

# Hartsfield-Jackson Atlanta International Airport (ATL)

## Venue Network Intelligence Report

Rev 1, first issue, 2026-09-21

*Over the nine passenger-building footprints, the only basis on which this report names a leader, the three carriers are closer than any gate-area figure suggests: 3 buildings are ties (Domestic Terminal, Concourse T, Concourse B), AT&T leads over Concourse C, Concourse D, Concourse E, Concourse F, T-Mobile over Concourse A, Verizon over International Terminal, and every carrier is healthy on more than half the tiles over 7 of the nine buildings. The international side is the weakest place measured: over Concourse F the healthy tile shares are AT&T 55%, T-Mobile 38%, Verizon 36% and over the International Terminal AT&T 49%, T-Mobile 27%, Verizon 61%, and every carrier's lowest building is one of those two. On the apron-weighted gate areas (the 80 m join around each gate point, a median 22.4% of which sits over a building) only AT&T clears the healthy 5G line: gate-area medians AT&T -93.4 dBm (133 of 201 healthy), T-Mobile -96.7 (31) and Verizon -97.6 (12), the last two 0.9 dB apart and tied; 59 of the 201 gate points are below the line for all three carriers and 116 for two, an apron and jet-bridge condition for two carriers across the venue rather than a per-gate fault. The airport-owned neutral-host DAS was being replaced inside this window (Council approval May 19, 2025; T-Mobile and AT&T signed; January 2026 target; Verizon's participation not held), so in-building infrastructure is present for every carrier by record, this window is a baseline that blends the legacy and the new system, and this issue cannot evaluate the new system on its own. Ookla's Site Finder centroids inside the piers are consistent with that record and are read no further. It measures 201 gate points, 284 venue points, 44,634 unique tiles (85,763 carrier-tile observations), 44,155 usage tiles and 371 estimated site centroids over 12 months.*

Prepared by the Imagine Wireless Network Intelligence Platform

Data window: 2025-09-01 to 2026-08-31 · Issued: 2026-09-21 · Freshness: 21 days (within the 90-day policy)

Primary sources: Ookla Cell Analytics (per-carrier RF tiles; All Networks usage and density tiles; Site Finder centroids) · OpenStreetMap gates and building polygons (pinned 2026-09-21) · Google Places and OpenStreetMap venue points (pinned 2026-09-21 (Google Places (New) + OSM))

Reference sources: City of Atlanta Department of Aviation pages and records · FAA enplanement statistics · public press

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PHOTO. Domestic Terminal ticketing and check-in hall, with the Main and North Checkpoint signage, May 2023. · Photo: Harrison Keely, CC BY 4.0, via Wikimedia Commons

| Over the building footprints (the leader basis)                                                                                                                                                                | Weakest buildings measured (all carriers)                                                                                                                                                                                                    | Apron-weighted gate areas: only one carrier above the line                                                                                                                              | Wi-Fi share of observed data                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>3 of 9 buildings tied; AT&amp;T leads C, D, E, F; T-Mobile leads Concourse A; Verizon leads International Terminal; every carrier above half healthy over 7 of 9 buildings (tie rule: 1 point and 1 dB)</b> | Concourse F: healthy on AT&T 55%, T-Mobile 38%, Verizon 36% of tiles over the footprint (medians AT&T -94.0, T-Mobile -97.0, Verizon -99.0 dBm) · International Terminal: AT&T 49%, T-Mobile 27%, Verizon 61% (n=49 to 60 tiles per carrier) | AT&T -93.4 dBm (133 of 201 healthy) · T-Mobile -96.7 (31) · Verizon -97.6 (12), the last two tied; 59 of 201 points weak for all three; a median 22.4% of the join sits over a building | 41.7% of observed MB on tiles in a concourse zone (n=26,630); 42.5% over the whole clip (n=44,155). Blends the public network with tenant, lounge, hotel and personal Wi-Fi; not attributable to any one network |

## Executive summary

| Building (OSM footprint) | AT&T: healthy · median 5G dBm | T-Mobile: healthy · median 5G dBm | Verizon: healthy · median 5G dBm | Verdict (tie rule 1 point, 1 dB) |
|--------------------------|-------------------------------|-----------------------------------|----------------------------------|----------------------------------|
| Domestic Terminal        | 54% · -95.0 (n=354)           | 56% · -95.0 (n=440)               | 55% · -94.0 (n=378)              | three-way tie                    |
| Concourse T              | 70% · -92.0 (n=203)           | 70% · -93.0 (n=256)               | 71% · -91.0 (n=217)              | two-way tie                      |
| Concourse A              | 81% · -91.0 (n=177)           | 87% · -89.0 (n=222)               | 71% · -91.0 (n=211)              | T-Mobile leads                   |
| Concourse B              | 72% · -91.0 (n=181)           | 74% · -92.0 (n=228)               | 71% · -91.5 (n=208)              | three-way tie                    |
| Concourse C              | 89% · -87.0 (n=166)           | 80% · -92.0 (n=211)               | 65% · -91.5 (n=196)              | AT&T leads                       |
| Concourse D              | 87% · -88.0 (n=119)           | 60% · -93.0 (n=150)               | 77% · -90.5 (n=142)              | AT&T leads                       |
| Concourse E              | 69% · -92.0 (n=339)           | 50% · -95.0 (n=464)               | 53% · -95.0 (n=379)              | AT&T leads                       |
| Concourse F              | 55% · -94.0 (n=157)           | 38% · -97.0 (n=217)               | 36% · -99.0 (n=166)              | AT&T leads                       |
| International Terminal   | 49% · -96.0 (n=49)            | 27% · -97.0 (n=60)                | 61% · -93.0 (n=59)               | Verizon leads                    |

- Inside the buildings (the leader basis) the three carriers are close: 3 of 9 buildings are ties, AT&T leads Concourse C, Concourse D, Concourse E, Concourse F, T-Mobile leads Concourse A, Verizon leads International Terminal. Concourse F and the International Terminal are every carrier's lowest building (AT&T 55%, T-Mobile 38%, Verizon 36%; AT&T 49%, T-Mobile 27%, Verizon 61% of tiles healthy).
- On the apron-weighted gate areas only AT&T clears the healthy 5G line (133 of 201 gate points healthy against T-Mobile 31 and Verizon 12, the last two tied at the median), and 59 gate points are weak for all three. That join is a median 22.4% over a building, so it is a jet-bridge and apron reading, not a hold-room reading.
- The airport-owned neutral-host DAS was being replaced inside the window: Council approval May 19, 2025, T-Mobile and AT&T signed, January 2026 target (held). Verizon's participation, the integrator and the per-building cutover dates are not held. This issue is a baseline that blends the legacy and new systems and cannot evaluate the new system on its own.
- Three asks: the in-building record per building and per carrier (Recommendation 1); a like-for-like re-measurement per building, starting with Concourse F and the International Terminal (Recommendations 2 and 3); and a walk test inside two piers to measure the building-versus-apron gap this report can only infer (Recommendation 4). No capital recommendation follows from this instrument alone (section 13).

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## 1. Executive readout

External benchmark, engaged with up front: Ookla's December 2025 article on the 50 busiest United States airports (Speedtest Intelligence, first half of 2025) named Hartsfield-Jackson one of five airports where the airport Wi-Fi posted a higher median download speed than any mobile provider; the per-provider figures sit in an interactive table and are not held (not independently verified). That is not in tension with this report. It measures throughput on the public networks; this report measures signal level and signal quality and carries no throughput or latency field at all (section 16). A venue can post a strong download figure and still hold the gaps measured here, because a strong signal can be congested and a weak signal can be fast when few devices share it. The two readings answer different questions, and the one this report answers is where the radio conditions are weakest, for which carrier, and which buildings they sit in.

*Provenance legend: measured values compute from the Ookla exports at build time. Facts marked "held" come from a source document pinned in this build and checksummed in the verification bundle. Facts marked "not independently verified" are public record that this build cites without holding a copy. The Imagine knowledge-graph snapshot is pinned in this build and quoted inline as "Imagine knowledge graph"; its leadership rows are held and no name is printed. Section 16 defines every threshold and basis.*

Hartsfield-Jackson Atlanta International Airport is operated by the City of Atlanta Department of Aviation (held). Two terminal complexes are in service: the Domestic Terminal (split into North and South halves with the MARTA Airport Station between the two baggage-claim halls, feeding Concourses

T, A, B, C and D; the airport fact sheet publishes 155 domestic gates across the whole complex) and the Maynard H. Jackson Jr. International Terminal (opened in 2012, with Concourse F (gates F1 to F14 on the official 2012 map) attached to it and Concourse E reached through the E-F connector; the airport fact sheet publishes 43 international gates); the Plane Train, an underground automated people mover, links all seven concourses with both terminals on a 3-mile loop with eleven four-car trains about every two minutes and more than 200,000 riders a day (held). The \$1.4 billion Concourse D widening program, 2024 to 2029, replaces the concourse module by module and widens it from 60 to 90 feet; five new gates opened on September 17, 2025 and three more on June 4, 2026, both inside this window, while sections of the existing concourse were closed for construction throughout (held). This report measures 201 gate points, 284 mapped venue points, 85,763 radio-frequency (RF) tiles, 44,155 usage tiles and 371 estimated site centroids over the 12-month window ending 2026-08-31. This issue cannot evaluate the replacement DAS: the export is a single 12-month aggregate with no date split and the per-building cutover dates are not held, so the date-range comparison in section 15 is the instrument for that question, not this report.

#### **Over the buildings, the leader basis (section 4.7).**

Domestic Terminal: three-way tie (AT&T, T-Mobile, Verizon; top share margin 0 points, top median margin 1.0 dB); Concourse T: two-way tie (AT&T, Verizon; top share margin 1 point, top median margin 1.0 dB); Concourse A: T-Mobile leads (share margin 6 points, median margin 2.0 dB); Concourse B: three-way tie (AT&T, T-Mobile, Verizon; top share margin 2 points, top median margin 0.5 dB); Concourse C: AT&T leads (share margin 8 points, median margin 4.5 dB); Concourse D: AT&T leads (share margin 11 points, median margin 2.5 dB); Concourse E: AT&T leads (share margin 17 points, median margin 3.0 dB); Concourse F: AT&T leads (share margin 17 points, median margin 3.0 dB); International Terminal: Verizon leads (share margin 12 points, median margin 3.0 dB). Every carrier is healthy on more than half the tiles over 7 of the 9 buildings. The carrier statements that follow give each carrier's building readings first and its apron-weighted gate-area readings second.

#### **AT&T: leads over 4 of 9 building footprints (Concourse C, Concourse D, Concourse E, Concourse F); first at the apron-weighted gate-area 5G median by 3.3 dB and the only carrier above the healthy line there; the strongest LTE layer.**

AT&T's venue 5G gate median is -93.4 dBm, 3.3 dB ahead of T-Mobile and 4.2 dB ahead of Verizon, both margins above the 1 dB noise floor. It holds healthy 5G reference signal received power (RSRP) at 133 of 201 gate points (66.2%; 60 within 1 dB of the line), with 68 gate points at risk and 0 critical. It holds the strongest gate-area 5G reading by more than 1 dB at 138 of 201 gate points (Concourse T 10 of 21, Concourse A 5 of 29, Concourse B 24 of 32, Concourse C 34 of 34, Concourse D 41 of 41, Concourse E 20 of 32, Concourse F 4 of 12, counts; 52 of the 201 points are ties within the floor), and reports 5G on 40% of its on-airport tiles, the smallest footprint of the three (a share that mixes deployment with the panel's handset mix, section 16, so it is not compared across carriers). Its signal-quality median is +15.2 dB (197 of 201 gate points healthy), the highest of the three, read with the band confound in section 3. Its LTE layer is the strongest of the three (gate median -92.4 dBm, 182 of 201 gate points healthy, strongest LTE reading at 174 of 201 gate points). Over the building footprints it leads Concourse C, Concourse D, Concourse E, Concourse F (section 4.7); its lowest building is International Terminal (49% of tiles healthy). AT&T is the weakest carrier at 0 of 201 gate points where the bottom margin exceeds 1 dB (103 points tie at the bottom).

**T-Mobile: leads over Concourse A and ties over Domestic Terminal, Concourse T, Concourse B; tied with Verizon below the healthy line at the apron-weighted gate-area 5G median (31 of 201 gate points healthy).**

T-Mobile's 5G gate median is -96.7 dBm, 0.9 dB from Verizon's and inside the noise floor, so the two are reported as tied, and 1.7 dB below the healthy line. It is healthy at 31 of 201 gate points (15.4%; 72 within 1 dB of the line), with 170 gate points at risk and 0 critical. It holds the strongest gate-area 5G reading by more than 1 dB at 11 of 201 gate points, 8 of them in Concourse A (count), and reports 5G on 84% of its on-airport tiles, the widest footprint. Its signal-quality median is +9.5 dB (76 of 201 gate points healthy), the lowest of the three. Its LTE layer sits at the line (gate median -95.8 dBm, 68 of 201 gate points healthy). Over the building footprints its highest is Concourse A (87%) and its lowest is International Terminal (27%). T-Mobile is the weakest carrier at 10 of 201 gate points where the bottom margin exceeds 1 dB (103 points tie at the bottom).

**Verizon: leads over International Terminal and ties over Domestic Terminal, Concourse T, Concourse B; tied with T-Mobile below the line at the apron-weighted gate-area median, healthy at the fewest gate points (12 of 201) and the lowest reading by more than 1 dB at 88 of them.**

Verizon's 5G gate median is -97.6 dBm, 2.6 dB below the line. It is healthy at 12 of 201 gate points (6.0%; 34 within 1 dB of the line), with 189 gate points at risk and 0 critical. It holds the strongest gate-area 5G reading by more than 1 dB at 0 of 201 gate points and reports 5G on 70% of its tiles. Its signal-quality median is +10.8 dB (132 of 201 gate points healthy). Its LTE layer is below the line at the gate median (-96.4 dBm, 61 of 201 gate points healthy). Over the building footprints its highest is Concourse D (77%) and its lowest is Concourse F (36%). Verizon's 5G is NR3700 on 63% of its 9,964 band-reporting 5G tiles (section 9.1).

#### **Over the two terminal complexes (gate-area counts).**

Domestic Terminal complex (Concourses T, A, B, C, D) gate medians: AT&T -92.9, T-Mobile -96.2, Verizon -97.4 dBm (n=157 gate points); healthy 5G at AT&T 113 of 157 gate points (72%), T-Mobile 31 of 157 gate points (20%), Verizon 11 of 157 gate points (7%). International Terminal complex (Concourses E, F) gate medians: AT&T -95.3, T-Mobile -97.5, Verizon -98.0 dBm (n=44 gate points); healthy 5G at AT&T 20 of 44 gate points (45%), T-Mobile 0 of 44 gate points (0%), Verizon 1 of 44 gate points (2%). Over the OpenStreetMap building footprints (section 4.7): Domestic Terminal three-way tie (AT&T, T-Mobile, Verizon; top share margin 0 points, top median margin 1.0 dB) (AT&T 54%, T-Mobile 56%, Verizon 55%); Concourse T two-way tie (AT&T, Verizon; top share margin 1 point, top median margin 1.0 dB) (AT&T 70%, T-Mobile 70%, Verizon 71%); Concourse A T-Mobile leads (share margin 6 points, median margin 2.0 dB) (AT&T 81%, T-Mobile 87%, Verizon 71%); Concourse B three-way tie (AT&T, T-Mobile, Verizon; top share margin 2 points, top median margin 0.5 dB) (AT&T 72%, T-Mobile 74%, Verizon 71%); Concourse C AT&T leads (share margin 8 points, median margin 4.5 dB) (AT&T 89%, T-Mobile 80%, Verizon 65%); Concourse D AT&T leads (share margin 11 points, median margin 2.5 dB) (AT&T 87%, T-Mobile 60%, Verizon 77%); Concourse E AT&T leads (share margin 17 points, median margin 3.0 dB) (AT&T 69%, T-Mobile 50%, Verizon 53%); Concourse F AT&T leads (share margin 17 points, median margin 3.0 dB) (AT&T 55%, T-Mobile 38%, Verizon 36%); International Terminal Verizon leads (share margin 12 points, median margin 3.0 dB) (AT&T 49%, T-Mobile 27%, Verizon 61%).

Gate-median order: AT&T, then T-Mobile and Verizon tied. The AT&T-to-T-Mobile margin is 3.3 dB and the AT&T-to-Verizon margin is 4.2 dB, both above the 1 dB noise floor set in section 16, so AT&T is ranked first on the gate median. The T-Mobile-to-Verizon margin is 0.9 dB, under the floor, so this report never ranks one above the other on that figure; T-Mobile is listed first only because its median is numerically higher. On the healthy-gate count the order is AT&T, T-Mobile, Verizon (133, 31, 12 of 201); on signal quality it is AT&T, Verizon, T-Mobile, on different band mixes. Only AT&T's median sits above the -95 dBm line. The order reproduces from the tile export alone.

#### The in-building record and what it does not settle

Hartsfield-Jackson runs an airport-owned neutral-host distributed antenna system (DAS) that carries the carriers' signals over a common infrastructure, first commissioned in 2010 with more than 700 antennas across the terminal, atrium, concourses and the underground transportation mall and a separate layer for public-safety radio (held). On May 19, 2025 the Atlanta City Council approved carrier agreements for a replacement DAS, with signed agreements from T-Mobile and AT&T, and the airport scheduled completion for January 2026, inside this window, so the window blends the end-of-life legacy system and the new one (held). The airport states that the new system covers the entire passenger facility from curbside to gate, across all concourses and both the Domestic and International terminals (held). The Site Finder layer (section 9.3) places Ookla's estimated serving nodes inside the passenger buildings for all three carriers: LTE AT&T 40 of 61 on-airport, T-Mobile 12 of 23 on-airport, Verizon 31 of 67 on-airport; 5G AT&T 9 of 33 on-airport, T-Mobile 28 of 55 on-airport, Verizon 29 of 59 on-airport. Those are estimated positions from crowdsourced RF, not a registry, but a centroid inside a 60 m wide pier is consistent with a node in that pier and not with a macro site. So the two carriers below the healthy line at the gate areas are not without in-building infrastructure; the questions are what each carrier's in-building layer carries (which bands, which power), whether its 5G rides on it or on the macro layer, and how the hand-off works at the jet bridge. Section 8 lists what the record does not hold; Recommendation 1 asks for it.

#### What the pattern is consistent with (inference)

Band first, and it points away from the obvious reading. AT&T's strongest-serving 5G band is NR3700 on 47% of its 2,223 band-reporting 5G tiles and NR3500 on another 25%, the highest-frequency mix of the three; T-Mobile's is NR2500 on 55% of 26,021; Verizon's is NR3700 on 63% of 9,964. A C-band signal that reads 3.3 dB stronger than a 2.5 GHz signal at the same apron-weighted gate point is evidence for a nearer source, not for spectrum. Over the buildings the carriers separate by building rather than by carrier: Domestic Terminal, Concourse T, Concourse B are ties, Concourse A goes to T-Mobile, International Terminal to Verizon and Concourse C, Concourse D, Concourse E, Concourse F to AT&T, which is the pattern a multi-carrier in-building system produces when its per-carrier loading differs from building to building, and equally what pier geometry does to macro signals; Concourse C is the sharpest case (section 4.5). The export cannot separate the two, and this report does not state that any carrier's reading comes from any in-building system.

#### Limits of every ranking in this report

Every ranking in this report is signal-layer: RSRP and signal-to-interference-plus-noise ratio (SINR) from an Android crowdsource panel. The export contains no throughput or latency, so it measures where signal is. It does not measure whether a call or app fails, and a strong-signal network can still be congested. The panel's composition differs by carrier and is Android-only, and handset vintage decides which devices can report which 5G band at all, so cross-carrier comparisons inherit a device-population bias the export cannot correct. Nothing in this report is measured indoors; gate and tenant values are tiles within 80 m of a point (section 16).

## 2. Venue snapshot and asset inventory

| Element                     | Value                                                         | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Airport / IATA / ICAO       | Hartsfield-Jackson Atlanta International Airport / ATL / KATL | FAA large hub, rank 1 by calendar-2024 enplanements (held); 106,302,208 total passengers in 2025 (91,437,847 domestic, 14,864,361 international), -1.6% versus 2024, and 805,268 aircraft operations (airport monthly traffic report, held; passengers in both directions, a different basis from the FAA enplanement figure used in section 12)                                                                                            |
| Operating authority         | City of Atlanta Department of Aviation                        | A municipal department of the City of Atlanta; carrier agreements, airport contracts and capital appropriations go to the Atlanta City Council and then to the Mayor (held)                                                                                                                                                                                                                                                                 |
| Terminal complexes analyzed | 2                                                             | Domestic Terminal: Delta Air Lines and its Delta Connection affiliates on Concourses A, B, C and D, with American, United, Southwest, JetBlue, Frontier, Alaska and other domestic carriers on Concourses T and C; split into North and South halves with the MARTA Airport Station between the two baggage-claim halls, feeding Concourses T, A, B, C and D; the airport fact sheet publishes 155 domestic gates across the whole complex. |

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|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            |                                                                                                                                                                                                                                                                                                                                             | Maynard H. Jackson Jr. International Terminal: Delta long-haul services and the foreign-flag carriers on Concourse F, with Concourse E serving international and domestic flights; opened in 2012, with Concourse F (gates F1 to F14 on the official 2012 map) attached to it and Concourse E reached through the E-F connector; the airport fact sheet publishes 43 international gates (all held)                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Zones for tile assignment  | 7                                                                                                                                                                                                                                                                                                                                           | Concourse T (Domestic Terminal complex) · Concourse A (Domestic Terminal complex) · Concourse B (Domestic Terminal complex) · Concourse C (Domestic Terminal complex) · Concourse D (Domestic Terminal complex) · Concourse E (International Terminal complex) · Concourse F (International Terminal complex) (nearest gate or tenant point within 500 m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Passenger buildings (mask) | 9                                                                                                                                                                                                                                                                                                                                           | Domestic Terminal, Concourse T, Concourse A, Concourse B, Concourse C, Concourse D, Concourse E, Concourse F, International Terminal (pinned OpenStreetMap footprints; the leader basis, section 4.7)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Gate points analyzed       | 201                                                                                                                                                                                                                                                                                                                                         | Concourse T 21, Concourse A 29, Concourse B 32, Concourse C 34, Concourse D 41, Concourse E 32, Concourse F 12 (OpenStreetMap inventory pinned 2026-09-21, zoned by the concourse letter in the gate ref and checked against the concourse footprint; 180 of 201 sit inside a footprint). the airport fact sheet publishes 155 domestic and 43 international gates, 198 in all, with no per-concourse count, and the official 2012 International Terminal map publishes gates F1 to F14 for Concourse F; the Concourse D widening program adds and retires gate positions through 2029, so a per-concourse published count for this window is not held (held). The reconciliation is tabulated in section 2.1; no OpenStreetMap node on the airport carries the tag without a concourse letter and number                      |
| Mapped venue points        | 284                                                                                                                                                                                                                                                                                                                                         | 106 food · 47 retail · 42 transport_admin · 33 services · 21 admin · 19 other · 16 lounge. Zone attribution: T 68, A 25, B 26, C 22, D 28, E 24, F 42, outside zones 49. Google Places and OpenStreetMap capture, pinned 2026-09-21 (Google Places (New) + OSM) (points only). 299 points were captured and 15 were excluded before analysis because they are not venue points: museum aircraft exhibits, vending machines, a vehicle charging station, a cargo handler, an airline hangar, the airport operator's office, two private terminals and the airport captured as a point. 48 points were refiled where the capture's category contradicted the point's function, 4 of them airline and card-issuer lounges the capture had listed as food or other. Every call is listed with its reason in the audit dossier      |
| Carriers measured          | 3                                                                                                                                                                                                                                                                                                                                           | AT&T · T-Mobile · Verizon (85,763 RF tiles; 44,155 All Networks usage tiles; 181 LTE and 190 5G estimated site centroids for the three carriers)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| In-building cellular       | Hartsfield-Jackson runs an airport-owned neutral-host distributed antenna system (DAS) that carries the carriers' signals over a common infrastructure, first commissioned in 2010 with more than 700 antennas across the terminal, atrium, concourses and the underground transportation mall and a separate layer for public-safety radio | on May 19, 2025 the Atlanta City Council approved carrier agreements for a replacement DAS, with signed agreements from T-Mobile and AT&T, and the airport scheduled completion for January 2026, inside this window, so the window blends the end-of-life legacy system and the new one; the airport states that the new system covers the entire passenger facility from curbside to gate, across all concourses and both the Domestic and International terminals; the airport states that the replacement moves the system from 4G to 5G service on a neutral-host design that can distribute any future carrier's signal, and upgrades the radio distribution used by public-safety personnel; the airport describes the legacy system as end-of-life equipment with limited parts availability and a design that hampers |

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|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                       | modernization (all held). The items the record does not hold are listed once, in section 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Knowledge-graph coverage</b> | Profile, two DAS deployment rows, financial-report and budget evidence, seven leadership rows (names withheld)                                                                                                                                                                                                                                                                                                        | The reconciled Airport DAS Master (2026-07-28) records ATL as DAS: yes, self-owned: yes, neutral host: yes, operator unknown, equipment integrator Johnson Controls, contract term 2018 to 2022 at year precision, with a field note of a 50 million dollar project installed by Johnson Controls and SMS that was due to expire in 2022; the graph also holds a neutral-host DAS deployment row dated 2025 with no vendor recorded; the airport's FY2025 annual comprehensive financial report names a Distributed Antenna System Upgrade among its major capital projects with no dollar figure attached, and the City's FY2026 adopted budget book carries no individual DAS, Wi-Fi or cellular line; the graph's secondary research records the airport Wi-Fi as airport-owned and run in house on a capital-funded model (Imagine knowledge graph). The graph's enplanement count carries no year and is not published; contracts query not available |
| <b>Public Wi-Fi</b>             | SSID ATL Free Wi-Fi                                                                                                                                                                                                                                                                                                                                                                                                   | operated by the airport on its own network, launched free in June 2014 with several hundred access points installed by airport information-technology staff and contractors at a City-approved cost of \$5,622,249; no third-party Wi-Fi concessionaire was found in the public record and the current equipment generation is not held (held); the airport publishes no Wi-Fi usage figure, and none is transcribed here (held)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Capital program</b>          | ATLNext, the airport's 20-year capital improvement program, with a new master plan under way toward 160 million annual passengers                                                                                                                                                                                                                                                                                     | the \$1.4 billion Concourse D widening program (2024 to 2029), the largest single project in the ATLNext capital program; Plane Train fleet renewal, track work and a five-year operation and maintenance procurement approved by the Council on March 16, 2026; the \$440 million South Red Deck, a seven-story parking deck with more than 7,000 spaces beside the Domestic South Terminal, opened to travelers on June 1, 2026, inside this window (held)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Ground transport</b>         | the Plane Train (eleven four-car trains on a 3-mile underground loop, about every two minutes, more than 200,000 riders a day), the landside ATL SkyTrain to the Rental Car Center, and the MARTA Airport Station at the west end of the Domestic Terminal                                                                                                                                                            | Context only (not independently verified)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Recognition</b>              | the world's busiest airport by total passengers in 2025 per Airports Council International, the top spot in 27 of the last 28 years; Best Airport over 40 million passengers in North America in the 2023 and 2024 Airport Service Quality awards and not among the 2025 winners; 15th of 20 mega airports in the J.D. Power 2026 North America Airport Satisfaction Study at 606 of 1,000, below the segment average | Context only (not independently verified)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



*PHOTO. Aerial view over the airfield, May 2026. Illustrative only; individual concourses are not distinguishable in this frame. · Photo: Zixed11, CC0, via Wikimedia Commons*

#### **How to read the measurement**

Every cellular number in this report is an aggregate of crowdsourced background scans from consumer Android devices (about 3% of handsets; iOS devices are not sampled), binned by Ookla to map tiles of about 9 m by 11 m, then joined to gate and tenant points. The numbers describe where devices were over a 12-month window. They are not drive-test measurements. Every n counts tiles, and every table carries its n so thin cells are visible.

