

Resource · Checklist

WiFi Site Survey Checklist

Updated for 2026 · Covers WiFi 6 / 6E / 7

Pre-survey questionnaire

- 1 **Business outcome.** Who uses it, what apps, what acceptable latency / throughput, what failure mode is unacceptable.
- 2 **Coverage area.** Floor plan with dimensions, ceiling heights, construction, explicit boundaries.
- 3 **Client device list.** Count + model + radio (WiFi 5 / 6 / 6E / 7). High-density rooms called out.
- 4 **Existing infrastructure.** APs, controller, PoE budget, cabling category.
- 5 **Regulatory & security.** PCI-DSS? HIPAA? Guest network? Captive portal? 802.1X?
- 6 **Budget & timeline.** Range and a drop-dead date.

On-site measurements

- **Passive RF sweep** on 2.4 / 5 / 6 GHz at floor and client height. Capture: RSSI, SNR, channel utilization, co/adj-channel interference.
- **Active survey** against the production SSID — roaming, throughput at 3 points per zone, latency to gateway and to a known cloud endpoint.
- **Spectrum analysis** with a real analyzer. Identify non-WiFi interferers.
- **Physical inspection** of proposed mounting locations: ceiling type, drop height, PoE source distance (< 90 m), backhaul path.
- **Photograph everything.**

Analysis & design

- Predictive model from floor plan with proposed AP placements, channel plan, power levels.
- Coverage targets: -65 dBm voice/video, -70 dBm general data, -75 dBm IoT.
- SNR targets: ≥25 dB voice, ≥20 dB data.
- Cell overlap: 15–20% for roaming, never more than 30%.
- Capacity: peak concurrent clients × per-client throughput vs. cell capacity at chosen modulation.

Deliverables

- 1 Annotated floor plan with AP locations, model, mounting, channel/power.
- 2 Predictive heat map per band.
- 3 Bill of materials (APs, cabling, PoE switches/injectors, mounting).

- 4 Configuration outline (SSIDs, VLANs, RADIUS/PSK, QoS, firmware target).
- 5 Post-install validation plan.
- 6 Raw survey data retained \geq 1 year.

If you receive a "site survey" that's a one-page PDF and a price, you didn't get a site survey. You got a guess.

Want us to run the survey?

Calibrated equipment, predictive + passive + active, real deliverables. We work throughout Central PA and the Mid-Atlantic. ccrammts.com/wifi.