Has Missing Pieces



Private Wireless Fills the Gaps

Private Wireless	Feature	Wi-Fi
<ul style="list-style-type: none"> Wide-area for seamless coverage Less Access Points (APs) required 	Coverage	<ul style="list-style-type: none"> Limited range More Access Points (APs) required
<ul style="list-style-type: none"> Strong encryption 	Security	<ul style="list-style-type: none"> Password or certificate-based access
<ul style="list-style-type: none"> Guaranteed performance Prioritized traffic 	Performance & QoS	<ul style="list-style-type: none"> Network's best effort Limited QoS

How Private Wireless & Wi-Fi Complement Each Other Across Industries



Manufacturing

- 5G: AGVs, Industrial Robots, Predictive Maintenance
- Wi-Fi: Data Offloading, Firmware Updates, Corporate Traffic



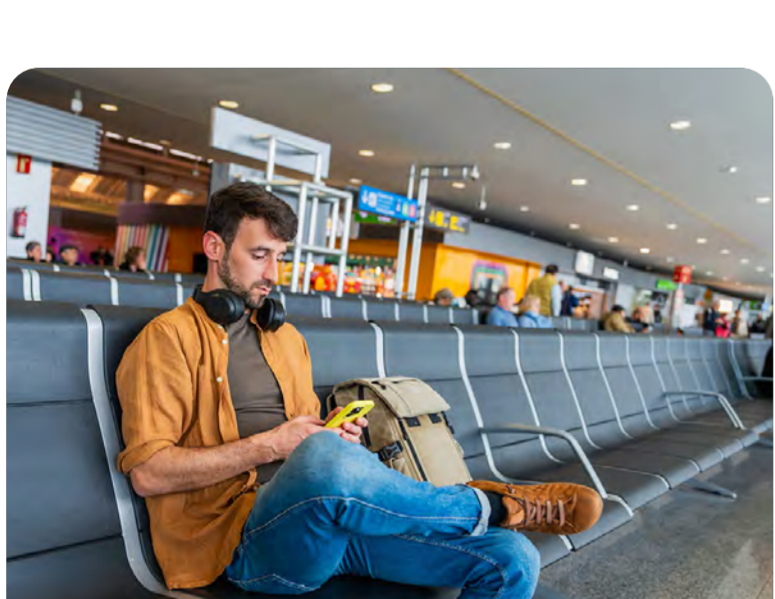
Warehouse & Logistics

- 5G: AMRs, AGVs, Forklifts
- Wi-Fi: Timecard Punch Clocks, Shipping Labels, Vendor Kiosks



Oil & Gas

- 5G: Worker Safety, Remote Inspections, IoT Sensors
- Wi-Fi: Vendor Access, Office Connectivity, Contractor Wi-Fi



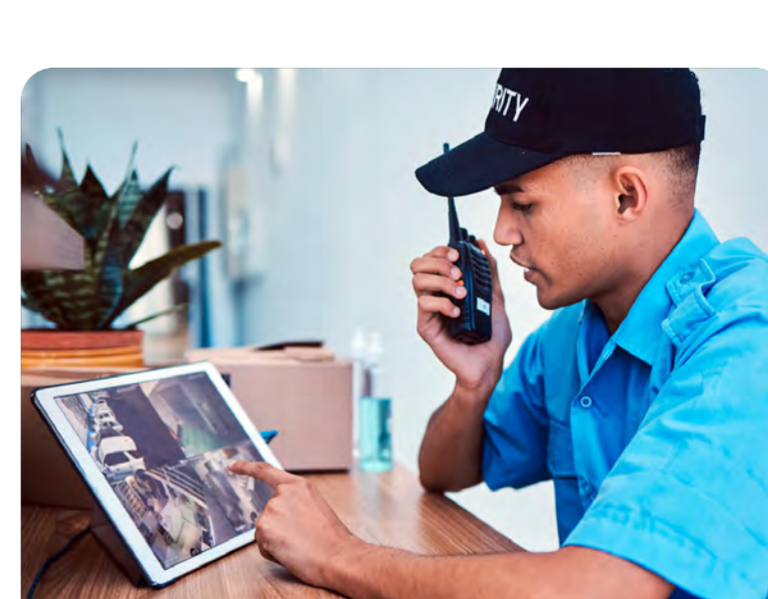
Airports

- 5G: Baggage Systems, Airside Vehicles, Surveillance Cameras
- Wi-Fi: Public Wi-Fi, Digital Signage, Crew Training



Energy & Utilities

- 5G: SCADA, Grid Automation, Substation Monitoring
- Wi-Fi: Crew Tablets, Substation IT, IT Systems



Correctional Facilities

- 5G: Body Cameras, Perimeter Security, Contraband Detection
- Wi-Fi: Visitor Services, Facility Scheduling, Internet Kiosks

Hughes Managed Private Wireless delivers scalable, future-ready connectivity across industries, providing enterprises with:

- Integrated private wireless solution enabling Industry 4.0 through seamless IT/OT convergence
- Built-in zero trust security for secure, enterprise-grade IT and OT connectivity
- Dedicated PAL licensed spectrum, ensuring reliable, interference-free performance
- End-to-end managed services spanning design, deployment, and 24/7 proactive operations

Learn more about [Hughes Managed Private Wireless Network Services](#)