**ATL venue map: aerodrome, OSM buildings, 201 gates, 85,763 RF tiles (44,634 unique centroids)**

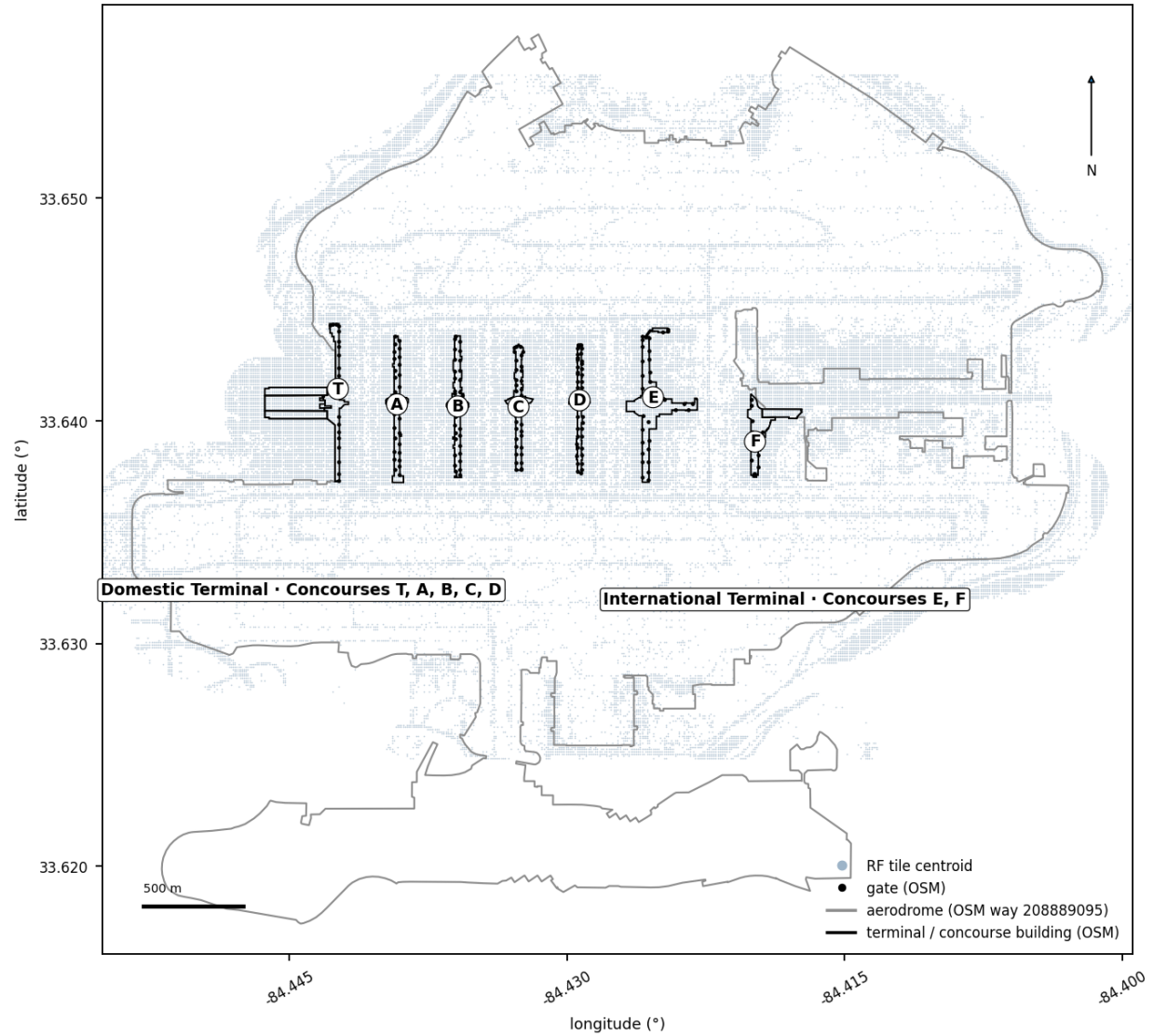


FIG. 1. Venue map: aerodrome outline, the nine OpenStreetMap passenger buildings, 201 gate points with concourse letters, and the 85,763 on-airport RF tile centroids. North up; scale bar in meters. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31



PHOTO. Plane Train in-car display with the concourse sequence F, E, D, C, B, A, T, December 2023. The train runs below the concourses through the transportation mall, which the airport-owned DAS has covered since 2010. · Photo: DiscoA340, CC0, via Wikimedia Commons

## 2.1 Measured gate inventory against the published gate list

| Concourse                 | Published gates        | Measured points | Published but not measured | Measured but not on the published list |
|---------------------------|------------------------|-----------------|----------------------------|----------------------------------------|
| Concourse T               | not held per concourse | 21              | n/a                        | n/a                                    |
| Concourse A               | not held per concourse | 29              | n/a                        | n/a                                    |
| Concourse B               | not held per concourse | 32              | n/a                        | n/a                                    |
| Concourse C               | not held per concourse | 34              | n/a                        | n/a                                    |
| Concourse D               | not held per concourse | 41              | n/a                        | n/a                                    |
| Concourse E               | not held per concourse | 32              | n/a                        | n/a                                    |
| Concourse F               | 14                     | 12              | F11, F13                   | none                                   |
| Whole campus (fact sheet) | 198                    | 201             | n/a                        | n/a                                    |

The analysis uses the 201 measured points against the 198 gates the airport fact sheet publishes for the whole campus (the airport fact sheet publishes 155 domestic and 43 international gates, 198 in all, with no per-concourse count, and the official 2012 International Terminal map publishes gates F1 to F14 for Concourse F; the Concourse D widening program adds and retires gate positions through 2029, so a per-concourse published count for this window is not held, held). A per-concourse published list is held only for Concourse F, where 2 published gates have no measured point and every measured point is on the published list. Every per-concourse count in this report is therefore a count of MEASURED points and is written that way throughout; the Concourse D widening program adds and retires positions inside the window, so its measured count blends construction phases. Aligning the OpenStreetMap inventory with the Department of Aviation's gate plan is a request in section 15, and no gate-named criterion in section 14 should be adopted before that is done.

### 3. Carrier findings

#### 3.0 Carrier summary

| Carrier  | 5G RSRP median (dBm) | 5G SINR median (dB) | LTE RSRP median (dBm) | Healthy 5G gate points | n (gate points / RF tiles) |
|----------|----------------------|---------------------|-----------------------|------------------------|----------------------------|
| AT&T     | -93.4                | +15.2               | -92.4                 | 133 of 201             | 201 / 25,823               |
| T-Mobile | -96.7                | +9.5                | -95.8                 | 31 of 201              | 201 / 32,992               |
| Verizon  | -97.6                | +10.8               | -96.4                 | 12 of 201              | 201 / 26,948               |

5G footprint and conditional medians (tile basis). Each 5G median is conditional on the tile reporting a 5G reading; the last column combines presence and level.

| Carrier  | 5G footprint (% of tiles) | 5G RSRP median over reporting tiles (dBm) | LTE RSRP median (dBm) | LTE-only tiles (%) | 5G present and healthy (% of all tiles) | n (tiles) |
|----------|---------------------------|-------------------------------------------|-----------------------|--------------------|-----------------------------------------|-----------|
| AT&T     | 40%                       | -98.0                                     | -96.0                 | 58%                | 17%                                     | 25,823    |
| T-Mobile | 84%                       | -97.0                                     | -98.0                 | 14%                | 34%                                     | 32,992    |
| Verizon  | 70%                       | -98.0                                     | -98.0                 | 28%                | 27%                                     | 26,948    |

How to read the two tables together. The gate-point medians in the first table are conditional on a tile reporting 5G at all, and the three carriers report 5G on very different shares of their tiles (AT&T 40%, T-Mobile 84%, Verizon 70%). Over all on-airport tiles the conditional 5G medians sit inside the noise floor (AT&T -98.0, T-Mobile -97.0, Verizon -98.0 dBm) and the share of tiles that are 5G-present AND healthy runs AT&T 17%, T-Mobile 34%, Verizon 27%, an order that differs from the gate-point order. A carrier whose handsets hold 5G only where it is strong contributes a censored sample to any 5G median. The defence at the gate points is that the per-gate 5G tile n is comparable across carriers there (median per gate AT&T 163, T-Mobile 180, Verizon 170 tiles; Appendix C prints every gate's n). The LTE medians differ between the two tables for the same reason (AT&T -92.4, T-Mobile -95.8, Verizon -96.4 dBm at the gate points against AT&T -96.0, T-Mobile -98.0, Verizon -98.0 over all tiles): the gate join sits on the apron edge of the piers, where every carrier is stronger than its campus-wide average. Every cross-carrier 5G statement in this report is read with the footprint share beside it and with the building basis of section 4.7 as the verdict.

ATL: venue-wide carrier medians (201 gate points)

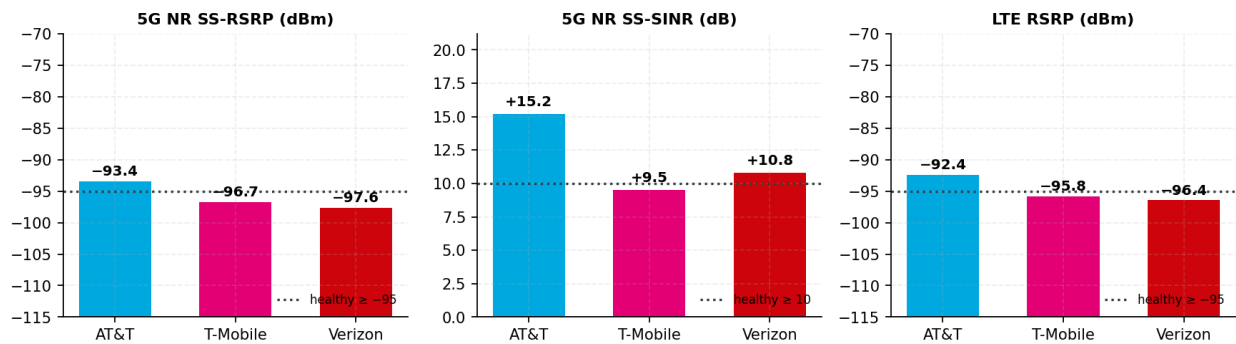


FIG. 2. Venue medians across 201 gate points against the locked threshold ladder (section 16). The two received-power panels draw bars from -115 dBm, so a longer bar is a stronger signal. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

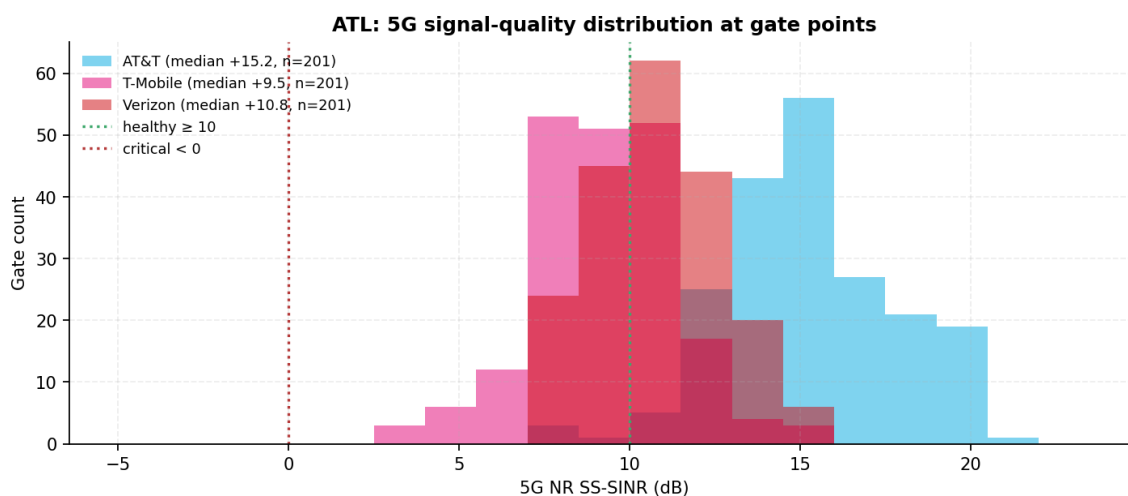


FIG. 3. SINR distribution per carrier at gate-point level. Read across carriers with care: SINR depends on the serving band's bandwidth and on neighbour loading, and these carriers sit on different bands here (section 9.1 gives each carrier's strongest-serving band mix), so a cross-carrier SINR gap is not a like-for-like comparison. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-

Cross-carrier SINR comparison, stated once and applied throughout: the three carriers are not on the same spectrum at this venue. Section 9.1 shows the strongest-serving band mix, and a carrier whose 5G sits mostly on a sub-1 GHz channel will not produce an SINR distribution comparable to one sitting mostly on mid-band with different neighbour loading and a different receiver population. Within a carrier, SINR across zones is a fair comparison and is used that way; across carriers it is context, not a ranking.

## ATL terminal and concourse area, 5G NR RSRP by tile in the locked coverage classes (2025-09-01 to 2026-08-31)

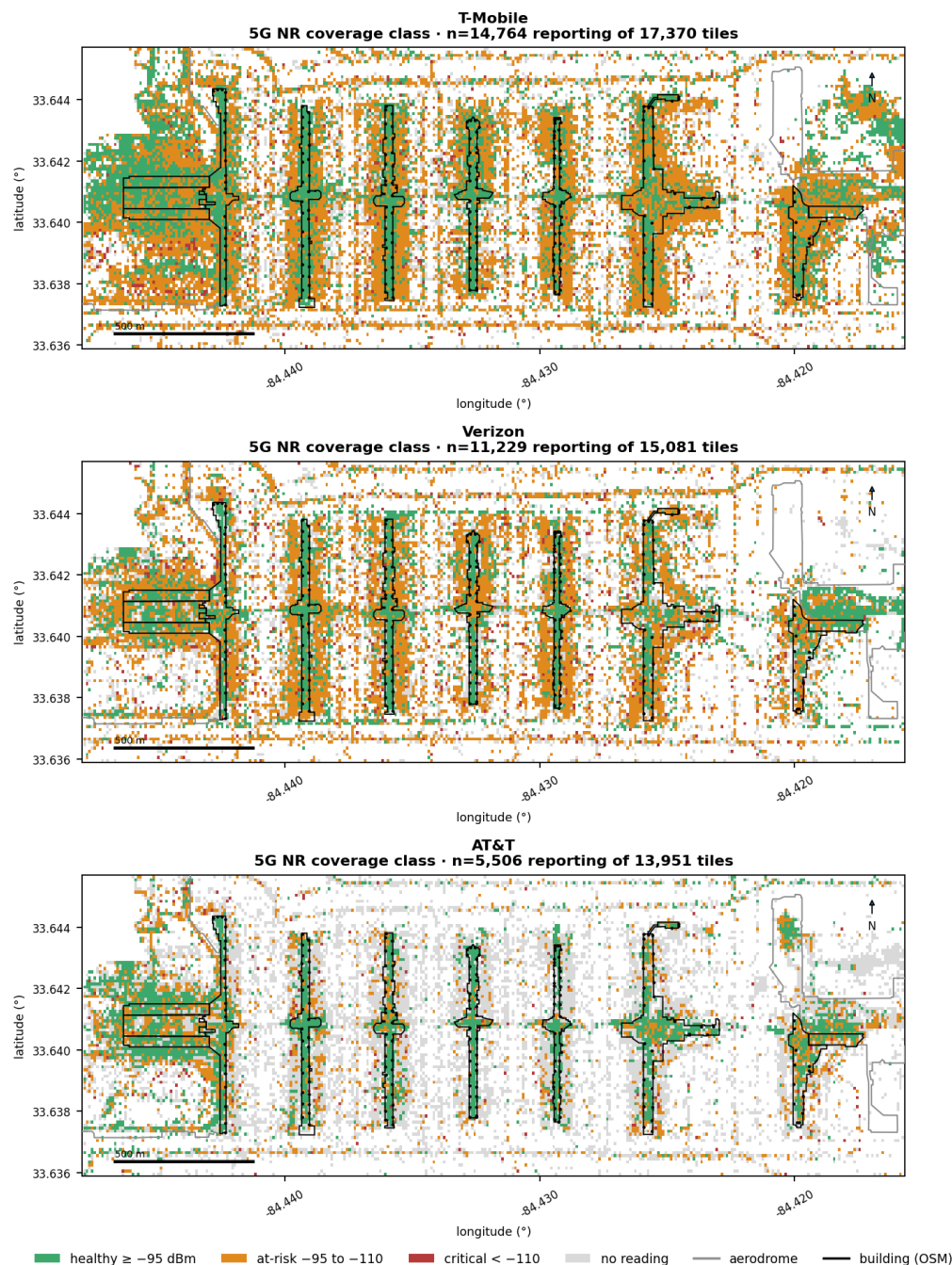


FIG. 4. Terminal and concourse area map of 5G NR RSRP by tile and carrier, colored by the locked coverage class. Grey tiles carry no 5G reading. Each tile is about 9 m by 11 m; n is the tile count per panel. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

### 3.1 AT&T results

AT&T is first at the 5G gate median ( $-93.4$  dBm, 3.3 dB ahead of T-Mobile) and the only carrier above the line. 133 of 201 gate points (66.2%; 60 within 1 dB of the line) are healthy, 68 at risk, 0 critical. It is the strongest 5G reading by more than 1 dB at 138 of 201 gate points, every gate point in Concourse C, Concourse D (counts). SINR is  $+15.2$  dB at the median (197 of 201 gate points healthy), the highest of the three on a different band mix. It reports 5G on 40% of its on-airport tiles (10,316 of 25,823); tiles

with an LTE reading but no 5G reading are 58% of its tiles. Its LTE layer is the strongest of the three: strongest LTE reading at 174 of 201 gate points, LTE gate median -92.4 dBm, healthy at 182 of 201 gate points.

On the tile basis its own highest zone share is Concourse C at 59% of tiles healthy and its lowest is Concourse F at 36%. Healthy tile shares by zone: Concourse T 52%, Concourse A 49%, Concourse B 50%, Concourse C 59%, Concourse D 55%, Concourse E 52%, Concourse F 36% (n ≥ 387 tiles per zone). Over the pinned building footprints (section 4.7) it is healthy on Domestic Terminal 54%, Concourse T 70%, Concourse A 81%, Concourse B 72%, Concourse C 89%, Concourse D 87%, Concourse E 69%, Concourse F 55%, International Terminal 49%. FIG. 4 shows the pattern: green along the piers from Concourse B eastward, amber over Concourse F and the International Terminal. Its terminal-vs-periphery proxy is -1.0 dB (section 5.2). AT&T's 5G is NR3700 on 47% of its 2,223 band-reporting 5G tiles. AT&T is the weakest carrier at 0 of 201 gate points where the bottom margin exceeds 1 dB (103 points tie at the bottom).

#### **What the AT&T readings show**

First at the gate-area 5G median, the only carrier above the healthy line there (133 of 201 gate points), the strongest LTE layer (174 of 201 gate points, median -92.4 dBm), and the leader over Concourse C, Concourse D, Concourse E, Concourse F. Its 5G reports on 40% of its tiles, the smallest share, which this report does not read as a coverage figure because the share is confounded by the panel's handset mix. Its lowest building is International Terminal (49% healthy, median -96.0 dBm), so the international side is where a re-measurement would show the largest change for AT&T too. Site Finder places 40 AT&T LTE and 9 AT&T 5G estimated nodes inside the passenger buildings (section 9.3).

### **3.2 T-Mobile results**

T-Mobile's 5G gate median is -96.7 dBm, tied with Verizon (0.9 dB apart) and 3.3 dB behind AT&T, below the healthy line. 31 of 201 gate points (15.4%; 72 within 1 dB of the line) are healthy, 170 at risk, 0 critical. It is the strongest 5G reading by more than 1 dB at 11 of 201 gate points (Concourse T 1 of 21, Concourse A 8 of 29, Concourse F 2 of 12, counts). SINR is +9.5 dB at the median (76 of 201 gate points healthy), the lowest of the three. It reports 5G on 84% of its on-airport tiles (27,860 of 32,992), the widest footprint. Its LTE layer sits at the line: LTE gate median -95.8 dBm, healthy at 68 of 201 gate points, strongest LTE reading at 4 gate points.

On the tile basis its own highest zone share is Concourse F at 42% of tiles healthy and its lowest is Concourse D and Concourse E at 29% (a tie within 1 point). Healthy tile shares by zone: Concourse T 41%, Concourse A 36%, Concourse B 31%, Concourse C 36%, Concourse D 29%, Concourse E 29%, Concourse F 42% (n ≥ 1,514 tiles per zone). Over the pinned building footprints it is healthy on Domestic Terminal 56%, Concourse T 70%, Concourse A 87%, Concourse B 74%, Concourse C 80%, Concourse D 60%, Concourse E 50%, Concourse F 38%, International Terminal 27%; it leads over Concourse A (section 4.7). T-Mobile's 5G is NR2500 on 55% of its 26,021 band-reporting 5G tiles, a mid-band layer that reads weaker than sub-1 GHz at the same distance. Its terminal-vs-periphery proxy is +1.0 dB (section 5.2). T-Mobile is the weakest carrier at 10 of 201 gate points where the bottom margin exceeds 1 dB (103 points tie at the bottom).

#### **What the T-Mobile readings show**

Tied with Verizon below the healthy line at the gate-area 5G median, healthy at 31 of 201 gate points, and the lowest 5G SINR median (+9.5 dB, on a different band mix from the other two). Its strongest place is over Concourse A (87% of tiles healthy) and its weakest is over International Terminal (27%, median -97.0 dBm). Site Finder places 28 T-Mobile 5G estimated nodes inside the passenger buildings, the most of the three on 5G, and only 12 LTE nodes (section 9.3): a carrier with in-building 5G nodes and a below-line gate-area median is the clearest case for a walk test of what those nodes carry and at what power.

### 3.3 Verizon results

Verizon's 5G gate median is -97.6 dBm, tied with T-Mobile and 4.2 dB behind AT&T, below the healthy line. 12 of 201 gate points (6.0%; 34 within 1 dB of the line) are healthy, the fewest of the three, 189 at risk, 0 critical. It is the strongest 5G reading by more than 1 dB at 0 of 201 gate points. SINR is +10.8 dB at the median (132 of 201 gate points healthy). It reports 5G on 70% of its on-airport tiles (18,800 of 26,948). Its LTE layer is below the line at the gate median: -96.4 dBm, healthy at 61 of 201 gate points, strongest LTE reading at 0 gate points.

On the tile basis its own highest zone share is Concourse F at 57% of tiles healthy and its lowest is Concourse D at 25%. Healthy tile shares by zone: Concourse T 33%, Concourse A 32%, Concourse B 31%, Concourse C 31%, Concourse D 25%, Concourse E 29%, Concourse F 57% (n ≥ 1,259 tiles per zone). Over the pinned building footprints it is healthy on Domestic Terminal 55%, Concourse T 71%, Concourse A 71%, Concourse B 71%, Concourse C 65%, Concourse D 77%, Concourse E 53%, Concourse F 36%, International Terminal 61%; it leads over International Terminal (section 4.7). Verizon's 5G is NR3700 on 63% of its 9,964 band-reporting 5G tiles. Its terminal-vs-periphery proxy is +2.0 dB (section 5.2). Verizon is the weakest carrier at 88 of 201 gate points where the bottom margin exceeds 1 dB (103 points tie at the bottom), the most of the three.

#### What the Verizon readings show

Tied with T-Mobile below the healthy line at the gate-area 5G median, healthy at the fewest gate points (12 of 201), and the weakest carrier by more than 1 dB at 88 of 201 gate points. Its strongest place is over Concourse D (77% of tiles healthy) and its weakest is over Concourse F (36%, median -99.0 dBm). Site Finder places 31 Verizon LTE and 29 Verizon 5G estimated nodes inside the passenger buildings (section 9.3), so the below-line gate-area reading sits beside evidence of in-building nodes, and the re-measurement question is the same as T-Mobile's: what those nodes carry, and whether 5G rides on them.

### 3.4 5G footprint and coverage-band attachment

5G footprint share, stated and not charted: AT&T reports 5G on 40% of its on-airport tiles (10,316 of 25,823), T-Mobile reports 5G on 84% of its on-airport tiles (27,860 of 32,992), Verizon reports 5G on 70% of its on-airport tiles (18,800 of 26,948). CONFOUNDED: a tile reports 5G only if a handset in the panel could report that carrier's 5G band, so this share mixes the carrier's 5G deployment with the mix of 5G-capable handsets that carrier has in an Android crowdsourcing panel. It is not a coverage measurement, the carriers are not compared across carriers on it, and it is therefore not drawn as a chart with a shared axis (section 16).

#### ATL: sub-1 GHz LTE reliance per carrier (higher = more coverage-band dependence)

| Carrier  | n (tiles) | Mean percent low band | Tiles above zero | p90 percent low band |
|----------|-----------|-----------------------|------------------|----------------------|
| AT&T     | 25,183    | 9.4%                  | 39%              | 32%                  |
| T-Mobile | 32,567    | 1.6%                  | 8%               | 0%                   |
| Verizon  | 26,419    | 6.9%                  | 27%              | 33%                  |

FIG. 5. LTE percent-low-band per carrier: mean, share of tiles above zero, and p90. Higher means more attachment to sub-1 GHz coverage bands. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

The percent-low-band statistic describes LTE coverage-band attachment. A tile that attaches to sub-1 GHz spectrum is using a coverage-grade band, which propagation, carrier idle-mode priorities, and site geometry all drive. AT&T mean 9.4% (tiles above zero: 39% of n=25,183; p90 32%) · T-Mobile mean

1.6% (tiles above zero: 8% of n=32,567; p90 0%) · Verizon mean 6.9% (tiles above zero: 27% of n=26,419; p90 33%).

On the 5G side: AT&T: NR850 on 582 tiles, 26.2% of its 2,223 band-reporting NR tiles. T-Mobile: NR600 on 2,376 tiles, 9.1% of its 26,021 band-reporting NR tiles. Verizon: NR850 on 1,095 tiles, 11.0% of its 9,964 band-reporting NR tiles. Section 9.1 lists the bands.

### 3.5 RSRQ, channel quality (CQI), and optimization priority

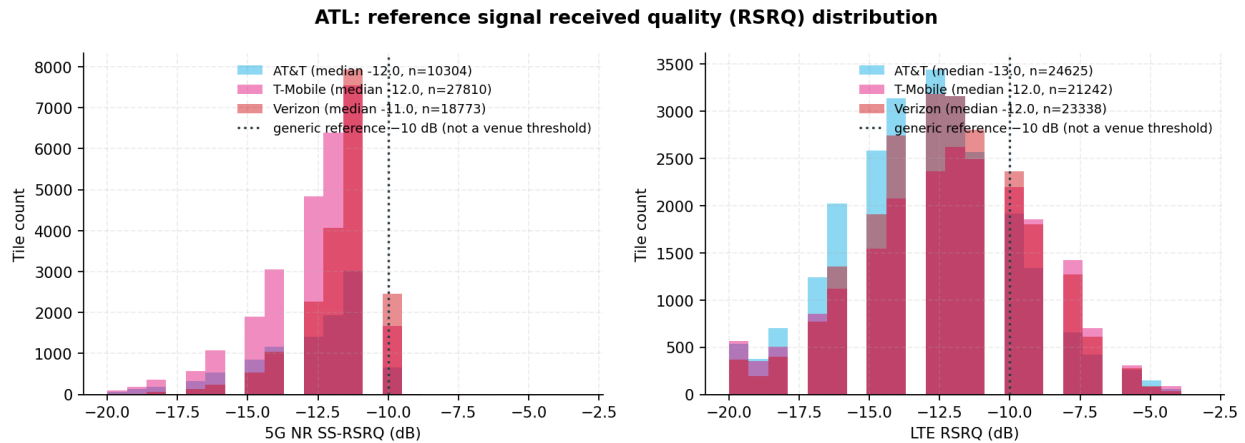


FIG. 6. 5G NR and LTE reference signal received quality (RSRQ) distributions per carrier. The dotted line is a GENERIC industry reference, not a threshold specified for this venue; medians in this range are ordinary for a loaded network and this is not a failure call. Read with SINR. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

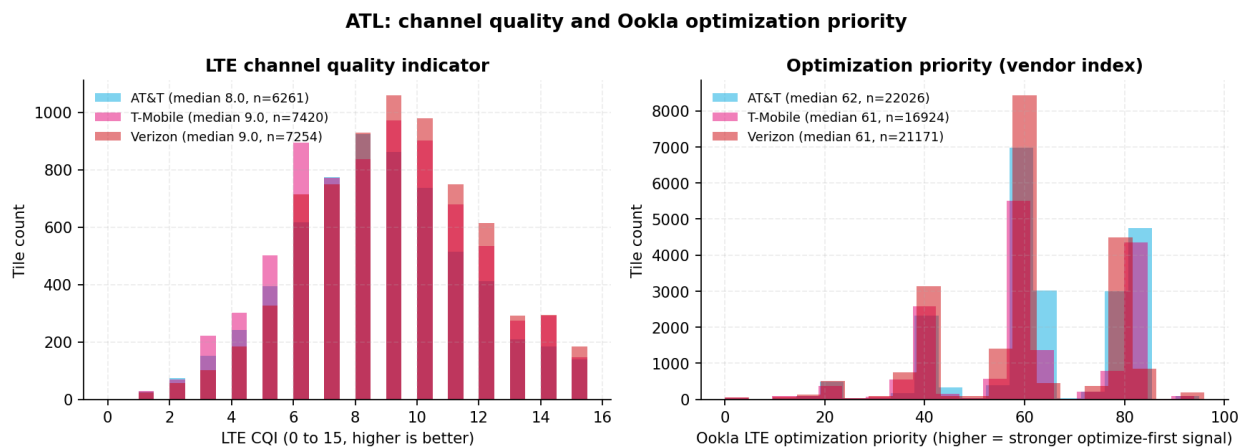


FIG. 7. LTE channel quality indicator (CQI) distribution and Ookla's LTE optimization priority index (vendor layer). · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

RSRQ medians: AT&T NR -12.0 / LTE -13.0 dB; T-Mobile NR -12.0 / LTE -12.0 dB; Verizon NR -11.0 / LTE -12.0 dB. Every carrier median sits below the -10 dB line on both technologies. Medians of -11 to -14 dB are ordinary loaded-network values, and the line is a generic reference, not a venue-specified threshold, so this is a venue-wide observation to read together with SINR, not a failure call. RSRQ degrades as subframe utilization rises, so a weak RSRQ on a strong-RSRP network is consistent with a loaded serving layer. This is an inference; the export carries no load field (section 16).

CQI medians: AT&T median 8.0 (n=6,261); T-Mobile median 9.0 (n=7,420); Verizon median 9.0 (n=7,254). CQI is the closest throughput proxy in an export that carries no throughput fields. Ookla's

LTE optimization priority is the vendor's own index for tiles where signal is strong but quality is poor. Venue medians: AT&T median 62 (n=22,026); T-Mobile median 61 (n=16,924); Verizon median 61 (n=21,171). The discriminating signal is in the distribution tails.

### 3.6 Serving-cell volatility (handover-churn proxy)

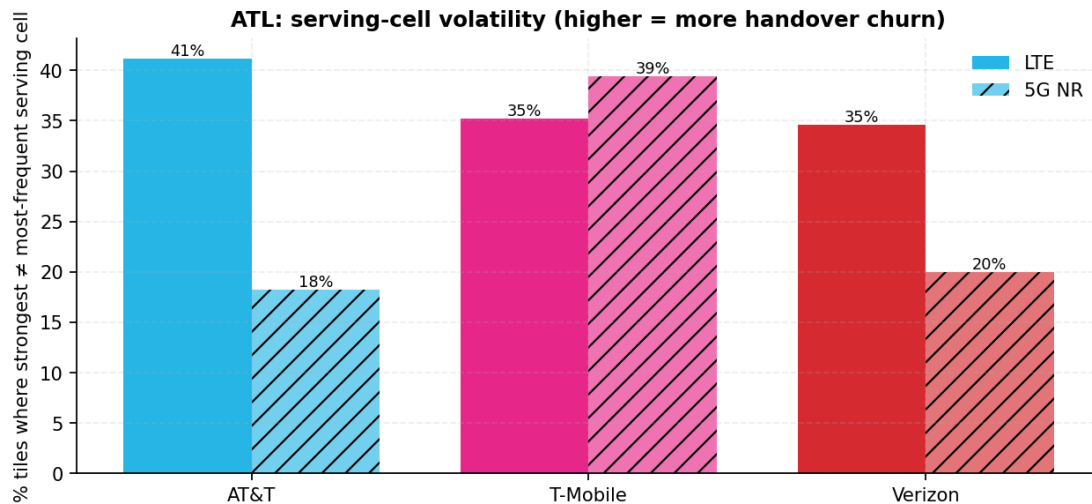


FIG. 8. Share of tiles where the strongest observed cell differs from the most-frequent serving cell. Proxy for handover instability and dominance conflict. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

Where the strongest cell at a tile is not the most-frequent serving cell, the network is handing over between competing cells. Measured churn: AT&T LTE 41% (n=24,709) / 5G 18% (n=2,223); T-Mobile LTE 35% (n=21,412) / 5G 39% (n=26,016); Verizon LTE 35% (n=23,371) / 5G 20% (n=9,964). Cell, PCI, and band fields populate only where Ookla resolved a serving cell, so each carrier's cell-resolved n is smaller than its RSRP n (field population table, section 16). Churn blends macro-sector overlap with any in-building system's handoff to the macro layer, and at a venue whose piers hold in-building nodes for every carrier (section 9.3) the jet-bridge hand-off is part of what this proxy sees. The export carries no handover trace.

## 4. The view by concourse zone

Concourse zone gate counts (Concourse T 21, Concourse A 29, Concourse B 32, Concourse C 34, Concourse D 41, Concourse E 32, Concourse F 12): Concourse B, Concourse C, Concourse D, Concourse E clear the 30-point floor on the gate basis, so their gate shares are shown as percentages; Concourse T, Concourse A, Concourse F do not, and their gate tallies appear as counts and are never ranked. For one consistent basis, every zone comparison in this section runs on the tile basis: a tile belongs to the zone of its nearest gate or tenant point within 500 m, which gives hundreds of tiles per carrier per zone. Zones are the seven concourses (T, A, B, C, D on the domestic side; E, F on the international side), from the concourse letter in each gate ref. The Concourse T zone also holds the Domestic Terminal landside (the hourly and daily decks, the economy lots and the MARTA station), because those points sit nearer Concourse T than any other; it is the one zone that mixes a pier with the landside.

## 4.1 Healthy share and median RSRP by zone

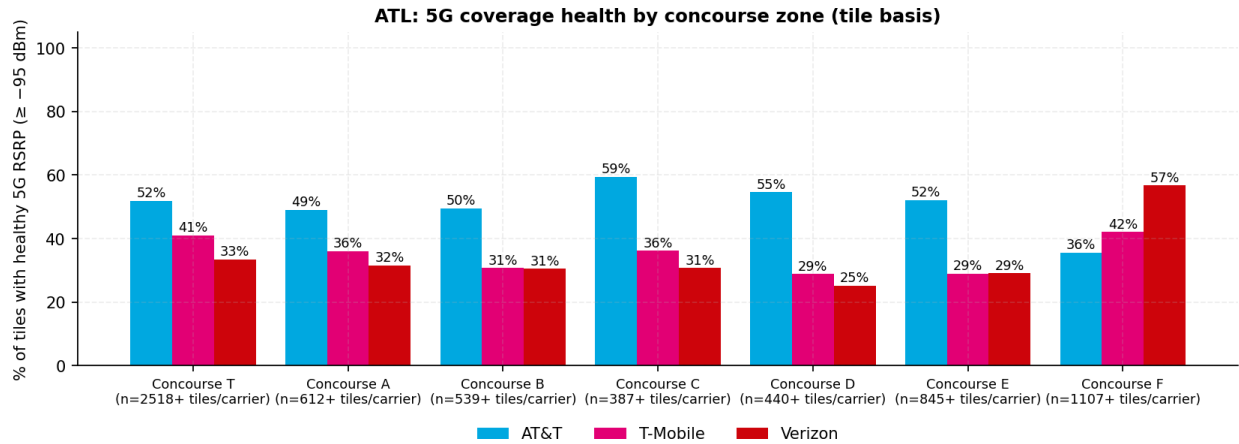


FIG. 9. Share of zone tiles with healthy 5G RSRP by carrier (tile basis; minimum n per carrier on the axis). · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

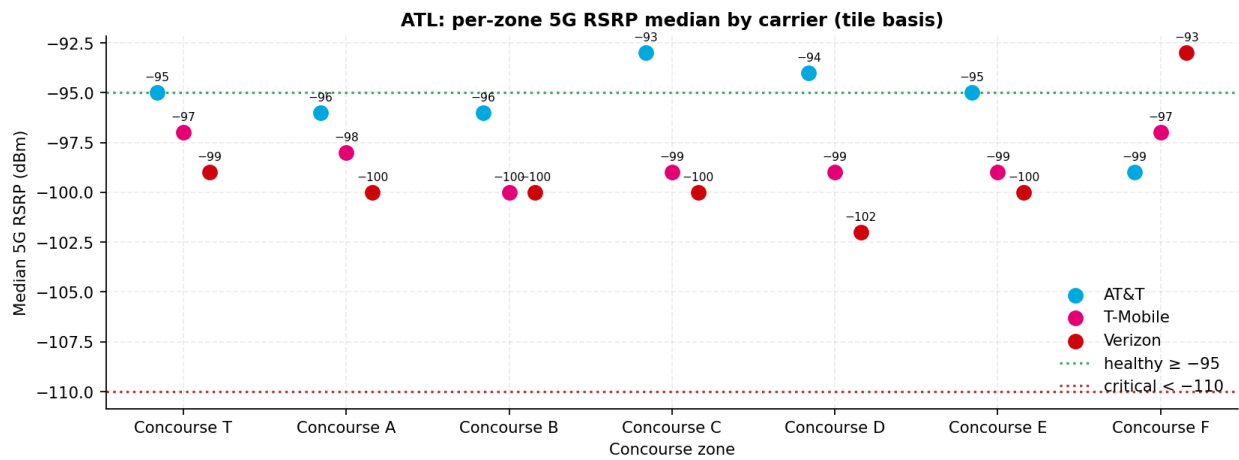


FIG. 10. Per-zone median 5G RSRP per carrier (tile basis). · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

# **ATL terminal and concourse area, LTE RSRP by tile in the locked coverage classes (2025-09-01 to 2026-08-31)**

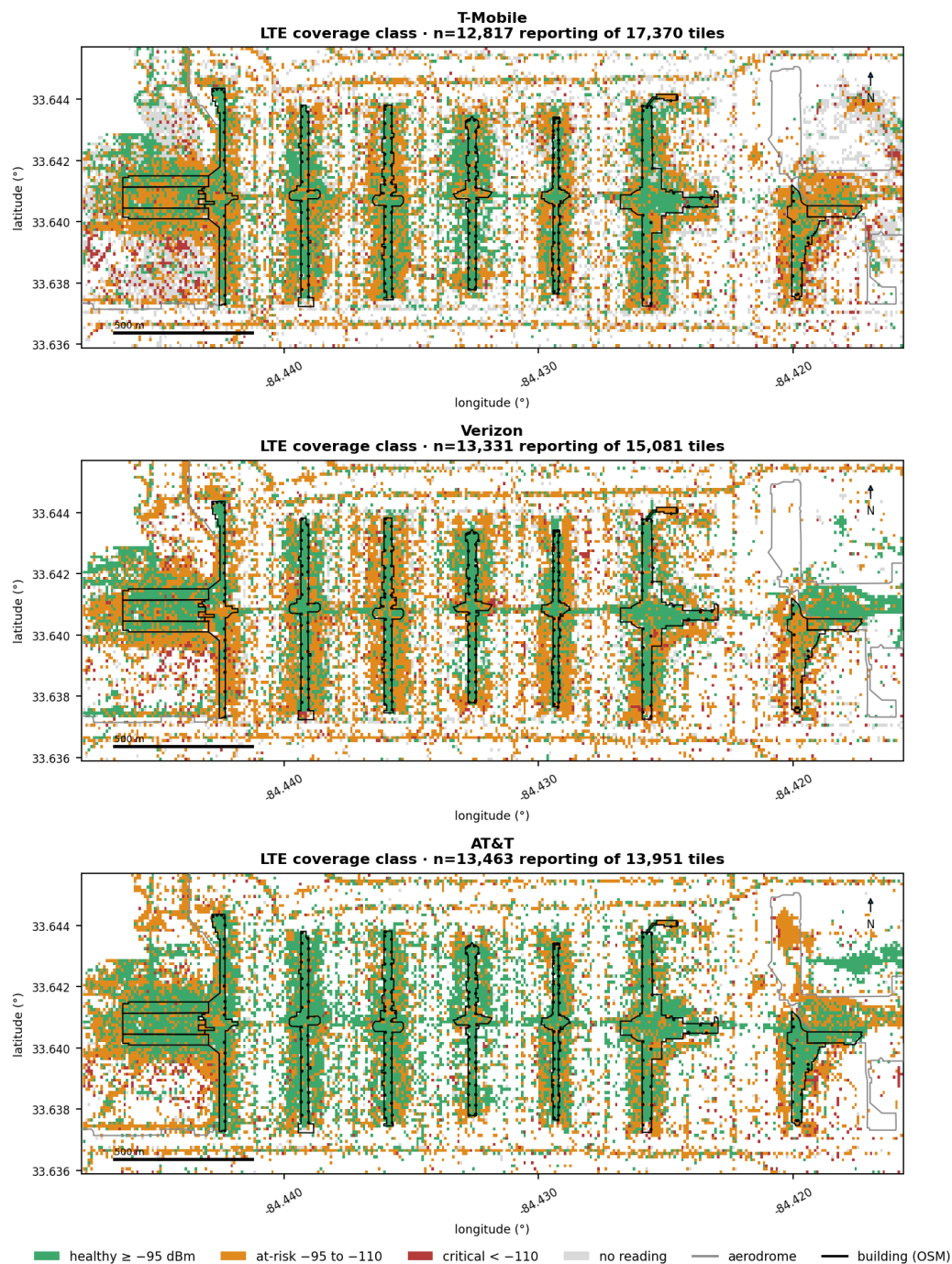


FIG. 11. Terminal and concourse area map of LTE RSRP by tile and carrier, colored by the locked coverage class. Grey tiles carry no LTE reading. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

| Zone              | AT&T healthy tiles | T-Mobile healthy tiles | Verizon healthy tiles | Median 5G RSRP (dBm)                          |
|-------------------|--------------------|------------------------|-----------------------|-----------------------------------------------|
| Concourse T (DOM) | 52% (n=2,518)      | 41% (n=4,995)          | 33% (n=3,403)         | AT&T -95.0 / T-Mobile -97.0 / Verizon -99.0   |
| Concourse A (DOM) | 49% (n=612)        | 36% (n=1,696)          | 32% (n=1,535)         | AT&T -96.0 / T-Mobile -98.0 / Verizon -100.0  |
| Concourse B (DOM) | 50% (n=539)        | 31% (n=1,829)          | 31% (n=1,554)         | AT&T -96.0 / T-Mobile -100.0 / Verizon -100.0 |
| Concourse C (DOM) | 59% (n=387)        | 36% (n=1,514)          | 31% (n=1,259)         | AT&T -93.0 / T-Mobile -99.0 / Verizon         |

|                           |               |               |               |                                              |
|---------------------------|---------------|---------------|---------------|----------------------------------------------|
|                           |               |               |               | -100.0                                       |
| <b>Concourse D (DOM)</b>  | 55% (n=440)   | 29% (n=1,548) | 25% (n=1,361) | AT&T -94.0 / T-Mobile -99.0 / Verizon -102.0 |
| <b>Concourse E (INTL)</b> | 52% (n=845)   | 29% (n=2,595) | 29% (n=2,068) | AT&T -95.0 / T-Mobile -99.0 / Verizon -100.0 |
| <b>Concourse F (INTL)</b> | 36% (n=1,107) | 42% (n=3,283) | 57% (n=1,895) | AT&T -99.0 / T-Mobile -97.0 / Verizon -93.0  |

These zone figures are NOT a leader board. A concourse zone is the set of tiles nearest that concourse's gate and venue points within 500 m, so it holds apron, taxiway and roadway as well as building, and section 4.7 carries the only basis on which this report names a leader. Read the zone rows as the spread within a zone: the widest carrier-to-carrier gap in healthy tile share is Concourse D at 30 points, and the narrowest is Concourse A at 17 points. Lowest zone per carrier on the healthy tile share: AT&T in Concourse F (36%), T-Mobile in Concourse D and Concourse E (29%, tied), Verizon in Concourse D (25%). The lowest zone differs by carrier.

## 4.2 Coverage class and PCI diversity

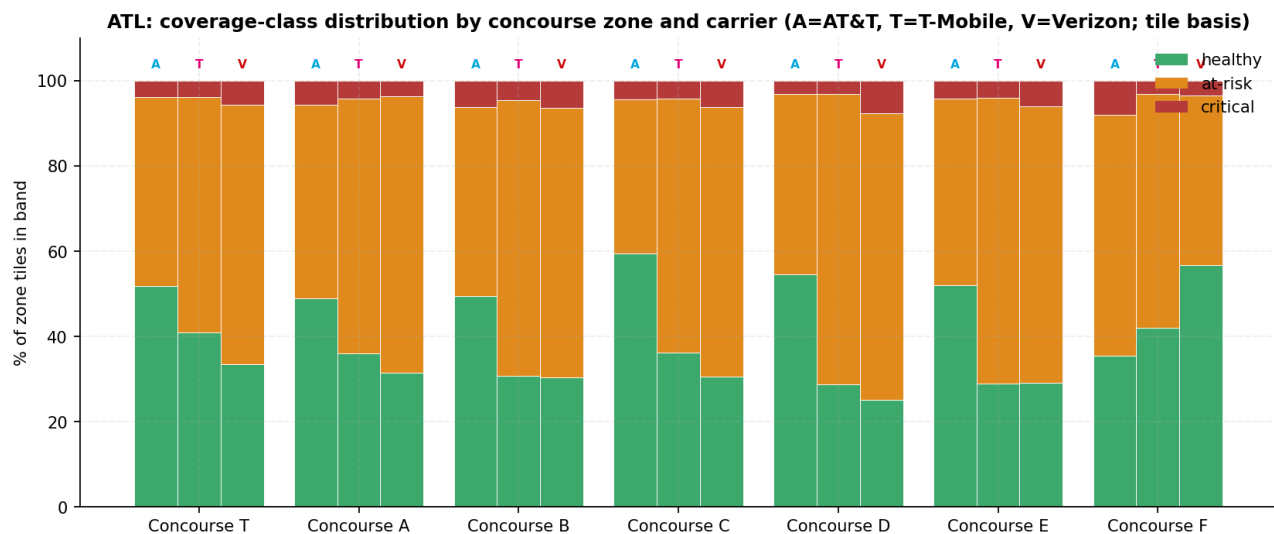


FIG. 12. Coverage-class distribution by concourse zone and carrier (tile basis; A=AT&T, T=T-Mobile, V=Verizon). · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

Critical-band gate points (below -110 dBm) by carrier: AT&T 0, T-Mobile 0, Verizon 0 of 201 (counts). On the tile basis the critical share peaks at AT&T 8% in Concourse F (n=1,107); T-Mobile 4% in Concourse B (n=1,829); Verizon 8% in Concourse D (n=1,361). Lowest healthy share in any zone: AT&T 36% (Concourse F); T-Mobile 29% (Concourse D); Verizon 25% (Concourse D).

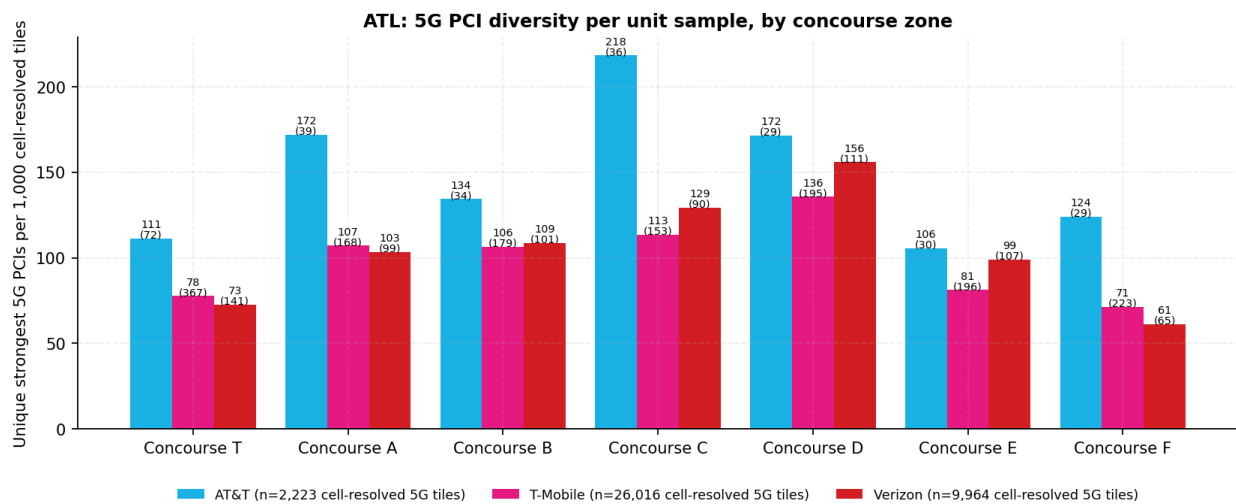


FIG. 13. Unique strongest-serving physical cell identities (PCIs) per 1,000 cell-resolved tiles, per zone per carrier, with the raw unique count in brackets. Normalized because a unique count rises with sample size. Reads in both directions; always pair with SINR (section 16).  
Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

The PCI picture in each zone reflects which sectors reach it, macro or in-building. Higher diversity with healthy SINR means several sectors serve the zone cleanly. Higher diversity with poor SINR means they compete. The raw unique counts are not comparable across carriers, because the cell-resolved samples behind them differ (AT&T 2,223, T-Mobile 26,016, Verizon 9,964 tiles), which is why the bars are per 1,000 tiles. Even normalized, this metric is a sampling statistic as much as a network property: PCI counts accumulate over 12 months across every 5G layer a carrier runs, so reassignment and multi-carrier layers inflate them. Read it as a prompt to look at SINR in the same zone, not as a ranking.

### 4.3 Cross-carrier concordance by gate

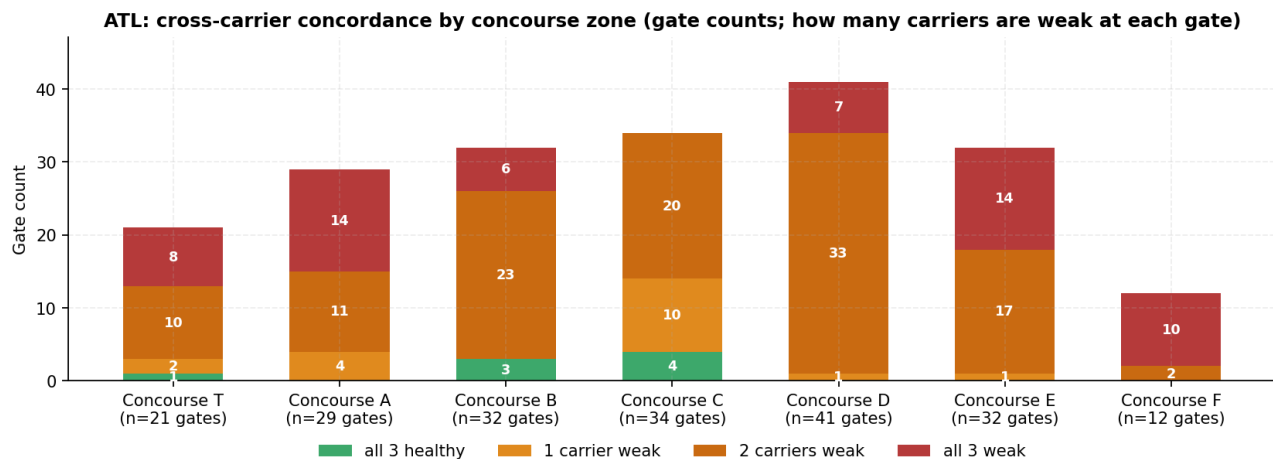


FIG. 14. Per concourse zone: how many of the three carriers are below the healthy line at each gate point (gate counts). Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

This split shapes the infrastructure question. A gate weak for all three carriers points to a gate-area condition for that gate's 80 m circle, which at this venue is mostly apron. A gate weak for exactly one carrier points to that carrier's path. Counts across 201 gate points: 8 healthy for all three, 18 weak for one carrier, 116 weak for two, and 59 weak for all three. Where one carrier is weak it is AT&T 0, T-Mobile 4, Verizon 14. Where two are weak the pair is T-Mobile and Verizon at 107; AT&T and Verizon at

9. The 59 all-weak gate points sit in Concourse T 8, Concourse A 14, Concourse B 6, Concourse D 7, Concourse E 14, Concourse F 10.

At only 8 of 201 gate points is every carrier healthy, and where a gate is weak it is most often two carriers (116 two-weak gate points) or all three (59). That is the opposite of a per-carrier picture: the gate areas at this venue are below the healthy line for T-Mobile and Verizon almost everywhere, and AT&T is the carrier that keeps the count of all-weak gates from being higher. Section 4.7 shows that over the building footprints the picture is closer and the leader changes from building to building, which is why the gate-area concordance is read as an apron-and-jet-bridge condition rather than a building condition.

#### 4.4 Concourses T and A

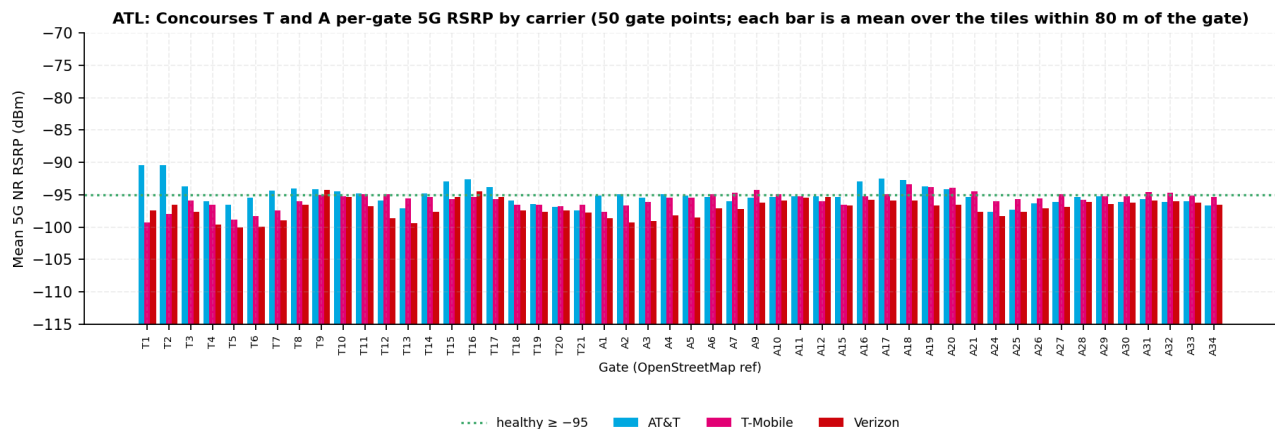


FIG. 15. Per-gate 5G RSRP across the 50 Concourse T and A gate points (OpenStreetMap inventory). Each bar is a mean over the tiles within 80 m of the gate. Bars rise from -115 dBm, so a longer bar is a stronger signal. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

Domestic Terminal: split into North and South halves with the MARTA Airport Station between the two baggage-claim halls, feeding Concourses T, A, B, C and D; the airport fact sheet publishes 155 domestic gates across the whole complex (held). Concourse T zone (Concourse T and the Domestic Terminal landside) hosts American, United and Delta, with other domestic carriers (held; the airport places the American Airlines Admirals Club across from gate T10, the United Club at T11 and a Delta Sky Club near gate T6; per-airline gate assignments are not held). It holds 21 of the 201 measured gate points.

Strongest-5G counts: AT&T 10, tie within 1 dB 10, T-Mobile 1. Healthy 5G gate points: AT&T 12 of 21 gates (count), T-Mobile 3 of 21 gates (count), Verizon 2 of 21 gates (count). Gate-basis 5G medians: AT&T -94.8, T-Mobile -96.0, Verizon -97.4 dBm. Tile-basis healthy shares: AT&T 52%, T-Mobile 41%, Verizon 33% ( $n \geq 2,518$  tiles per carrier), a carrier-to-carrier spread of 19 points on a pool that includes apron and roadway. Over the Concourse T footprint (section 4.7): AT&T 70% healthy, median -92.0 dBm ( $n=203$ ), T-Mobile 70% healthy, median -93.0 dBm ( $n=256$ ), Verizon 71% healthy, median -91.0 dBm ( $n=217$ ); two-way tie (AT&T, Verizon; top share margin 1 point, top median margin 1.0 dB).

Concourse A hosts Delta Air Lines (held; Delta Sky Clubs at the Concourse A centerpoint and near gate A17). It holds 29 of the 201 measured gate points. Strongest-5G counts: tie within 1 dB 16, T-Mobile 8, AT&T 5. Healthy 5G gate points: AT&T 7 of 29 gates (count), T-Mobile 12 of 29 gates (count), Verizon 0 of 29 gates (count). Gate-basis 5G medians: AT&T -95.3, T-Mobile -95.2, Verizon -96.6 dBm. Tile-basis healthy shares: AT&T 49%, T-Mobile 36%, Verizon 32% ( $n \geq 612$  tiles per carrier), a carrier-to-carrier spread of 17 points on a pool that includes apron and roadway. Over the Concourse A footprint (section

4.7): AT&T 81% healthy, median  $-91.0$  dBm ( $n=177$ ), T-Mobile 87% healthy, median  $-89.0$  dBm ( $n=222$ ), Verizon 71% healthy, median  $-91.0$  dBm ( $n=211$ ); T-Mobile leads (share margin 6 points, median margin 2.0 dB).



PHOTO. Concourse T corridor at gate T10, December 2023. · Photo: DiscoA340, CC BY-SA 4.0, via Wikimedia Commons



PHOTO. Concourse A at gate A19, December 2023. · Photo: DiscoA340, CC BY-SA 4.0, via Wikimedia Commons

## 4.5 Concourses B and C

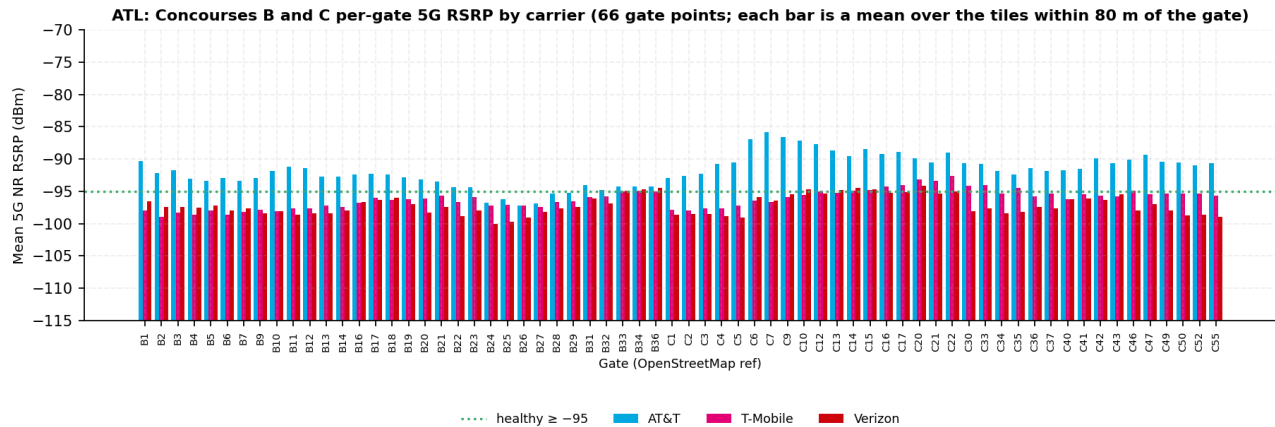


FIG. 16. Per-gate 5G RSRP across the 66 Concourse B and C gate points (OpenStreetMap inventory). Each bar is a mean over the tiles within 80 m of the gate. Bars rise from  $-115$  dBm, so a longer bar is a stronger signal. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

Concourse B hosts Delta Air Lines (held; Delta Sky Club near gate B18). It holds 32 of the 201 measured gate points. Strongest-5G counts: AT&T 24, tie within 1 dB 8. Healthy 5G gate points: AT&T 26 of 32 gates (81%), T-Mobile 3 of 32 gates (9%), Verizon 3 of 32 gates (9%). Gate-basis 5G medians: AT&T  $-93.3$ , T-Mobile  $-97.2$ , Verizon  $-97.5$  dBm. Tile-basis healthy shares: AT&T 50%, T-Mobile 31%, Verizon 31% ( $n \geq 539$  tiles per carrier), a carrier-to-carrier spread of 19 points on a pool that includes apron and roadway. Over the Concourse B footprint (section 4.7): AT&T 72% healthy, median  $-91.0$  dBm ( $n=181$ ), T-Mobile 74% healthy, median  $-92.0$  dBm ( $n=228$ ), Verizon 71% healthy, median  $-91.5$  dBm ( $n=208$ ); three-way tie (AT&T, T-Mobile, Verizon; top share margin 2 points, top median margin 0.5 dB).

Concourse C hosts Delta Connection and Southwest Airlines (held; Delta Sky Club near gate C37). It holds 34 of the 201 measured gate points. Strongest-5G counts: AT&T 34. Healthy 5G gate points: AT&T 34 of 34 gates (100%), T-Mobile 12 of 34 gates (35%), Verizon 6 of 34 gates (18%). Gate-basis 5G medians: AT&T  $-90.5$ , T-Mobile  $-95.4$ , Verizon  $-96.7$  dBm. Tile-basis healthy shares: AT&T 59%, T-Mobile 36%, Verizon 31% ( $n \geq 387$  tiles per carrier), a carrier-to-carrier spread of 28 points on a pool that includes apron and roadway. Over the Concourse C footprint (section 4.7): AT&T 89% healthy, median  $-87.0$  dBm ( $n=166$ ), T-Mobile 80% healthy, median  $-92.0$  dBm ( $n=211$ ), Verizon 65% healthy, median  $-91.5$  dBm ( $n=196$ ); AT&T leads (share margin 8 points, median margin 4.5 dB).

Spirit Airlines held gates C4 and C6 on Concourse C until it ceased operations on May 2, 2026, inside this window, and Delta bid for those gates in July 2026; whether the assignment closed inside the window is not held (held, from pinned press coverage).

Concourse C carries the sharpest carrier split on the campus. At 18 of its 34 gate points AT&T reads 5 dB or more above both other carriers (C1, C2, C3, C4, C5, C6, C7, C9, C10, C12, C13, C14, C15, C16, C17, C42, C47, C55), with AT&T signal-quality readings of  $+13.1$  to  $+20.5$  dB there, and 13 of the top 20 asymmetry gate points in section 10 sit in Concourse C. On C-band, a margin of that size over one stretch of pier is the signature of a dedicated near-field source rather than a macro sector. Which system that source belongs to is not held; it is the first place the walk test in Recommendation 4 should go, and this report draws no further conclusion from it.



PHOTO. Concourse B, boarding queue at gate B21, December 2023. · Photo: DiscoA340, CC BY-SA 4.0, via Wikimedia Commons



PHOTO. Concourse C at gate C33, December 2023. · Photo: DiscoA340, CC BY-SA 4.0, via Wikimedia Commons

## 4.6 Concourses D, E and F

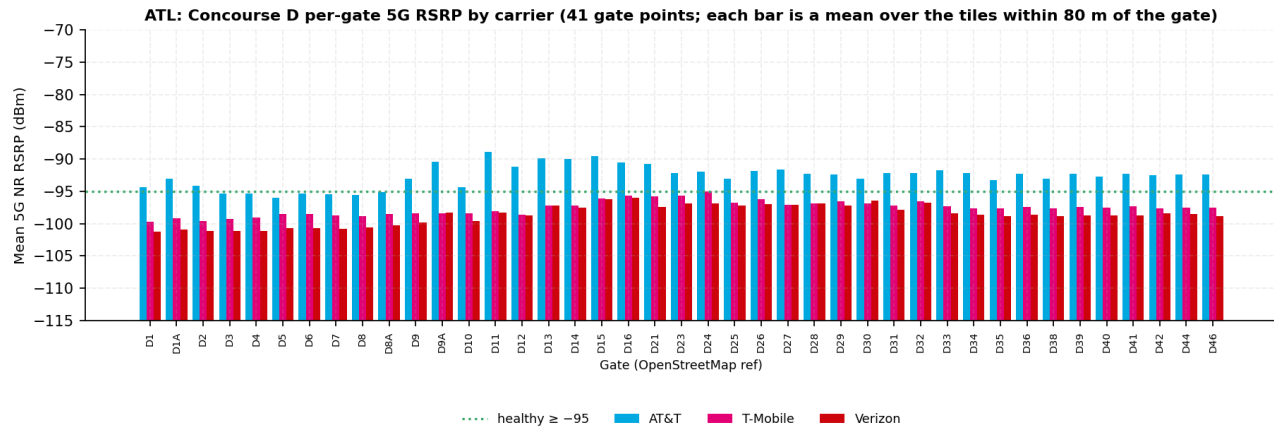


FIG. 17. Per-gate 5G RSRP across the 41 Concourse D gate points (OpenStreetMap inventory). Each bar is a mean over the tiles within 80 m of the gate. Bars rise from  $-115$  dBm, so a longer bar is a stronger signal. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

Concourse D hosts Delta Air Lines (held; the widening program's new gates were turned over to Delta, with a Delta Sky Club at the D centerpoint). It holds 41 of the 201 measured gate points. Strongest-5G counts: AT&T 41. Healthy 5G gate points: AT&T 34 of 41 gates (83%), T-Mobile 1 of 41 gates (2%), Verizon 0 of 41 gates (0%). Gate-basis 5G medians: AT&T  $-92.4$ , T-Mobile  $-97.5$ , Verizon  $-98.6$  dBm. Tile-basis healthy shares: AT&T 55%, T-Mobile 29%, Verizon 25% ( $n \geq 440$  tiles per carrier), a carrier-to-carrier spread of 30 points on a pool that includes apron and roadway. Over the Concourse D footprint (section 4.7): AT&T 87% healthy, median  $-88.0$  dBm ( $n=119$ ), T-Mobile 60% healthy, median  $-93.0$  dBm ( $n=150$ ), Verizon 77% healthy, median  $-90.5$  dBm ( $n=142$ ); AT&T leads (share margin 11 points, median margin 2.5 dB). The \$1.4 billion Concourse D widening program, 2024 to 2029, replaces the concourse module by module and widens it from 60 to 90 feet; five new gates opened on September 17, 2025 and three more on June 4, 2026, both inside this window, while sections of the existing concourse were closed for construction throughout (held); which gate positions were out of service on which dates inside the window is not held, so the Concourse D figures blend construction phases.



PHOTO. Concourse D gate D11 hold room, August 2024, during the widening program. · Photo: Vmzpz85, CC BY-SA 4.0, via Wikimedia Commons

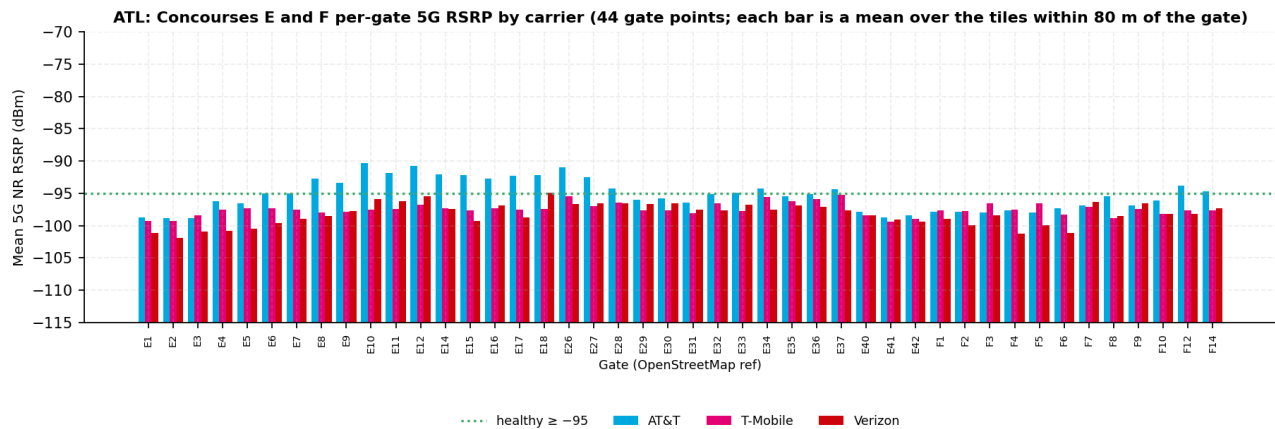


FIG. 18. Per-gate 5G RSRP across the 44 Concourse E and F gate points (OpenStreetMap inventory). Each bar is a mean over the tiles within 80 m of the gate. Bars rise from  $-115$  dBm, so a longer bar is a stronger signal. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

Maynard H. Jackson Jr. International Terminal: opened in 2012, with Concourse F (gates F1 to F14 on the official 2012 map) attached to it and Concourse E reached through the E-F connector; the airport fact sheet publishes 43 international gates (held). Concourse E hosts Delta and international carriers (held; Delta Sky Club across from gate E15 and an American Express Centurion Lounge next to gate E11; per-airline assignments are not held). It holds 32 of the 201 measured gate points. Strongest-5G counts: AT&T 20, tie within 1 dB 12. Healthy 5G gate points: AT&T 18 of 32 gates (56%), T-Mobile 0 of 32 gates

(0%), Verizon 1 of 32 gates (3%). Gate-basis 5G medians: AT&T -95.0, T-Mobile -97.5, Verizon -97.5 dBm. Tile-basis healthy shares: AT&T 52%, T-Mobile 29%, Verizon 29% ( $n \geq 845$  tiles per carrier), a carrier-to-carrier spread of 23 points on a pool that includes apron and roadway. Over the Concourse E footprint (section 4.7): AT&T 69% healthy, median -92.0 dBm ( $n=339$ ), T-Mobile 50% healthy, median -95.0 dBm ( $n=464$ ), Verizon 53% healthy, median -95.0 dBm ( $n=379$ ); AT&T leads (share margin 17 points, median margin 3.0 dB).

Concourse F (International Terminal) hosts Delta long-haul and foreign-flag carriers (held; gates F1 to F14 on the official 2012 map; Delta Sky Club and The Club at ATL on the mezzanine level). It holds 12 of the 201 measured gate points. Strongest-5G counts: tie within 1 dB 6, AT&T 4, T-Mobile 2. Healthy 5G gate points: AT&T 2 of 12 gates (count), T-Mobile 0 of 12 gates (count), Verizon 0 of 12 gates (count). Gate-basis 5G medians: AT&T -97.1, T-Mobile -97.6, Verizon -98.5 dBm. Tile-basis healthy shares: AT&T 36%, T-Mobile 42%, Verizon 57% ( $n \geq 1,107$  tiles per carrier), a carrier-to-carrier spread of 21 points on a pool that includes apron and roadway. Over the Concourse F footprint (section 4.7): AT&T 55% healthy, median -94.0 dBm ( $n=157$ ), T-Mobile 38% healthy, median -97.0 dBm ( $n=217$ ), Verizon 36% healthy, median -99.0 dBm ( $n=166$ ); AT&T leads (share margin 17 points, median margin 3.0 dB). Over the International Terminal footprint: AT&T 49% healthy, median -96.0 dBm ( $n=49$ ), T-Mobile 27% healthy, median -97.0 dBm ( $n=60$ ), Verizon 61% healthy, median -93.0 dBm ( $n=59$ ); Verizon leads (share margin 12 points, median margin 3.0 dB).



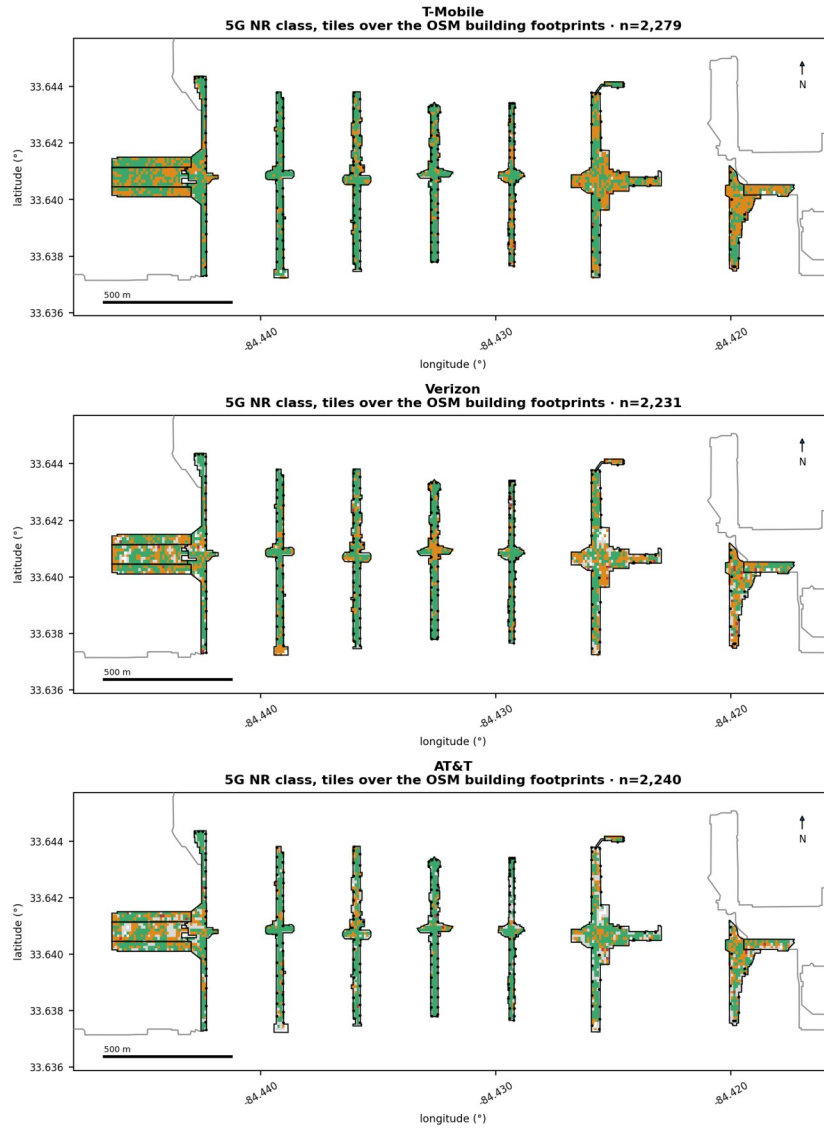
PHOTO. Concourse E, gates E1 to E12 signage, December 2023. · Photo: DiscoA340, CC BY-SA 4.0, via Wikimedia Commons



*PHOTO. Concourse F central atrium, May 2023. The International Terminal building is the weakest passenger building measured for T-Mobile and AT&T and Concourse F for Verizon (section 4.7). · Photo: Harrison Keely, CC BY 4.0, via Wikimedia Commons*

## 4.7 Building-masked view (OSM polygons)

ATL building-masked view using the OSM building-polygon mask (2025-09-01 to 2026-08-31)



| Building (OSM polygon) | T-Mobile: n · healthy · median | Verizon: n · healthy · median | AT&T: n · healthy · median |
|------------------------|--------------------------------|-------------------------------|----------------------------|
| Domestic Terminal      | 440 · 56% · -95.0 dBm          | 378 · 55% · -94.0 dBm         | 354 · 54% · -95.0 dBm      |
| Concourse T            | 256 · 70% · -93.0 dBm          | 217 · 71% · -91.0 dBm         | 203 · 70% · -92.0 dBm      |
| Concourse A            | 222 · 87% · -89.0 dBm          | 211 · 71% · -91.0 dBm         | 177 · 81% · -91.0 dBm      |
| Concourse B            | 228 · 74% · -92.0 dBm          | 208 · 71% · -91.5 dBm         | 181 · 72% · -91.0 dBm      |
| Concourse C            | 211 · 80% · -92.0 dBm          | 196 · 65% · -91.5 dBm         | 166 · 89% · -87.0 dBm      |
| Concourse D            | 150 · 60% · -93.0 dBm          | 142 · 77% · -90.5 dBm         | 119 · 87% · -88.0 dBm      |
| Concourse E            | 464 · 50% · -95.0 dBm          | 379 · 53% · -95.0 dBm         | 339 · 69% · -92.0 dBm      |
| Concourse F            | 217 · 38% · -97.0 dBm          | 166 · 36% · -99.0 dBm         | 157 · 55% · -94.0 dBm      |
| International Terminal | 60 · 27% · -97.0 dBm           | 59 · 61% · -93.0 dBm          | 49 · 49% · -96.0 dBm       |

■ healthy  $\geq -95$  dBm 
 ■ at-risk -95 to -110 
 ■ critical  $< -110$ 
■ no reading 
 — aerodrome 
 — building (OSM)

FIG. 19. Tiles whose centroid falls inside a pinned OSM passenger-building polygon (the seven concourses, the Domestic Terminal and the International Terminal), colored by 5G NR class, with the per-building per-carrier table. This is our OSM building-polygon mask, not Ookla's Indoor layer. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

| Building (OSM polygon) | AT&T: n · healthy · median 5G RSRP | T-Mobile: n · healthy · median 5G RSRP | Verizon: n · healthy · median 5G RSRP | Leader (tie-aware)                                                                           |
|------------------------|------------------------------------|----------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------|
| Domestic Terminal      | 354 · 54% · -95.0 dBm              | 440 · 56% · -95.0 dBm                  | 378 · 55% · -94.0 dBm                 | three-way tie (AT&T, T-Mobile, Verizon; top share margin 0 points, top median margin 1.0 dB) |
| Concourse T            | 203 · 70% · -92.0 dBm              | 256 · 70% · -93.0 dBm                  | 217 · 71% · -91.0 dBm                 | two-way tie (AT&T, Verizon; top share margin 1 point, top median margin 1.0 dB)              |
| Concourse A            | 177 · 81% · -91.0 dBm              | 222 · 87% · -89.0 dBm                  | 211 · 71% · -91.0 dBm                 | T-Mobile leads (share margin 6 points, median margin 2.0 dB)                                 |
| Concourse B            | 181 · 72% · -91.0 dBm              | 228 · 74% · -92.0 dBm                  | 208 · 71% · -91.5 dBm                 | three-way tie (AT&T, T-Mobile, Verizon; top share margin 2 points, top median margin 0.5 dB) |
| Concourse C            | 166 · 89% · -87.0 dBm              | 211 · 80% · -92.0 dBm                  | 196 · 65% · -91.5 dBm                 | AT&T leads (share margin 8 points, median margin 4.5 dB)                                     |
| Concourse D            | 119 · 87% · -88.0 dBm              | 150 · 60% · -93.0 dBm                  | 142 · 77% · -90.5 dBm                 | AT&T leads (share margin 11 points, median margin 2.5 dB)                                    |
| Concourse E            | 339 · 69% · -92.0 dBm              | 464 · 50% · -95.0 dBm                  | 379 · 53% · -95.0 dBm                 | AT&T leads (share margin 17 points, median margin 3.0 dB)                                    |
| Concourse F            | 157 · 55% · -94.0 dBm              | 217 · 38% · -97.0 dBm                  | 166 · 36% · -99.0 dBm                 | AT&T leads (share margin 17 points, median margin 3.0 dB)                                    |
| International Terminal | 49 · 49% · -96.0 dBm               | 60 · 27% · -97.0 dBm                   | 59 · 61% · -93.0 dBm                  | Verizon leads (share margin 12 points, median margin 3.0 dB)                                 |

*LTE over the same footprints (the graceful-degradation floor, on the leader basis):*

| Building (OSM polygon) | AT&T: n · LTE healthy · median<br>LTE RSRP | T-Mobile: n · LTE healthy ·<br>median LTE RSRP | Verizon: n · LTE healthy ·<br>median LTE RSRP |
|------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------------|
| Domestic Terminal      | 438 · 77% · -92.0 dBm                      | 436 · 49% · -96.0 dBm                          | 431 · 69% · -93.0 dBm                         |
| Concourse T            | 259 · 78% · -91.0 dBm                      | 258 · 66% · -93.0 dBm                          | 250 · 60% · -93.0 dBm                         |
| Concourse A            | 212 · 88% · -89.0 dBm                      | 215 · 72% · -91.0 dBm                          | 220 · 83% · -90.5 dBm                         |
| Concourse B            | 226 · 85% · -91.0 dBm                      | 226 · 71% · -93.0 dBm                          | 229 · 71% · -92.0 dBm                         |
| Concourse C            | 207 · 84% · -89.0 dBm                      | 210 · 72% · -91.5 dBm                          | 211 · 81% · -92.0 dBm                         |
| Concourse D            | 150 · 86% · -90.0 dBm                      | 150 · 69% · -92.0 dBm                          | 152 · 80% · -90.0 dBm                         |
| Concourse E            | 450 · 76% · -91.0 dBm                      | 453 · 71% · -92.0 dBm                          | 447 · 73% · -91.0 dBm                         |
| Concourse F            | 218 · 80% · -91.0 dBm                      | 214 · 49% · -96.0 dBm                          | 206 · 32% · -98.0 dBm                         |
| International Terminal | 61 · 85% · -90.0 dBm                       | 58 · 33% · -98.0 dBm                           | 59 · 51% · -95.0 dBm                          |

Leader rule, stated once: a carrier leads a building only when it is alone at the top on BOTH the healthy share, by more than 1 point, and the median, by more than 1 dB; otherwise every carrier within those margins of the top on either measure is tied. The rule runs on the unrounded shares and medians, so a printed 70% can sit more than 1 point from a printed 71%; the margins printed beside each verdict are the unrounded ones. The mask is a point-in-polygon test of tile centroids against the pinned OpenStreetMap footprints, so it selects tiles over the buildings rather than tiles measured inside the buildings (section 16). It is the basis on which this report names a leader, because the 80 m gate join at ATL reaches the apron on both sides of each pier: across the 201 gate points, a median of 22.4% of the tile centroids inside the join fall within a building footprint, and the highest at any gate is 68%, so a gate-area figure is mostly an outdoor apron reading (per concourse: Concourse T 21.8%, Concourse A 22.8%, Concourse B 23.2%, Concourse C 23.9%, Concourse D 15.2%, Concourse E 22.6%, Concourse F 34.2%). Every ranked cell clears the 30-tile floor. Domestic Terminal: three-way tie (AT&T, T-Mobile, Verizon; top share margin 0 points, top median margin 1.0 dB) (AT&T 54%, T-Mobile 56%, Verizon 55%). Concourse T: two-way tie (AT&T, Verizon; top share margin 1 point, top median margin 1.0 dB) (AT&T 70%, T-Mobile 70%, Verizon 71%). Concourse A: T-Mobile leads (share margin 6 points, median margin 2.0 dB) (AT&T 81%, T-Mobile 87%, Verizon 71%). Concourse B: three-way tie (AT&T, T-Mobile, Verizon; top share margin 2 points, top median margin 0.5 dB) (AT&T 72%, T-Mobile 74%, Verizon 71%). Concourse C: AT&T leads (share margin 8 points, median margin 4.5 dB) (AT&T 89%, T-Mobile 80%, Verizon 65%). Concourse D: AT&T leads (share margin 11 points, median margin 2.5 dB) (AT&T 87%, T-Mobile 60%, Verizon 77%). Concourse E: AT&T leads (share margin 17 points, median margin 3.0 dB) (AT&T 69%, T-Mobile 50%, Verizon 53%). Concourse F: AT&T leads (share margin 17 points, median margin 3.0 dB) (AT&T 55%, T-Mobile 38%, Verizon 36%). International Terminal: Verizon leads (share margin 12 points, median margin 3.0 dB) (AT&T 49%, T-Mobile 27%, Verizon 61%). Per carrier, the lowest building is AT&T International Terminal (49%); T-Mobile International Terminal (27%); Verizon Concourse F (36%), and the highest is AT&T Concourse C (89%); T-Mobile Concourse A (87%); Verizon Concourse D (77%). Over the buildings the three carriers are far closer than at the gate areas: the gate-area medians put T-Mobile and Verizon below the line at nearly every gate, yet over Domestic Terminal, Concourse T, Concourse B the three are tied and over Concourse A T-Mobile leads. That gap between the building reading and the apron reading is what an in-building system that serves the pier interiors, and hands off to the macro layer at the jet bridge, would produce; it is equally what a pier's own structure does to a mid-band macro signal. The export cannot separate the two, and Recommendation 1 asks for the record that would. Ookla's own Indoor layer is not used here (section 15).

## 4.8 What the readings mean along the passenger journey (interpretation)



PHOTO. MARTA Airport Station fare gates at the west end of the Domestic Terminal, June 2024: the first place an arriving rail passenger's handset meets the airport network. · Photo: ElToAn123, CC BY-SA 4.0, via Wikimedia Commons

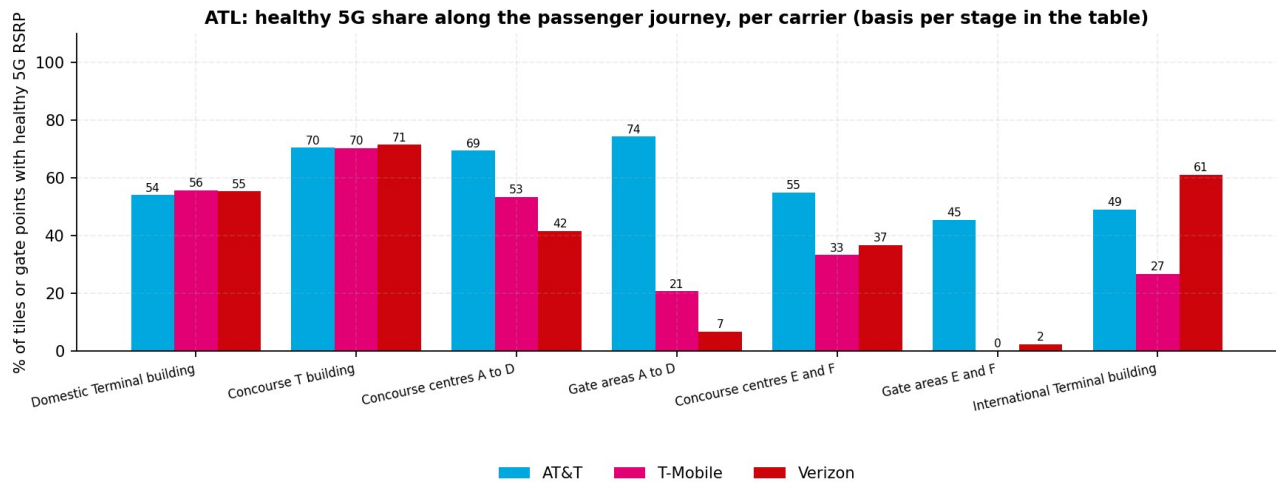


FIG. 20. Healthy 5G share per carrier at each stage of a passenger's path: the Domestic Terminal building, Concourse T, the concourse centres where the Plane Train arrives, the gate areas, and the International Terminal. The basis changes by stage (building mask, 80 m pools around the concourse centres, per-gate means) and is named in the table. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31; OpenStreetMap footprints

| Journey stage (basis)                                                                    | AT&T: healthy · median  | T-Mobile: healthy · median | Verizon: healthy · median |
|------------------------------------------------------------------------------------------|-------------------------|----------------------------|---------------------------|
| Domestic Terminal building (check-in, security, baggage claim; tiles over the footprint) | 54% · -95.0 dBm (n=354) | 56% · -95.0 dBm (n=440)    | 55% · -94.0 dBm (n=378)   |
| Concourse T building (the first pier, reached on foot from the Domestic Terminal)        | 70% · -92.0 dBm (n=203) | 70% · -93.0 dBm (n=256)    | 71% · -91.0 dBm (n=217)   |
| Concourse centres A to D (Plane Train station and                                        | 69% · -91.0 dBm         | 53% · -95.0 dBm            | 42% · -97.0 dBm           |

| central node, tiles within 80 m of the centre)                                                  | (n=392)                 | (n=730)                 | (n=672)                 |
|-------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|
| Gate areas A to D (per-gate means, 80 m join, mostly apron)                                     | 74% · -92.7 dBm (n=136) | 21% · -96.2 dBm (n=136) | 7% · -97.5 dBm (n=136)  |
| Concourse centres E and F (Plane Train station and central node)                                | 55% · -94.0 dBm (n=182) | 33% · -97.0 dBm (n=370) | 37% · -98.0 dBm (n=226) |
| Gate areas E and F (per-gate means, 80 m join)                                                  | 45% · -95.3 dBm (n=44)  | 0% · -97.5 dBm (n=44)   | 2% · -98.0 dBm (n=44)   |
| International Terminal building (international check-in and arrivals; tiles over the footprint) | 49% · -96.0 dBm (n=49)  | 27% · -97.0 dBm (n=60)  | 61% · -93.0 dBm (n=59)  |



PHOTO. Domestic Terminal baggage claim, carousel 8, August 2024. · Photo: Vmzp85, CC BY-SA 4.0, via Wikimedia Commons

Read this as a walk, not a leader board; every number is a crowdsourced tile aggregate and the basis changes by stage. A departing domestic passenger starts in the Domestic Terminal building, where the three carriers are within 2 points of each other (AT&T 54%, T-Mobile 56%, Verizon 55% of tiles healthy) and every median sits at or near the line, so check-in, security and baggage claim are a middling but even experience whatever the handset. The Plane Train delivers the passenger to a concourse centre, where over the A to D centre pools AT&T 69%, T-Mobile 53%, Verizon 42% of tiles are healthy. Inside the piers the building footprints are the reading that applies to a hold room: over Concourses A to D the healthy shares run AT&T 72 to 89%, T-Mobile 60 to 87%, Verizon 65 to 77% (section 4.7), so a passenger of any carrier seated in a domestic pier is more likely than not above the healthy line, and where a carrier trails it trails by building (AT&T lowest over Concourse B at 72%, T-Mobile lowest over Concourse D at 60%, Verizon lowest over Concourse C at 65%). The apron side of the jet bridge is where the carriers separate: on the 80 m gate join, a median 22.4% of which sits over a building, AT&T 74%, T-Mobile 21%, Verizon 7% of the A to D gate points are healthy, so the moment a T-Mobile or Verizon handset moves from the hold room onto the jet bridge and the aircraft door it is more likely than not to be below the line on 5G, while an AT&T handset is not. On the international side the walk is weaker at every stage: over the E and F centre pools AT&T 55%, T-Mobile 33%, Verizon 37%; over the Concourse F footprint AT&T 55%, T-Mobile 38%, Verizon 36%; over the International Terminal building AT&T 49%, T-Mobile 27%, Verizon 61%, where Verizon is the one carrier above half and T-Mobile the lowest; and on the E and F gate joins AT&T 45%, T-Mobile 0%, Verizon 2% of gate points. The LTE layer is the

floor: over the building footprints LTE is healthy on AT&T 76 to 88%, T-Mobile 33 to 72%, Verizon 32 to 83% of tiles (section 4.7), so the fall-back inside the piers holds for every carrier and thins on the apron, where the gate-point LTE medians are AT&T -92.4, T-Mobile -95.8, Verizon -96.4 dBm (section 9.2 gives service availability).

## 5. Tenant level

The 284 mapped points come from a Google Places and OpenStreetMap capture pinned 2026-09-21 (Google Places (New) + OSM) (points only). Category point counts sit at or below the 30-point floor for most categories. Category comparisons therefore run on the tile basis behind each category's points: tiles within 80 m of any point, deduplicated. Point counts appear on every axis.

### 5.1 Category signal strength and quality

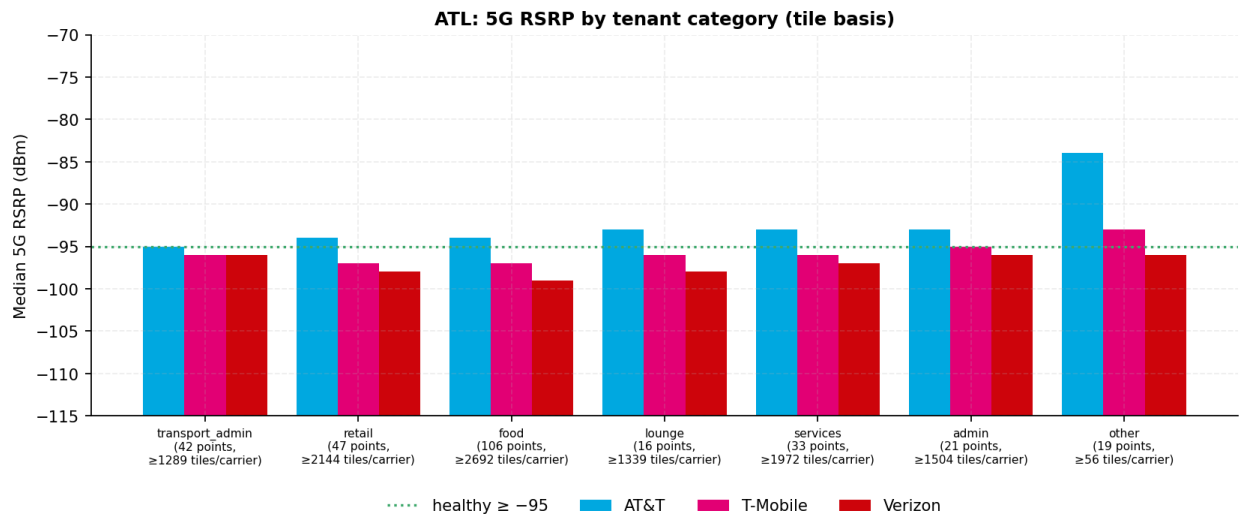


FIG. 21. Median 5G RSRP by tenant category (tile basis; points and minimum tiles per carrier on the axis). Bars rise from -115 dBm, so a longer bar is a stronger signal. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

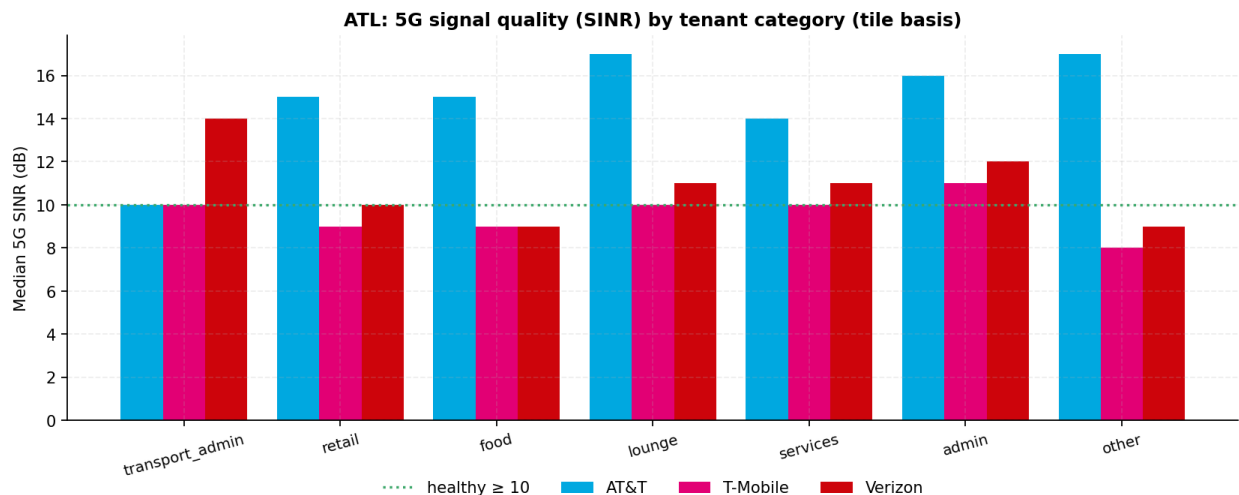


FIG. 22. Median 5G SINR by tenant category (tile basis). · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

Ranked categories clear the floor for every carrier: transport\_admin, retail, food, lounge, services, admin, other. Carrier-to-carrier spread per category on the tile median: transport\_admin 1 dB, retail 4 dB, food 5 dB, lounge 5 dB, services 4 dB, admin 3 dB, other 12 dB. Spreads at or under 1 dB are not

rankings, and tile RSRP is integer-valued, so a category ordering is not published here. Read the chart as a pattern; every category pool includes apron and roadway tiles.

## 5.2 Terminal vs periphery RSRP proxy

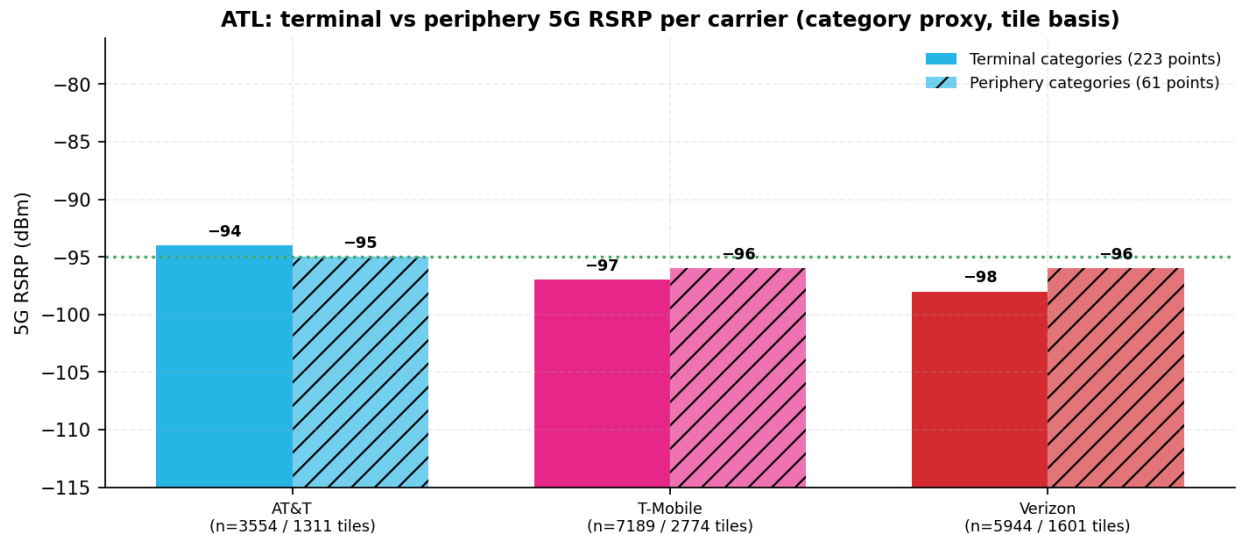


FIG. 23. Per-carrier median 5G RSRP, terminal tenant categories vs periphery categories, on the tile basis. Proxy: category-based masking, not Ookla's building-polygon indoor mask (queued, section 15). Bars rise from  $-115$  dBm, so a longer bar is a stronger signal. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

- AT&T: periphery  $-95.0$  dBm ( $n=1,311$  tiles behind 61 points), terminal  $-94.0$  dBm ( $n=3,554$  tiles behind 223 points), periphery minus terminal  $-1.0$  dB
- T-Mobile: periphery  $-96.0$  dBm ( $n=2,774$  tiles behind 61 points), terminal  $-97.0$  dBm ( $n=7,189$  tiles behind 223 points), periphery minus terminal  $+1.0$  dB
- Verizon: periphery  $-96.0$  dBm ( $n=1,601$  tiles behind 61 points), terminal  $-98.0$  dBm ( $n=5,944$  tiles behind 223 points), periphery minus terminal  $+2.0$  dB

Terminal categories cover the concessions, lounges and services inside the concourse and terminal footprints; periphery categories cover the parking decks and lots, the hotel and the fire stations. A large positive periphery-minus-terminal delta is consistent with macro spillover. A negative delta, where the terminal categories read stronger than the periphery, is consistent with an in-building source serving the concourses. Distance to macro sites confounds both readings; section 9.3 places the estimated sites. Deltas: AT&T  $-1.0$  dB, T-Mobile  $+1.0$  dB, Verizon  $+2.0$  dB. Tile RSRP is integer-valued, so medians and deltas quantize to whole dB.

## 5.3 Airline gate clusters

| Concourse: airlines (held)                                                                        | Gate points (n) | AT&T median 5G RSRP, dBm (tile n) | T-Mobile median 5G RSRP, dBm (tile n) | Verizon median 5G RSRP, dBm (tile n) |
|---------------------------------------------------------------------------------------------------|-----------------|-----------------------------------|---------------------------------------|--------------------------------------|
| Concourse T (Domestic Terminal complex): American, United and Delta, with other domestic carriers | 21              | $-95.0$ ( $n=2518$ )              | $-97.0$ ( $n=4995$ )                  | $-99.0$ ( $n=3403$ )                 |
| Concourse A (Domestic Terminal complex): Delta Air Lines                                          | 29              | $-96.0$ ( $n=612$ )               | $-98.0$ ( $n=1696$ )                  | $-100.0$ ( $n=1535$ )                |
| Concourse B (Domestic Terminal complex): Delta Air Lines                                          | 32              | $-96.0$ ( $n=539$ )               | $-100.0$ ( $n=1829$ )                 | $-100.0$ ( $n=1554$ )                |
| Concourse C (Domestic Terminal complex): Delta Connection and Southwest Airlines                  | 34              | $-93.0$ ( $n=387$ )               | $-99.0$ ( $n=1514$ )                  | $-100.0$ ( $n=1259$ )                |

|                                                                                                |    |                |                |                 |
|------------------------------------------------------------------------------------------------|----|----------------|----------------|-----------------|
| <b>Concourse D (Domestic Terminal complex):<br/>Delta Air Lines</b>                            | 41 | -94.0 (n=440)  | -99.0 (n=1548) | -102.0 (n=1361) |
| <b>Concourse E (International Terminal complex): Delta and international carriers</b>          | 32 | -95.0 (n=845)  | -99.0 (n=2595) | -100.0 (n=2068) |
| <b>Concourse F (International Terminal complex): Delta long-haul and foreign-flag carriers</b> | 12 | -99.0 (n=1107) | -97.0 (n=3283) | -93.0 (n=1895)  |

An airline reads its exposure through its concourse and the passenger's carrier. The concourse column is the airline set the airport's published concourse guide places there; a per-airline gate assignment is not held, so the rows are concourse groupings, not airline-specific measurements. Read the medians with the margins shown: margins at or under 1 dB are not rankings, tile RSRP is integer-valued, and the pool behind each row includes apron and roadway.

## 5.4 Retail and food brand coverage

| Brand (2 or more points) | Points (n) | AT&T median 5G RSRP (dBm, class, tiles) | T-Mobile median 5G RSRP (dBm, class, tiles) | Verizon median 5G RSRP (dBm, class, tiles) |
|--------------------------|------------|-----------------------------------------|---------------------------------------------|--------------------------------------------|
| Starbucks                | 6          | -91.9 (healthy, n=917)                  | -95.5 (at-risk, n=1020)                     | -96.5 (at-risk, n=952)                     |
| Chick-fil-A              | 2          | -91.7 (healthy, n=316)                  | -93.0 (healthy, n=357)                      | -95.8 (at-risk, n=348)                     |
| Popeyes                  | 3          | -93.7 (healthy, n=544)                  | -96.9 (at-risk, n=570)                      | -97.8 (at-risk, n=569)                     |
| Dunkin                   | 3          | -94.3 (healthy, n=529)                  | -95.7 (at-risk, n=563)                      | -97.7 (at-risk, n=542)                     |
| TGI Friday               | 3          | -93.1 (healthy, n=525)                  | -96.4 (at-risk, n=551)                      | -96.5 (at-risk, n=528)                     |
| Auntie Anne              | 3          | -91.9 (healthy, n=499)                  | -96.2 (at-risk, n=531)                      | -97.4 (at-risk, n=548)                     |
| Five Guys                | 2          | -91.1 (healthy, n=309)                  | -94.7 (healthy, n=358)                      | -95.7 (at-risk, n=342)                     |
| McDonald                 | 2          | -93.8 (healthy, n=366)                  | -95.7 (at-risk, n=388)                      | -96.2 (at-risk, n=366)                     |
| Burger King              | 2          | -95.2 (at-risk, n=371)                  | -96.5 (at-risk, n=382)                      | -95.7 (at-risk, n=363)                     |
| Caribou Coffee           | 2          | -96.0 (at-risk, n=336)                  | -97.7 (at-risk, n=355)                      | -99.7 (at-risk, n=346)                     |
| Qdoba                    | 2          | -92.5 (healthy, n=385)                  | -95.2 (at-risk, n=391)                      | -94.3 (healthy, n=368)                     |
| Asian Chao               | 2          | -94.1 (healthy, n=327)                  | -96.8 (at-risk, n=359)                      | -97.7 (at-risk, n=358)                     |
| Hudson                   | 4          | -95.5 (at-risk, n=402)                  | -96.9 (at-risk, n=479)                      | -97.9 (at-risk, n=406)                     |
| InMotion                 | 5          | -93.8 (healthy, n=883)                  | -95.6 (at-risk, n=941)                      | -97.0 (at-risk, n=899)                     |
| Tumi                     | 2          | -93.7 (healthy, n=366)                  | -97.5 (at-risk, n=384)                      | -96.5 (at-risk, n=352)                     |

Multi-location brands are a cross-zone consistency check, not a comparison: point counts are small (6 at most), so no carrier ordering is read from this table and every cell carries its coverage class so a sub-healthy value cannot pass unmarked. 30 of the 45 cells sit below the healthy line: Starbucks (T-Mobile), Starbucks (Verizon), Chick-fil-A (Verizon), Popeyes (T-Mobile), Popeyes (Verizon), Dunkin (T-Mobile), Dunkin (Verizon), TGI Friday (T-Mobile), TGI Friday (Verizon), Auntie Anne (T-Mobile), and others. Each point value is a mean over the tiles within 80 m of the point (per-point tile n in Appendix A).

## 5.5 Airline and premium lounges present in the pinned capture

| Lounge point                              | Zone        | AT&T 5G RSRP (class, n tiles) | T-Mobile 5G RSRP (class, n tiles) | Verizon 5G RSRP (class, n tiles) |
|-------------------------------------------|-------------|-------------------------------|-----------------------------------|----------------------------------|
| Admirals Club                             | Concourse T | -94.6 dBm (healthy, n=185)    | -95.2 dBm (at-risk, n=186)        | -97.3 dBm (at-risk, n=171)       |
| Delta Sky Club (Concourse T)              | Concourse T | -95.4 dBm (at-risk, n=186)    | -97.6 dBm (at-risk, n=191)        | -100.0 dBm (at-risk, n=182)      |
| USO Hartsfield-Jackson Atlanta Internati  | Concourse T | -92.8 dBm (healthy, n=189)    | -93.8 dBm (healthy, n=192)        | -90.8 dBm (healthy, n=188)       |
| United Club                               | Concourse T | -95.5 dBm (at-risk, n=174)    | -94.9 dBm (healthy, n=179)        | -97.1 dBm (at-risk, n=157)       |
| Delta Sky Club (Concourse A near Gate A1) | Concourse A | -92.7 dBm (healthy, n=190)    | -94.3 dBm (healthy, n=193)        | -96.3 dBm (at-risk, n=193)       |
| Minute Suites - ATL B24                   | Concourse B | -92.3 dBm (healthy, n=178)    | -96.6 dBm (at-risk, n=187)        | -98.0 dBm (at-risk, n=185)       |
| Delta Sky Club (Concourse C)              | Concourse C | -91.9 dBm (healthy, n=173)    | -95.3 dBm (at-risk, n=193)        | -97.4 dBm (at-risk, n=185)       |
| Delta Sky Club (Concourse D)              | Concourse D | -90.4 dBm (healthy, n=173)    | -95.5 dBm (at-risk, n=193)        | -95.8 dBm (at-risk, n=185)       |

|                                         |             |                            |                            |                            |
|-----------------------------------------|-------------|----------------------------|----------------------------|----------------------------|
|                                         |             | n=174)                     | n=175)                     | n=174)                     |
| Delta Skyclub Lounge                    | Concourse D | -91.9 dBm (healthy, n=140) | -97.0 dBm (at-risk, n=165) | -97.7 dBm (at-risk, n=168) |
| American Express Centurion Lounge       | Concourse E | -91.8 dBm (healthy, n=182) | -97.4 dBm (at-risk, n=191) | -97.5 dBm (at-risk, n=182) |
| Delta Sky Club (Concourse E)            | Concourse E | -93.6 dBm (healthy, n=169) | -98.1 dBm (at-risk, n=193) | -99.7 dBm (at-risk, n=184) |
| Delta Skyclub Lounge                    | Concourse E | -92.1 dBm (healthy, n=161) | -97.6 dBm (at-risk, n=191) | -99.1 dBm (at-risk, n=174) |
| Minute Suites ATL – Concourse E, Atrium | Concourse E | -92.1 dBm (healthy, n=182) | -96.6 dBm (at-risk, n=188) | -96.4 dBm (at-risk, n=174) |
| Delta Sky Club (Concourse F)            | Concourse F | -95.7 dBm (at-risk, n=186) | -98.0 dBm (at-risk, n=187) | -98.1 dBm (at-risk, n=182) |
| Minute Suites ATL - Concourse F         | Concourse F | -96.7 dBm (at-risk, n=150) | -97.0 dBm (at-risk, n=186) | -98.9 dBm (at-risk, n=135) |
| The Club at ATL                         | Concourse F | -94.7 dBm (healthy, n=192) | -97.0 dBm (at-risk, n=193) | -96.1 dBm (at-risk, n=189) |

16 lounge points are in the pinned capture after the hygiene pass refilled the airline and card-issuer lounges the capture had listed as food or restaurant: Admirals Club, American Express Centurion Lounge, Delta Sky Club (Concourse A near Gate A17), Delta Sky Club (Concourse C), Delta Sky Club (Concourse D), Delta Sky Club (Concourse E), Delta Sky Club (Concourse F), Delta Sky Club (Concourse T), Delta Skyclub Lounge, Minute Suites - ATL B24, Minute Suites ATL - Concourse F, Minute Suites ATL – Concourse E, Atrium, The Club at ATL, USO Hartsfield-Jackson Atlanta International Airport, United Club. These are single-point aggregates over the tiles within 80 m of each point, reported for scope and not ranked. Across the 16 points the healthy count is AT&T 12, T-Mobile 3, Verizon 1 and the median across points is AT&T -92.8 dBm, T-Mobile -96.8 dBm, Verizon -97.5 dBm. Lounge names are printed as the capture spells them. A lounge is a place a passenger sits for an hour with a laptop, so section 5.6 reads these together with the Wi-Fi figures.

## 5.6 What the readings mean for tenants (interpretation)

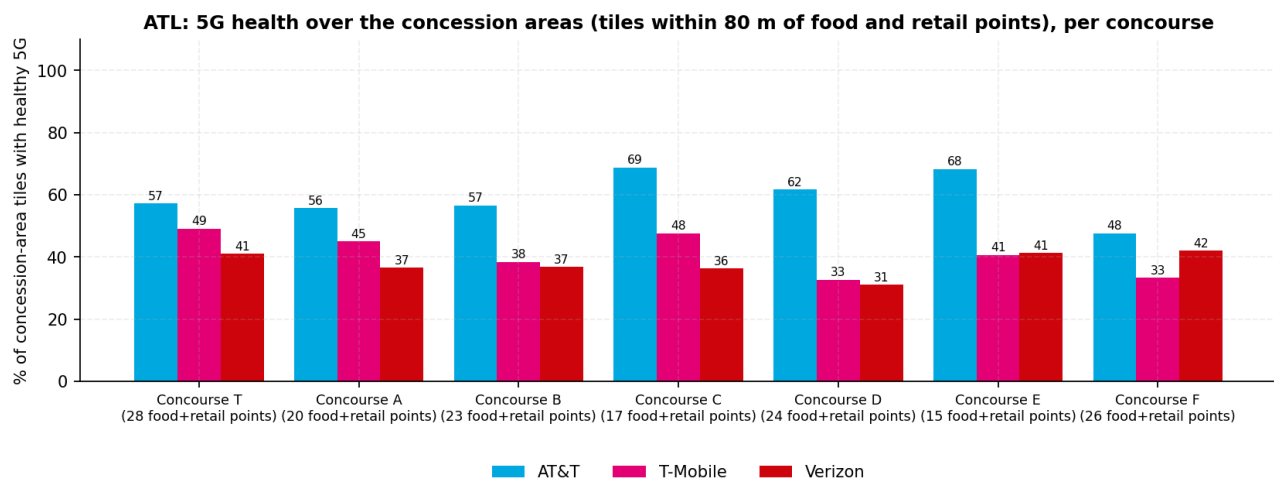


FIG. 24. Share of tiles with healthy 5G within 80 m of the food and retail points in each concourse, per carrier, with the point count per concourse on the axis. The pools sit over the concourse centres and the pier interiors, where the concessions are. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31; OpenStreetMap venue points

| Concourse (concessions)             | AT&T: healthy · median 5G | T-Mobile: healthy · median 5G | Verizon: healthy · median 5G | Device density around the concessions (12 months)                                          |
|-------------------------------------|---------------------------|-------------------------------|------------------------------|--------------------------------------------------------------------------------------------|
| Concourse T (28 food+retail points) | 57% · -94.0 dBm (n=1,036) | 49% · -96.0 dBm (n=1,532)     | 41% · -98.0 dBm (n=1,220)    | median 20 unique devices per tile over 1,664 usage tiles (53,777 device-tile observations) |

|                                            |                            |                              |                             |                                                                                            |
|--------------------------------------------|----------------------------|------------------------------|-----------------------------|--------------------------------------------------------------------------------------------|
| <b>Concourse A (20 food+retail points)</b> | 56% · -95.0 dBm<br>(n=478) | 45% · -97.0 dBm<br>(n=1,029) | 37% · -98.0 dBm<br>(n=946)  | median 12 unique devices per tile over 1,242 usage tiles (32,595 device-tile observations) |
| <b>Concourse B (23 food+retail points)</b> | 57% · -94.0 dBm<br>(n=405) | 38% · -98.0 dBm<br>(n=1,035) | 37% · -99.0 dBm<br>(n=927)  | median 11 unique devices per tile over 1,237 usage tiles (31,440 device-tile observations) |
| <b>Concourse C (17 food+retail points)</b> | 69% · -91.0 dBm<br>(n=279) | 48% · -96.0 dBm<br>(n=800)   | 36% · -99.0 dBm<br>(n=678)  | median 8 unique devices per tile over 997 usage tiles (23,395 device-tile observations)    |
| <b>Concourse D (24 food+retail points)</b> | 62% · -92.0 dBm<br>(n=284) | 33% · -98.0 dBm<br>(n=820)   | 31% · -101.0 dBm<br>(n=757) | median 11 unique devices per tile over 1,011 usage tiles (24,238 device-tile observations) |
| <b>Concourse E (15 food+retail points)</b> | 68% · -92.0 dBm<br>(n=271) | 41% · -97.0 dBm<br>(n=462)   | 41% · -97.5 dBm<br>(n=334)  | median 17 unique devices per tile over 497 usage tiles (15,062 device-tile observations)   |
| <b>Concourse F (26 food+retail points)</b> | 48% · -96.0 dBm<br>(n=372) | 33% · -98.0 dBm<br>(n=714)   | 42% · -97.0 dBm<br>(n=467)  | median 10 unique devices per tile over 812 usage tiles (25,205 device-tile observations)   |

For a concessionaire the question is not which carrier wins but whether a customer at the counter, and the point-of-sale device behind it, has a usable signal on whatever network they carry. The concession areas sit at the concourse centres and along the pier interiors, so on the tile basis behind the food and retail points the healthy shares are Concourse T AT&T 57%, T-Mobile 49%, Verizon 41%; Concourse A AT&T 56%, T-Mobile 45%, Verizon 37%; Concourse B AT&T 57%, T-Mobile 38%, Verizon 37%; Concourse C AT&T 69%, T-Mobile 48%, Verizon 36%; Concourse D AT&T 62%, T-Mobile 33%, Verizon 31%; Concourse E AT&T 68%, T-Mobile 41%, Verizon 41%; Concourse F AT&T 48%, T-Mobile 33%, Verizon 42%. Ranked on the per-tile median unique-device count around the concessions (the sum over tiles counts a device once per tile it crosses, scales with the number of tiles, and is not used to rank), Concourse T carries the densest concession floor (median 20 devices per tile), and Concourse D is where the weakest carrier's share over the concessions is lowest (31%). Three practical readings follow, each an inference from crowdsourced tiles and not a site survey, and each on the building basis of section 4.7. First, over the Concourse F footprint a T-Mobile or Verizon customer's 5G is below the healthy line more often than not (38% and 36% of tiles healthy), so a tenant there should expect payment terminals, order-ahead pickups and loyalty apps on those networks to lean on Wi-Fi or on the LTE floor, which over the same footprint is healthy on AT&T 80%, T-Mobile 49%, Verizon 32% of tiles; in the International Terminal building Verizon is the one carrier above half (61%) and T-Mobile the lowest (27%), so the same caution there applies to T-Mobile and AT&T customers. Over the domestic piers every carrier is above half on the building basis, and the offload share in each zone (section 7) is the measure of how much traffic already rides Wi-Fi. Second, the lounges (section 5.5) are the highest-dwell tenant spaces on the campus, and their per-carrier readings are the ones to walk-test first, because a lounge customer notices a bad hour in a way a passenger buying a coffee does not. Third, the tenant-level Wi-Fi footprint (section 7.2) shows Wi-Fi observed at every mapped point in every category, so the augmentation layer already exists at the concessions; what is not held is which of it is the public network and which is tenant-owned, and the controller telemetry in section 15 is what would answer it.

## 6. Load and density



PHOTO. Domestic Terminal South upper-level departures curb, October 2025, inside the window. · Photo: Mccunicano, CC BY-SA 4.0, via Wikimedia Commons

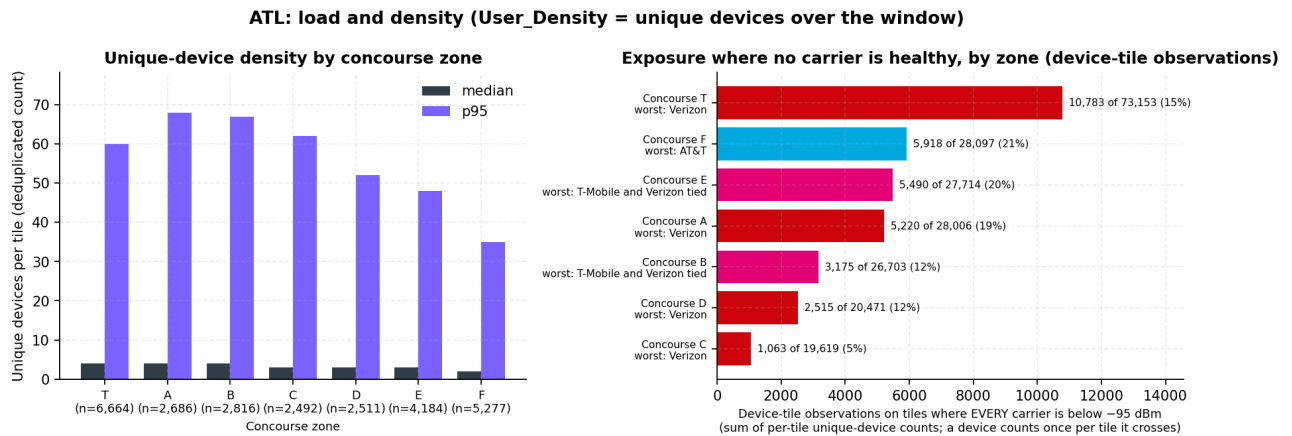


FIG. 25. Left: unique-device density by concourse zone (median and 95th percentile per tile; User\_Density = unique devices per tile over the window, deduplicated within the tile). Right: device-tile observations on tiles where every carrier is below the healthy line, counted only over tiles where all three carriers report 5G, with that denominator shown. A sum over tiles counts a device once per tile it crosses, so it scales with the zone's tile count and is not a count of unique devices. · Source: Ookla Cell Analytics All Networks usage export, 2025-09-01 to 2026-08-31

Density is this dataset's demand signal. Ookla's User\_Density field counts the unique Android devices observed per tile over the window, deduplicated. It does not count simultaneous users and it does not measure time spent. Zone medians: Concourse T 4 (p95 60, n=6,664), Concourse A 4 (p95 68, n=2,686), Concourse B 4 (p95 67, n=2,816), Concourse C 3 (p95 62, n=2,492), Concourse D 3 (p95 52, n=2,511), Concourse E 3 (p95 48, n=4,184), Concourse F 2 (p95 35, n=5,277). The on-airport median is 2 devices per tile across 44,155 usage tiles.

The right panel puts weak signal and demand in one quantity with one unit. For each zone it sums the per-tile User\_Density over the tiles where EVERY carrier reporting 5G on that tile is below -95.0 dBm. The unit is device-tile observations: a device is counted once per tile it crosses, so the sum scales with the zone's tile count, it is not a count of unique devices and not a passenger count, and it is printed with its denominator rather than as an index. Only tiles on which all three carriers report are counted, and the denominator is printed beside each bar. The usage and radio panels are separate exports on the same tile grid and are joined tile to tile, never on a coarser cell, because a coarse join takes the worst reading anywhere within about 110 m and saturates. Result: Concourse T 10,783 device-tile observations of 73,153 (15%), Concourse F 5,918 device-tile observations of 28,097 (21%), Concourse E 5,490 device-tile observations of 27,714 (20%), Concourse A 5,220 device-tile observations of 28,006 (19%), Concourse B 3,175 device-tile observations of 26,703 (12%), Concourse D 2,515 device-tile observations of 20,471 (12%), Concourse C 1,063 device-tile observations of 19,619 (5%). The Concourse T zone also holds the Domestic Terminal landside (the hourly and daily decks, the economy lots and the MARTA station), which is why it carries the most usage tiles and the largest sum. Concourse T and Concourse F hold 49% of the venue's exposure on this measure, which is what makes them the first two places to re-measure (section 13). The worst carrier per zone is Verizon in Concourse T; AT&T in Concourse F; T-Mobile and Verizon tied in Concourse E; Verizon in Concourse A; T-Mobile and Verizon tied in Concourse B; Verizon in Concourse D; Verizon in Concourse C (a below-healthy margin under 1 point is a tie).

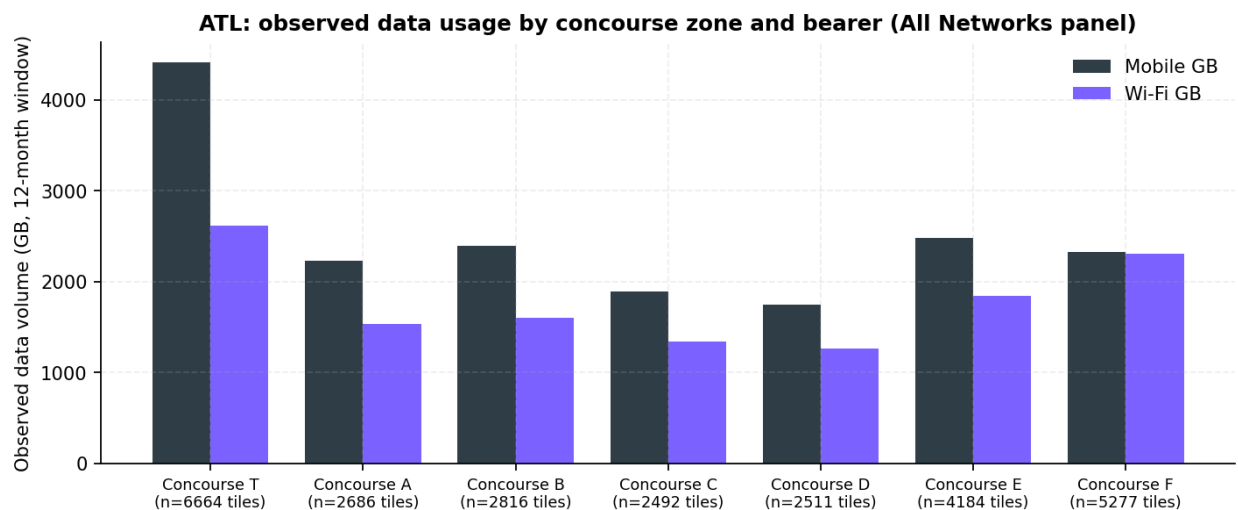


FIG. 26. Observed data volume by concourse zone and bearer (GB over the 12-month window). · Source: Ookla Cell Analytics All Networks usage export, 2025-09-01 to 2026-08-31

Usage volume shows where bandwidth is consumed, by bearer and by zone. It is observed sample volume from the crowdsourcing panel. It is not total traffic.

## 7. Wi-Fi as an augmentation layer

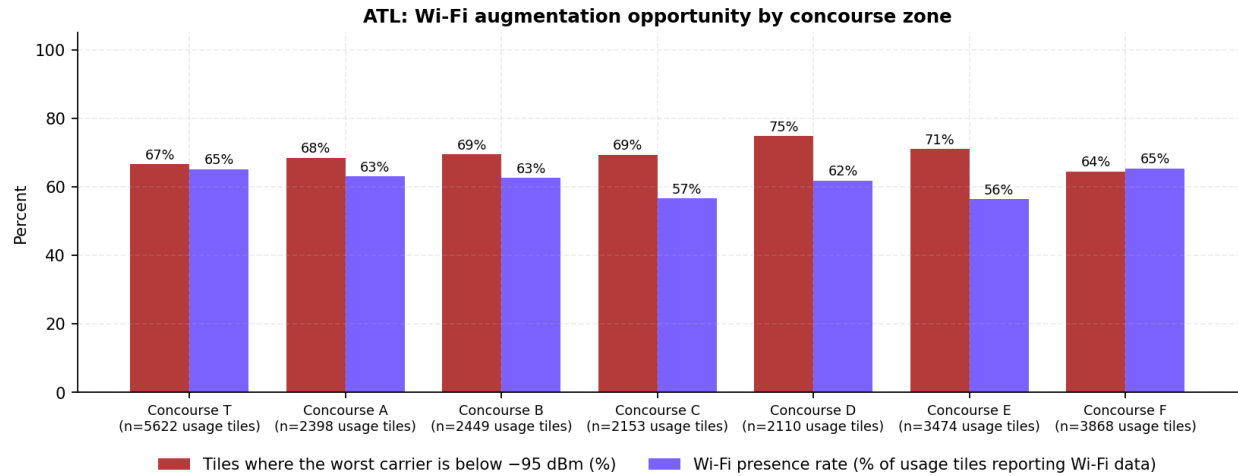


FIG. 27. By concourse zone: the share of tiles where the **WEAKEST** carrier is below the healthy line, beside the Wi-Fi presence rate. Both bars point the same way, so a tall red bar with a tall purple bar is a zone where Wi-Fi is already carrying the gap. Zone n counts usage tiles that report the Wi-Fi field, so it is smaller than the density n in FIG. 25. · Source: Ookla Cell Analytics All Networks usage export, 2025-09-01 to 2026-08-31

Wi-Fi presence (a different figure from the offload share): Wi-Fi usage is observed on 58.4% of the 34,322 on-airport usage tiles that report the Wi-Fi field. A non-reporting tile means no measurement and is excluded from the denominator; it is not evidence of no Wi-Fi. The augmentation opportunity is largest where the worst-served carrier is weakest and Wi-Fi presence is high, which at this venue is every concourse.

### 7.1 Offload share (venue and zone level only)

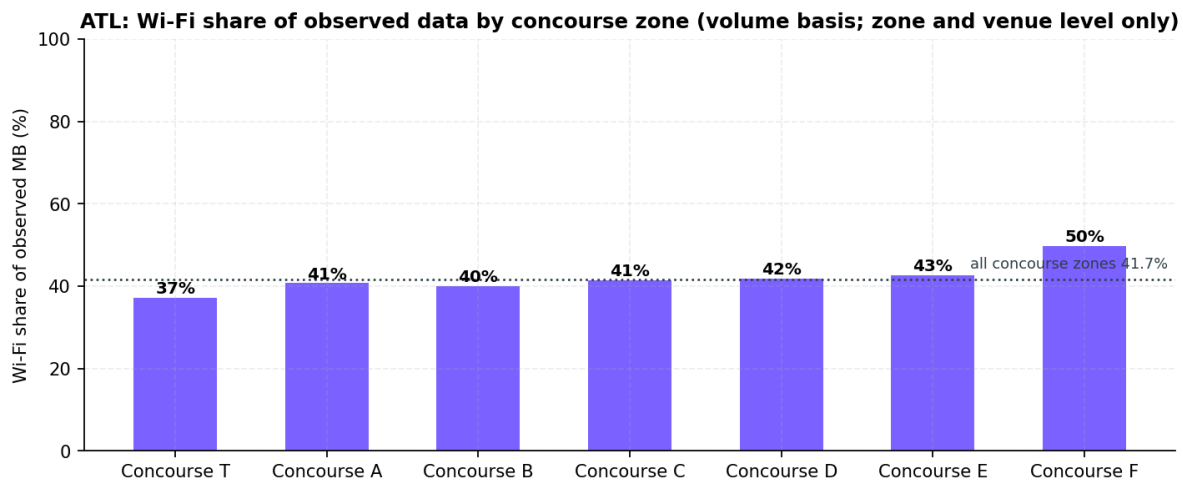


FIG. 28. Wi-Fi share of observed data volume by concourse zone, with the venue reference line. · Source: Ookla Cell Analytics All Networks usage export, 2025-09-01 to 2026-08-31

On tiles assigned to a concourse zone, 41.7% of observed data volume moves over Wi-Fi ( $\sum \text{Wi-Fi MB} \div \sum \text{all MB}$  on the All Networks panel,  $n=26,630$  tiles); over the whole clip the figure is 42.5% ( $n=44,155$ ). Locked rule (section 16): offload is computed at venue and zone level only. The export does not attribute Wi-Fi usage to any cellular carrier's subscribers, so per-carrier offload is not derivable and not implied. The figure blends the public network with tenant, airline lounge, hotel, and personal networks.

Scope decomposition: the 17,525 usage tiles outside every zone run 52.4% Wi-Fi. The 200 m buffer around the aerodrome captures the parking decks, the rental-car and hotel approaches, the cargo aprons and roadway; those are not concourse tiles, which is why the concourse-zone figure is the one on the cover.

## 7.2 Tenant-level Wi-Fi footprint

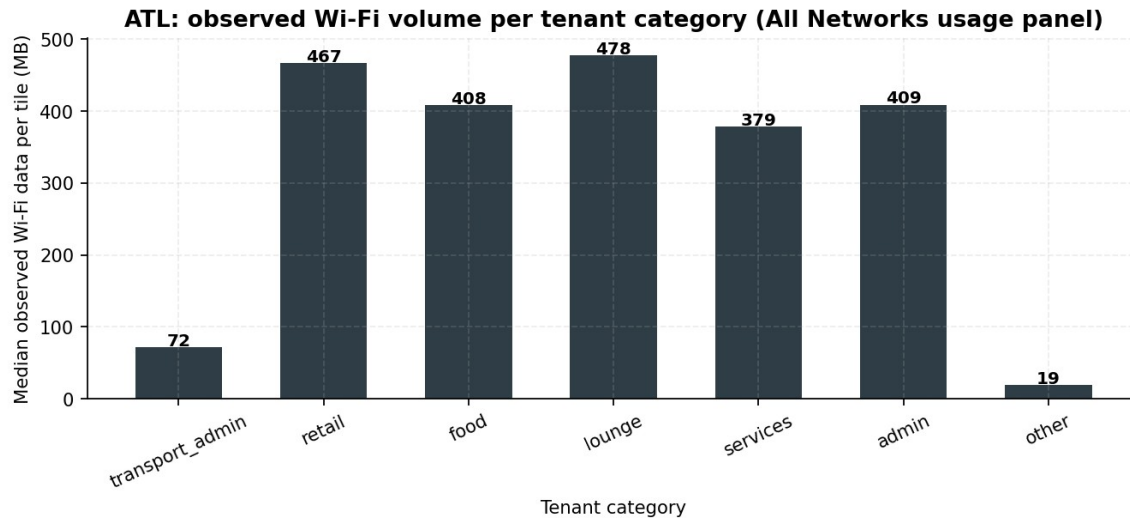


FIG. 29. Median observed Wi-Fi data volume per tile behind each tenant category. The companion presence-rate chart is not drawn because presence is at or near 100% in every category; the rates and point counts are in the text. · Source: Ookla Cell Analytics All Networks usage export, 2025-09-01 to 2026-08-31

Wi-Fi presence by category: transport\_admin 100% of 35 points, retail 100% of 47 points, food 100% of 106 points, lounge 100% of 16 points, services 100% of 32 points, admin 100% of 21 points, other 100% of 13 points. Presence does not discriminate between categories here; what differs is volume, which the figure shows.

Wi-Fi presence and observed volume peak where passengers spend time. The public network is ATL Free Wi-Fi (operated by the airport on its own network, launched free in June 2014 with several hundred access points installed by airport information-technology staff and contractors at a City-approved cost of \$5,622,249; no third-party Wi-Fi concessionaire was found in the public record and the current equipment generation is not held; held); the Wi-Fi figures here come solely from the Ookla usage layer. Controller telemetry (section 15) would convert presence into capacity.

## 8. Private wireless and the in-building layer

Hartsfield-Jackson runs an airport-owned neutral-host distributed antenna system (DAS) that carries the carriers' signals over a common infrastructure, first commissioned in 2010 with more than 700 antennas across the terminal, atrium, concourses and the underground transportation mall and a separate layer for public-safety radio (held). On May 19, 2025 the Atlanta City Council approved carrier agreements for a replacement DAS, with signed agreements from T-Mobile and AT&T, and the airport scheduled completion for January 2026, inside this window, so the window blends the end-of-life legacy system and the new one (held). The airport states that the replacement moves the system from 4G to 5G service on a neutral-host design that can distribute any future carrier's signal, and upgrades the radio distribution used by public-safety personnel (held). The reconciled Airport DAS Master (2026-07-28)

records ATL as DAS: yes, self-owned: yes, neutral host: yes, operator unknown, equipment integrator Johnson Controls, contract term 2018 to 2022 at year precision, with a field note of a 50 million dollar project installed by Johnson Controls and SMS that was due to expire in 2022; the graph also holds a neutral-host DAS deployment row dated 2025 with no vendor recorded, and the airport's FY2025 annual comprehensive financial report names a Distributed Antenna System Upgrade among its major capital projects with no dollar figure attached, and the City's FY2026 adopted budget book carries no individual DAS, Wi-Fi or cellular line (Imagine knowledge graph); the graph names the integrator of the 2018 system, not of the 2025 replacement, so it narrows none of the open items. Items not held at this issue, each stated once here and asked for in Recommendation 1: the integrator and equipment vendor of the replacement system and the City Council file for the May 19, 2025 carrier agreements; Verizon's participation in the new system (Verizon is not named in the 2025 release; it was on the 2010 system); the actual per-building cutover dates against the January 2026 target, and which buildings were live on the new system during this window; the International Terminal and Concourse F cellular architecture, which the airport's technology leadership described in November 2025 as different from the rest of the campus. Everything measured in this report stands without them; what they decide is what the after reading is measured against.

No public record of a Citizens Broadband Radio Service, private LTE or private 5G network at the airport was located; the airport's public-safety radio rides a separate layer of the airport-owned DAS, and the 2025 replacement upgrades that layer (not independently verified). The Ookla drop for this window also contained a separate five-tile export labelled with a CBRS operator; five tiles is below the 30-tile floor and it is held in the audit dossier as a count, not surfaced here. The public Ookla layer does not characterize private networks. AT&T's FirstNet Band 14 (LTE700PS) appears on 2,085 AT&T LTE tiles (section 9.1). The table below is illustrative, not a finding; it lists typical large-hub workloads and the parties such a program would involve; nothing in the data supports or selects any row.

| Workload                                                    | Why a private network fits                                            | Coordination required                                                           |
|-------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Baggage handling system instrumentation                     | Deterministic latency, contained RF, isolation from passenger traffic | Department of Aviation, baggage system vendors                                  |
| Ramp and ground-service vehicle telematics                  | Outdoor airside coverage with controlled SIM provisioning             | Airside operations, Delta ramp operations                                       |
| Push-to-talk and operational voice                          | Guaranteed-quality voice independent of public carriers               | Atlanta Police Department Airport Section, Atlanta Fire Rescue, ground handlers |
| Fixed cameras and IoT in non-public areas                   | Bandwidth without consuming public-carrier capacity                   | Facilities maintenance                                                          |
| Construction-phase connectivity (Concourse D modernization) | Coverage that survives phased construction sequencing                 | Program management, contractors                                                 |

## 9. Spectrum, service availability, and estimated site positions

### 9.1 Band distribution

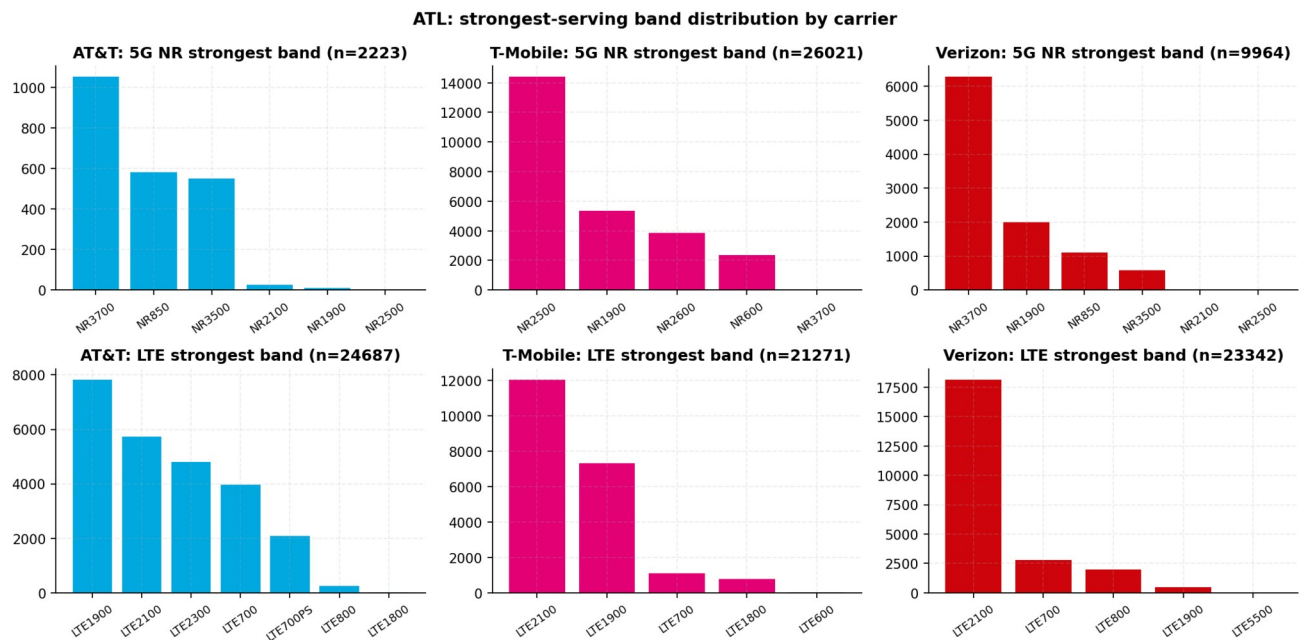


FIG. 30. Strongest-serving band distribution per carrier, 5G NR and LTE (n on each panel). · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

Legend: Ookla band labels are technology plus approximate frequency in MHz, printed verbatim from the export. For example, NR2500 and NR2600 are both 2.5 GHz spectrum, and LTE800 and NR850 are both 850 MHz cellular spectrum. LTE700PS is FirstNet Band 14, the public-safety broadband band. Cell, PCI, and band fields populate only where Ookla resolved a serving cell, so band n is smaller than RSRP n (section 16).

The bands a tile attaches to most often show which spectrum each carrier puts to work at the venue. Sub-1 GHz attachment implies coverage-grade bands. Mid-band attachment implies strong penetration or an in-building source. LTE1800 rows are an Ookla band label as exported, not a United States band allocation.

**AT&T (n = 2,223 NR tiles, 24,687 LTE tiles):**

| NR band | Tiles (n) | LTE band | Tiles (n) |
|---------|-----------|----------|-----------|
| NR3700  | 1054      | LTE1900  | 7833      |
| NR850   | 582       | LTE2100  | 5728      |
| NR3500  | 550       | LTE2300  | 4809      |
| NR2100  | 25        | LTE700   | 3965      |
| NR1900  | 11        | LTE700PS | 2085      |
| NR2500  | 1         | LTE800   | 250       |

**T-Mobile (n = 26,021 NR tiles, 21,271 LTE tiles):**

| NR band | Tiles (n) | LTE band | Tiles (n) |
|---------|-----------|----------|-----------|
| NR2500  | 14411     | LTE2100  | 12039     |
| NR1900  | 5356      | LTE1900  | 7316      |
| NR2600  | 3875      | LTE700   | 1111      |
| NR600   | 2376      | LTE1800  | 765       |
| NR3700  | 3         | LTE600   | 40        |

**Verizon (n = 9,964 NR tiles, 23,342 LTE tiles):**

| NR band | Tiles (n) | LTE band | Tiles (n) |
|---------|-----------|----------|-----------|
| NR3700  | 6282      | LTE2100  | 18162     |
| NR1900  | 1990      | LTE700   | 2770      |
| NR850   | 1095      | LTE800   | 1959      |
| NR3500  | 588       | LTE1900  | 450       |
| NR2100  | 8         | LTE5500  | 1         |

## 9.2 Service availability

Service availability is near-universal for all three carriers and is stated here rather than charted. On tiles that report the field, mean own-network availability is AT&T 97%, T-Mobile 98%, Verizon 98%, and mean general-LTE availability is AT&T 100%, T-Mobile 99%, Verizon 100%. That is the graceful-degradation floor: a device keeps a usable LTE layer almost everywhere on the campus, even where the LTE level itself is below the healthy line at the piers (section 4.8). Basis disclosure: these fields are not populated on every tile. The own-network mean rests on AT&T 19,841, T-Mobile 25,521, Verizon 22,919 tiles and the general-LTE mean on AT&T 19,861, T-Mobile 25,561, Verizon 22,947 tiles, which is AT&T 77%, T-Mobile 77%, Verizon 85% of each carrier's on-airport tiles; the field-population table in section 16 lists every field on the same basis.

### 9.3 Estimated site positions (Ookla Site Finder)

**ATL terminal and concourse area, Ookla Site Finder estimated site centroids by carrier (2025-09-01 to 2026-08-31)**

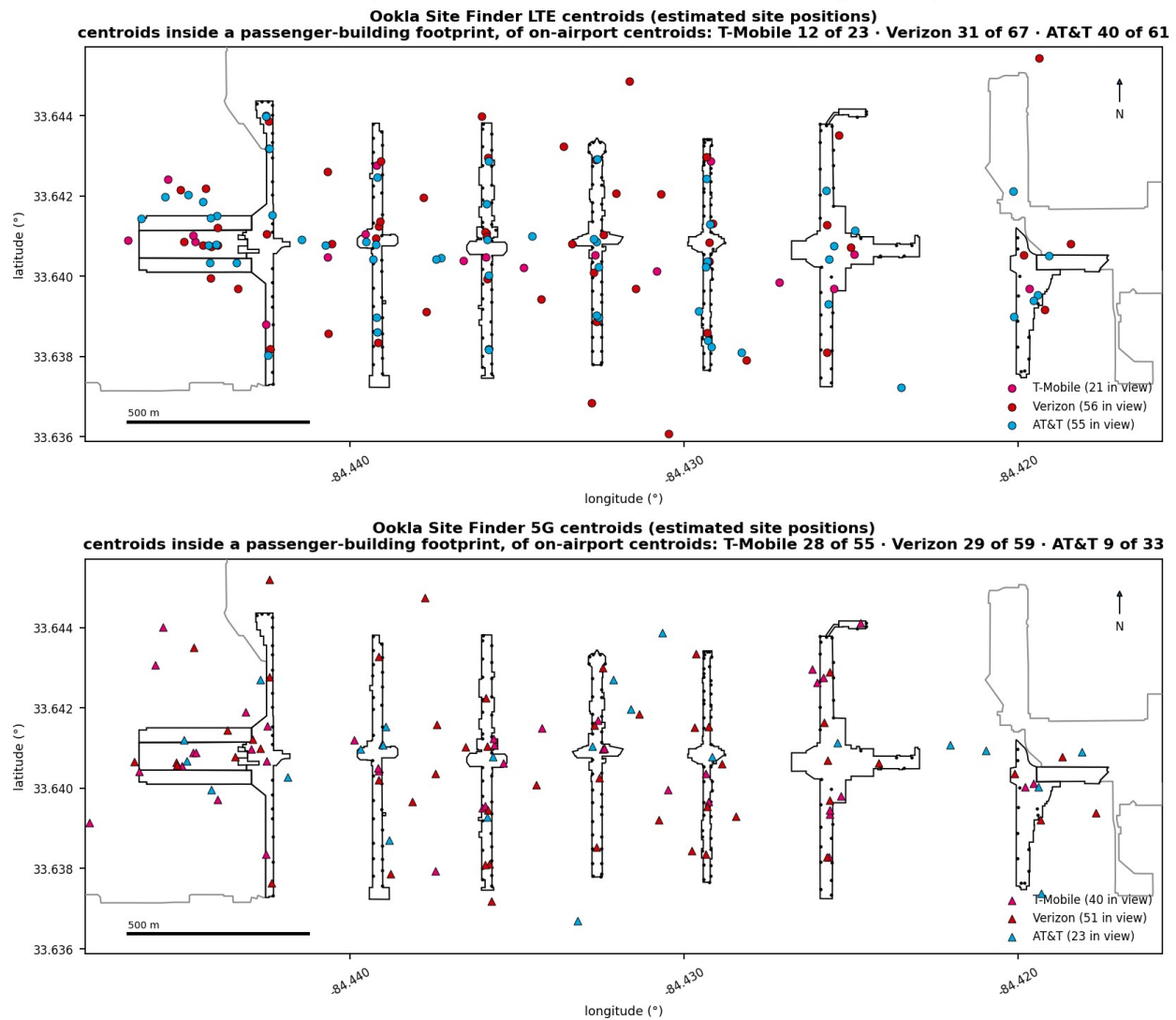


FIG. 31. Ookla Site Finder LTE (circles) and 5G (triangles) centroids over the terminal and concourse area, per carrier, with the passenger-building footprints. Centroids are Ookla's ESTIMATED site positions derived from crowdsourced RF, not carrier registry data. · Source: Ookla Cell Analytics Site Finder LTE and 5G centroid workbooks (estimated site positions), pulled with the 2026-09-21 drop

| Tech | Carrier  | Centroids (all) | On-airport | Inside a passenger building | Per building                                                                     | Median distance to the nearest building (on-airport) |
|------|----------|-----------------|------------|-----------------------------|----------------------------------------------------------------------------------|------------------------------------------------------|
| LTE  | AT&T     | 72              | 61         | 40                          | Domestic Terminal 6, T 4, A 6, B 5, C 6, D 6, E 4, F 2, International Terminal 1 | 20 m                                                 |
| LTE  | T-Mobile | 33              | 23         | 12                          | Domestic Terminal 2, T 2, A 1, B 2, C 1, D 1, E 2, F 1                           | 24 m                                                 |
| LTE  | Verizon  | 76              | 67         | 31                          | Domestic Terminal 5, T 4, A 5, B 5, C 4, D 4, E 3, F 1                           | 38 m                                                 |
| 5G   | AT&T     | 40              | 33         | 9                           | Domestic Terminal 2, A 1, B 2, C 1, D 1, E 1, F 1                                | 42 m                                                 |
| 5G   | T-Mobile | 75              | 55         | 28                          | Domestic Terminal 4, T 4, A 2, B 4, C 4, D 2, E 6, F 2                           | 29 m                                                 |
| 5G   | Verizon  | 75              | 59         | 29                          | Domestic Terminal 4, T 4, A 3, B 5, C 3, D 3, E 6, F 1                           | 24 m                                                 |

Site Finder is Ookla's estimate of where each serving node sits, computed from the same crowdsourced tiles. It is a layer of estimated positions, not a registry, and this report reads it in one way only: a centroid that falls inside a 60 m wide concourse pier is consistent with a node in that pier and not with a macro site outside it. On that reading the passenger buildings hold LTE nodes for AT&T 40 of 61 on-airport, T-Mobile 12 of 23 on-airport, Verizon 31 of 67 on-airport, and 5G nodes for AT&T 9 of 33 on-airport, T-Mobile 28 of 55 on-airport, Verizon 29 of 59 on-airport. All three carriers show estimated nodes of both technologies within the building footprints. A centroid is the position of the devices that reported a cell, so a centroid inside a pier is produced equally by an in-building remote in that pier and by a macro sector whose reporting devices were all inside the pier; the layer cannot tell the two apart, and this report does not use it to. The fact that in-building infrastructure exists for every carrier rests on the held DAS record (section 8), not on this layer, which is read as consistent with that record and no further. The estimated node counts differ by carrier (on-airport LTE AT&T 61, T-Mobile 23, Verizon 67; 5G AT&T 33, T-Mobile 55, Verizon 59); the export cannot say whether that reflects sectorization, remotes per carrier or panel size, and it is recorded as an observation for Recommendation 1. What the export cannot say either is what any node carries (which bands, at what power), whether each carrier's 5G rides on it or on the macro layer, and how the hand-off at the jet bridge behaves; those are the open items in section 8. 8 centroids labelled with 2 networks other than the three carriers of record are counted in the audit dossier and not surfaced. Per-building counts are in the table; the concourse with the most estimated 5G nodes is not by itself the concourse with the highest healthy share (section 4.7), which is the second reason this layer is read as context and not as a ranking.

## 10. Carrier-asymmetry atlas

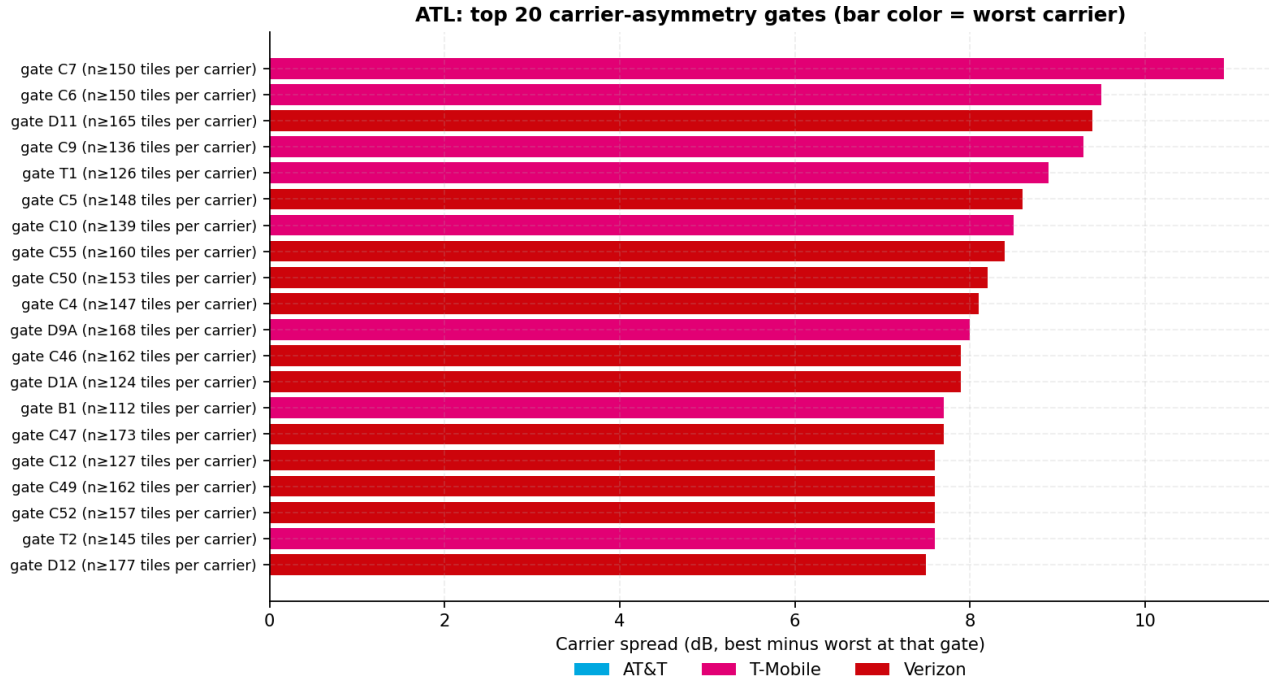


FIG. 32. Top 20 gate points by best-minus-worst carrier 5G RSRP spread, among the 201 gate points where every carrier's per-gate n is at least 30 tiles. Bar color is the worst carrier at that gate. Gate refs follow the OpenStreetMap inventory. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31

These 20 gate points are where a passenger's experience varies most by carrier (spreads of 8 to 11 dB). The best carrier across the top 20 is AT&T. Weakest-carrier tally across the 201 gate points, counting a gate for a carrier only where its bottom margin exceeds 1 dB: tie within 1 dB 103, Verizon 88, T-Mobile 10. The top five sit in Concourse T (1), Concourse C (3), Concourse D (1): gate C7 at 10.9 dB, gate C6 at 9.5 dB, gate D11 at 9.4 dB, gate C9 at 9.3 dB, gate T1 at 8.9 dB. They serve two purposes: worst-case examples for the stakeholder narrative, and the validation-point list for post-deployment monitoring (section 14). A multi-carrier in-building system that carries every carrier's 5G should compress this spread.

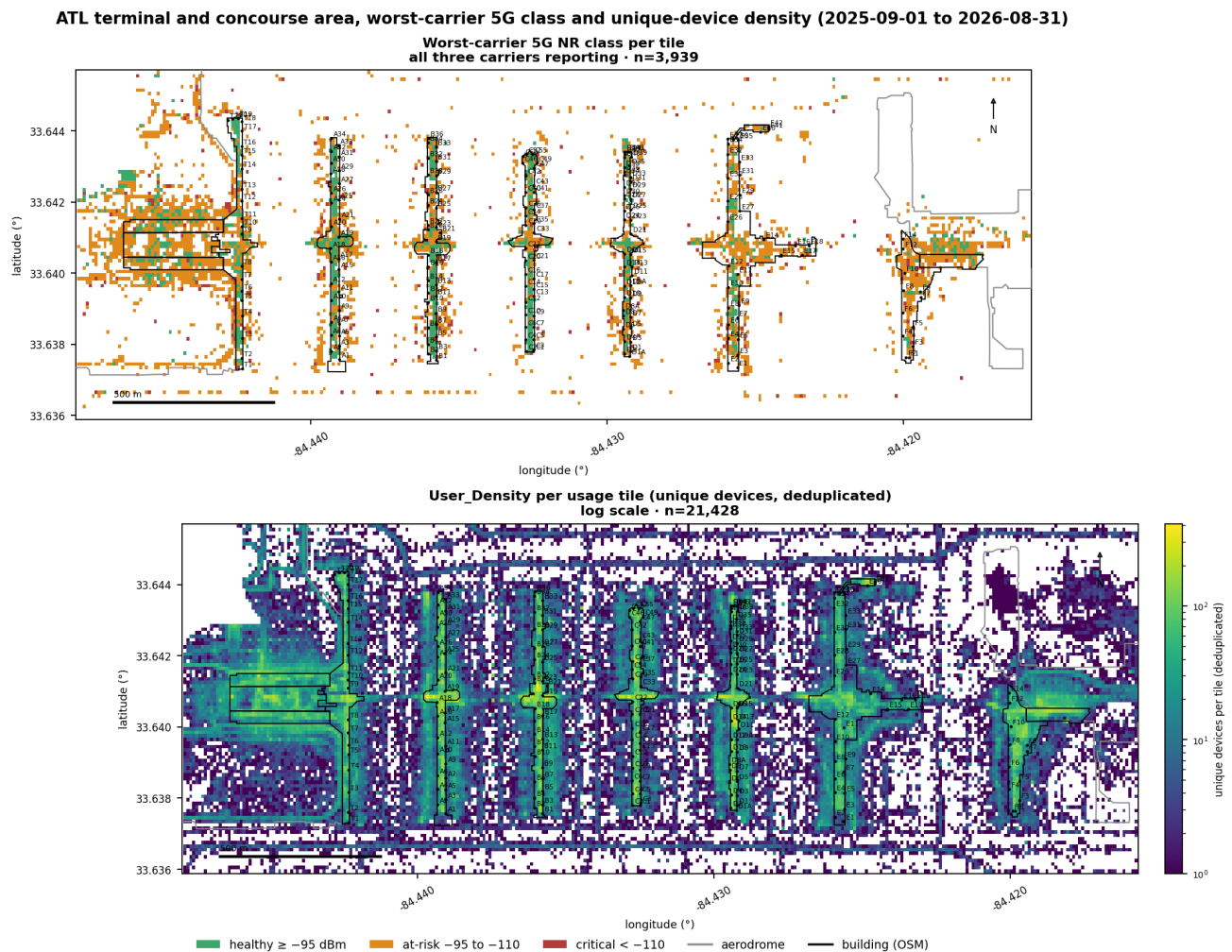


FIG. 33. Top: each terminal-area tile colored by the worst carrier's 5G NR class where all three carriers report. Bottom: User\_Density per usage tile (unique devices, deduplicated) on a log scale over the same extent. · Source: Ookla Cell Analytics per-carrier RF tile export, 2025-09-01 to 2026-08-31; Ookla Cell Analytics All Networks usage export, 2025-09-01 to 2026-08-31

FIG. 33 pairs the two questions an operator asks first: where is the weakest carrier weak, and where are the devices. Amber covers the apron between the piers and both landside terminals, green runs along the pier interiors, and the density panel shows the concourse centres and the Domestic Terminal carrying the highest unique-device counts.

## 11. Federal and operational-critical tenants

| Point                           | Zone          | Per-carrier 5G RSRP (class, n tiles)                                                                                                                                                                             |
|---------------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Atlanta Fire Rescue Station 35  | outside zones | AT&T -70.0 dBm (n=12, below the 30-tile floor, no class assigned); T-Mobile -90.9 dBm (healthy, n=30); Verizon -93.3 dBm (n=12, below the 30-tile floor, no class assigned)                                      |
| Atlanta Fire Station 40         | outside zones | AT&T -110.5 dBm (n=5, below the 30-tile floor, no class assigned); T-Mobile -94.7 dBm (n=4, below the 30-tile floor, no class assigned); Verizon -91.6 dBm (n=11, below the 30-tile floor, no class assigned)    |
| Atlanta Station 24 Fire Station | outside zones | AT&T -88.0 dBm (n=19, below the 30-tile floor, no class assigned); T-Mobile -94.3 dBm (healthy, n=30); Verizon -99.6 dBm (at-risk, n=69)                                                                         |
| United States Postal Service    | outside zones | AT&T -100.0 dBm (n=3, below the 30-tile floor, no class assigned); T-Mobile -98.2 dBm (n=6, below the 30-tile floor, no class assigned); Verizon -99.9 dBm (n=8, below the 30-tile floor, no class assigned)     |
| United States Postal Service    | outside zones | AT&T -103.3 dBm (n=12, below the 30-tile floor, no class assigned); T-Mobile -97.2 dBm (n=12, below the 30-tile floor, no class assigned); Verizon -100.2 dBm (n=15, below the 30-tile floor, no class assigned) |

5 operational-critical points are identifiable by name in the pinned capture (Atlanta Fire Rescue Station 35, Atlanta Fire Station 40, Atlanta Station 24 Fire Station, United States Postal Service, United States Postal Service); no other federal or operational-critical point is identifiable by name in the capture, and the Customs and Border Protection hall inside the International Terminal is not a mapped point. AT&T's FirstNet Band 14 (LTE700PS) appears on 2,085 AT&T LTE tiles (section 9.1); public-safety coverage posture is a section 15 layer. These readings are single-point aggregates, reported for scope and not ranked.



## 12. Share of gate points below the healthy line, and why passenger exposure is not derivable

| Carrier  | Gate points below healthy 5G | Share of gate points | Gate points within 1 dB of the line (sensitivity) |
|----------|------------------------------|----------------------|---------------------------------------------------|
| AT&T     | 68 of 201                    | 33.8%                | 60                                                |
| T-Mobile | 170 of 201                   | 84.6%                | 72                                                |
| Verizon  | 189 of 201                   | 94.0%                | 34                                                |

Translation method: ATL recorded 52,511,402 revenue enplanements in calendar 2024 (FAA, held) and 106,302,208 total passengers in 2025 (airport monthly traffic report, both directions, held); the two bases are not interchangeable and only the FAA enplanement figure belongs in any translation. Per-gate volumes are not held, so the only translation this report offers is illustrative and stays in prose: distributing annual enplanements uniformly across the 201 measured gate points would place the share of gate points below healthy 5G onto the same share of enplanements. It is not a measurement, it assigns every gate the same volume regardless of airline, and it is not tabulated for that reason. A gate-level passenger feed (section 15) would replace it. The point stands without it: AT&T 33.8%, T-Mobile 84.6%, Verizon 94.0% of gate points sit below the healthy 5G threshold in this window, with AT&T 60, T-Mobile 72, Verizon 34 of those gate points within 1 dB of the line.

## 13. Prioritized recommendations

Ordered by dependency, each with an owner.

*No capital recommendation follows from this instrument alone. Crowdsourced tiles locate where signal is weak and for whom; they do not size a system, price it, or attribute a reading to a system. The asks below are records, re-measurements and walk tests, which is what the instrument supports.*

| # | Recommendation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Owner                                                                                                          |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 1 | Obtain the in-building record the public sources do not hold: the integrator and equipment vendor of the replacement system and the City Council file for the May 19, 2025 carrier agreements; Verizon's participation in the new system (Verizon is not named in the 2025 release; it was on the 2010 system); the actual per-building cutover dates against the January 2026 target, and which buildings were live on the new system during this window; the International Terminal and Concourse F cellular architecture, which the airport's technology leadership described in November 2025 as different from the rest of the campus; and for each of AT&T, T-Mobile and Verizon, which bands (LTE, 5G NR) ride on the in-building system in each of the nine passenger buildings, at what power, and how the hand-off to the macro layer at the jet bridge is configured. The measured pattern (two carriers below the healthy line at nearly every gate area while Site Finder places their nodes inside the piers, section 9.3) is consistent with more than one explanation, and the record decides which. | City of Atlanta<br>Department of Aviation<br>with the in-building<br>system operator and the<br>three carriers |
| 2 | Adopt this window as the baseline reading and re-measure per building. Section 14 lists the per-carrier, per-building criteria. Take the weakest 5 carrier-building cells first, on the building basis (section 4.7), all at or below 50% healthy: T-Mobile over International Terminal (27% of 60 tiles); Verizon over Concourse F (36% of 166 tiles); T-Mobile over Concourse F (38% of 217 tiles); AT&T over International Terminal (49% of 49 tiles); T-Mobile over Concourse E (50% of 464 tiles). The apron-weighted zone basis is a different question, the jet-bridge and apron hand-off; its lowest cells are Verizon in the Concourse D zone (25% of 1,361 tiles); T-Mobile in the Concourse D zone (29% of 1,548 tiles); T-Mobile in the Concourse E zone (29% of 2,595 tiles), and they are re-measured as apron cells, not as buildings.                                                                                                                                                                                                                                                                | Imagine Wireless with<br>the Department of<br>Aviation                                                         |
| 3 | Make Concourse F and the International Terminal the first places re-measured, for all three carriers: they hold every carrier's lowest building reading (Concourse F AT&T 55%, T-Mobile 38%, Verizon 36%; International Terminal AT&T 49%, T-Mobile 27%, Verizon 61% healthy), and they are where an arriving international passenger first turns a handset on. The criteria in section 14 are indicative monitoring targets for a like-for-like re-measurement. They are NOT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Department of Aviation<br>with the in-building<br>system operator and<br>AT&T, T-Mobile and<br>Verizon         |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                        |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | acceptance criteria and must not be written into a carrier agreement or a DAS acceptance document: acceptance is per-carrier commissioning by walk test and scanner survey.                                                                                                                                                                                                                                                                                        |                                                                                                                                                        |
| 4 | Walk-test T-Mobile and Verizon 5G inside two piers, one where each leads or ties over the footprint (Concourse A) and one where AT&T leads (Concourse C), from the concourse centre to the gate hold room and onto the jet bridge, so the building-versus-apron gap in section 4.7 is measured rather than inferred.                                                                                                                                               | Imagine Wireless with the two carriers                                                                                                                 |
| 5 | Treat Wi-Fi as a coexisting capacity layer in the design (41.7% of observed data volume in the concourse zones rides Wi-Fi, section 7.1; that figure blends the public network with tenant, lounge, hotel and personal Wi-Fi and is not attributable to any one network). Obtain controller telemetry for the public network to size it, and read section 5.6 for the tenant-side reason.                                                                          | City of Atlanta<br>Department of Aviation,<br>Wi-Fi operator                                                                                           |
| 6 | Verify public-safety coverage at the fire stations by walk test (Atlanta Fire Rescue Station 35, Atlanta Fire Station 40, Atlanta Station 24 Fire Station are mapped points; the readings in section 11 are single-point crowdsourced aggregates, not a coverage assessment) and confirm the FirstNet Band 14 posture inside the piers. Emergency responder radio coverage is governed by the authority having jurisdiction and NFPA 1221, not by this instrument. | Department of Aviation<br>with Atlanta Fire<br>Rescue, the Atlanta<br>Police Department<br>Airport Section and the<br>authority having<br>jurisdiction |
| 7 | Decide the CBRS and private-wireless question alongside the in-building program (section 8), not after it, with the Concourse D construction phases in view.                                                                                                                                                                                                                                                                                                       | City of Atlanta<br>Department of Aviation                                                                                                              |

## 14. Post-deployment monitoring criteria and re-measurement plan

These are INDICATIVE monitoring criteria for a like-for-like re-measurement. They are not the acceptance test for any system, they are not contractual, and they must not be written into a carrier agreement or a DAS acceptance document: acceptance is per-carrier commissioning by walk test and scanner survey. Every threshold below is the locked ladder from section 16 (–95.0 dBm healthy) plus this window's measured baseline recorded for comparison. This report sets no target share: a share to aim at depends on the design, and on window-to-window variation this single window cannot estimate. Gate refs and counts come from the OpenStreetMap inventory (Concourse T 21, Concourse A 29, Concourse B 32, Concourse C 34, Concourse D 41, Concourse E 32, Concourse F 12; the airport fact sheet publishes 155 domestic and 43 international gates, 198 in all, with no per-concourse count, and the official 2012 International Terminal map publishes gates F1 to F14 for Concourse F; the Concourse D widening program adds and retires gate positions through 2029, so a per-concourse published count for this window is not held, held). Gate-named criteria must be reconciled against the Department of Aviation's gate plan before adoption. The building rows are the criteria that apply inside the piers and terminals; the zone rows are apron-weighted context; no row is a per-gate apron threshold, because an 80 m gate join that is a median 22.4% over a building is a macro and jet-bridge reading an in-building system is not built to meet.

| Zone, building, or point                                             | Carrier | Criterion (threshold)                                                                                                             | Re-test                                                       |
|----------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| All measured gate points                                             | AT&T    | Healthy 5G share above this window's baseline of 66% (133 of 201 gate points); no target share is set here                        | Like-for-like window                                          |
| Concourse T zone (apron-weighted; context, not a building criterion) | AT&T    | Zone tile median compared against this window's –95.0 dBm; healthy share compared against this window's baseline of 52% (n=2,518) | Like-for-like window after the concourse's in-building change |
| Concourse A zone (apron-weighted; context, not a building criterion) | AT&T    | Zone tile median compared against this window's –96.0 dBm; healthy share compared against this window's baseline of 49% (n=612)   | Like-for-like window after the concourse's in-building change |
| Concourse B zone (apron-weighted; context, not a building criterion) | AT&T    | Zone tile median compared against this window's –96.0 dBm; healthy share compared against this window's baseline of 50% (n=539)   | Like-for-like window after the concourse's in-building change |
| Concourse C zone (apron-weighted; context, not a building criterion) | AT&T    | Zone tile median compared against this window's –93.0 dBm; healthy share compared against this window's baseline of 59% (n=387)   | Like-for-like window after the concourse's in-building change |
| Concourse D zone (apron-weighted; context, not a building criterion) | AT&T    | Zone tile median compared against this window's –94.0 dBm; healthy share compared against this window's baseline of 55% (n=440)   | Like-for-like window after the concourse's in-building change |

|                                                                      |          |                                                                                                                                                              |                                                               |
|----------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Concourse E zone (apron-weighted; context, not a building criterion) | AT&T     | Zone tile median compared against this window's -95.0 dBm; healthy share compared against this window's baseline of 52% (n=845)                              | Like-for-like window after the concourse's in-building change |
| Concourse F zone (apron-weighted; context, not a building criterion) | AT&T     | Zone tile median compared against this window's -99.0 dBm; healthy share compared against this window's baseline of 36% (n=1,107)                            | Like-for-like window after the concourse's in-building change |
| Domestic Terminal                                                    | AT&T     | Median over the footprint at or above -95.0 dBm (locked ladder; this window -95.0 dBm); healthy share compared against this window's baseline of 54% (n=354) | Like-for-like window after that building's change             |
| Concourse T                                                          | AT&T     | Median over the footprint at or above -95.0 dBm (locked ladder; this window -92.0 dBm); healthy share compared against this window's baseline of 70% (n=203) | Like-for-like window after that building's change             |
| Concourse A                                                          | AT&T     | Median over the footprint at or above -95.0 dBm (locked ladder; this window -91.0 dBm); healthy share compared against this window's baseline of 81% (n=177) | Like-for-like window after that building's change             |
| Concourse B                                                          | AT&T     | Median over the footprint at or above -95.0 dBm (locked ladder; this window -91.0 dBm); healthy share compared against this window's baseline of 72% (n=181) | Like-for-like window after that building's change             |
| Concourse C                                                          | AT&T     | Median over the footprint at or above -95.0 dBm (locked ladder; this window -87.0 dBm); healthy share compared against this window's baseline of 89% (n=166) | Like-for-like window after that building's change             |
| Concourse D                                                          | AT&T     | Median over the footprint at or above -95.0 dBm (locked ladder; this window -88.0 dBm); healthy share compared against this window's baseline of 87% (n=119) | Like-for-like window after that building's change             |
| Concourse E                                                          | AT&T     | Median over the footprint at or above -95.0 dBm (locked ladder; this window -92.0 dBm); healthy share compared against this window's baseline of 69% (n=339) | Like-for-like window after that building's change             |
| Concourse F                                                          | AT&T     | Median over the footprint at or above -95.0 dBm (locked ladder; this window -94.0 dBm); healthy share compared against this window's baseline of 55% (n=157) | Like-for-like window after that building's change             |
| International Terminal                                               | AT&T     | Median over the footprint at or above -95.0 dBm (locked ladder; this window -96.0 dBm); healthy share compared against this window's baseline of 49% (n=49)  | Like-for-like window after that building's change             |
| All measured gate points                                             | T-Mobile | Healthy 5G share above this window's baseline of 15% (31 of 201 gate points); no target share is set here                                                    | Like-for-like window                                          |
| Concourse T zone (apron-weighted; context, not a building criterion) | T-Mobile | Zone tile median compared against this window's -97.0 dBm; healthy share compared against this window's baseline of 41% (n=4,995)                            | Like-for-like window after the concourse's in-building change |
| Concourse A zone (apron-weighted; context, not a building criterion) | T-Mobile | Zone tile median compared against this window's -98.0 dBm; healthy share compared against this window's baseline of 36% (n=1,696)                            | Like-for-like window after the concourse's in-building change |
| Concourse B zone (apron-weighted; context, not a building criterion) | T-Mobile | Zone tile median compared against this window's -100.0 dBm; healthy share compared against this window's baseline of 31% (n=1,829)                           | Like-for-like window after the concourse's in-building change |
| Concourse C zone (apron-weighted; context, not a building criterion) | T-Mobile | Zone tile median compared against this window's -99.0 dBm; healthy share compared against this window's baseline of 36% (n=1,514)                            | Like-for-like window after the concourse's in-building change |
| Concourse D zone (apron-weighted; context, not a building criterion) | T-Mobile | Zone tile median compared against this window's -99.0 dBm; healthy share compared against this window's baseline of 29% (n=1,548)                            | Like-for-like window after the concourse's in-building change |
| Concourse E zone (apron-weighted; context, not a building criterion) | T-Mobile | Zone tile median compared against this window's -99.0 dBm; healthy share compared against this window's baseline of 29% (n=2,595)                            | Like-for-like window after the concourse's in-building change |
| Concourse F zone (apron-weighted; context, not a building criterion) | T-Mobile | Zone tile median compared against this window's -97.0 dBm; healthy share compared against this window's baseline of 42% (n=3,283)                            | Like-for-like window after the concourse's in-building change |
| Domestic Terminal                                                    | T-Mobile | Median over the footprint at or above -95.0 dBm (locked ladder; this window -95.0 dBm); healthy share compared against this window's baseline of 56% (n=440) | Like-for-like window after that building's change             |
| Concourse T                                                          | T-Mobile | Median over the footprint at or above -95.0 dBm (locked ladder; this window -93.0 dBm); healthy share compared against this window's baseline of 70% (n=256) | Like-for-like window after that building's change             |
| Concourse A                                                          | T-Mobile | Median over the footprint at or above -95.0 dBm (locked ladder; this window -89.0 dBm); healthy share compared against this window's baseline of 87% (n=222) | Like-for-like window after that building's change             |

|                                                                      |          |                                                                                                                                                              |                                                               |
|----------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Concourse B                                                          | T-Mobile | Median over the footprint at or above -95.0 dBm (locked ladder; this window -92.0 dBm); healthy share compared against this window's baseline of 74% (n=228) | Like-for-like window after that building's change             |
| Concourse C                                                          | T-Mobile | Median over the footprint at or above -95.0 dBm (locked ladder; this window -92.0 dBm); healthy share compared against this window's baseline of 80% (n=211) | Like-for-like window after that building's change             |
| Concourse D                                                          | T-Mobile | Median over the footprint at or above -95.0 dBm (locked ladder; this window -93.0 dBm); healthy share compared against this window's baseline of 60% (n=150) | Like-for-like window after that building's change             |
| Concourse E                                                          | T-Mobile | Median over the footprint at or above -95.0 dBm (locked ladder; this window -95.0 dBm); healthy share compared against this window's baseline of 50% (n=464) | Like-for-like window after that building's change             |
| Concourse F                                                          | T-Mobile | Median over the footprint at or above -95.0 dBm (locked ladder; this window -97.0 dBm); healthy share compared against this window's baseline of 38% (n=217) | Like-for-like window after that building's change             |
| International Terminal                                               | T-Mobile | Median over the footprint at or above -95.0 dBm (locked ladder; this window -97.0 dBm); healthy share compared against this window's baseline of 27% (n=60)  | Like-for-like window after that building's change             |
| All measured gate points                                             | Verizon  | Healthy 5G share above this window's baseline of 6% (12 of 201 gate points); no target share is set here                                                     | Like-for-like window                                          |
| Concourse T zone (apron-weighted; context, not a building criterion) | Verizon  | Zone tile median compared against this window's -99.0 dBm; healthy share compared against this window's baseline of 33% (n=3,403)                            | Like-for-like window after the concourse's in-building change |
| Concourse A zone (apron-weighted; context, not a building criterion) | Verizon  | Zone tile median compared against this window's -100.0 dBm; healthy share compared against this window's baseline of 32% (n=1,535)                           | Like-for-like window after the concourse's in-building change |
| Concourse B zone (apron-weighted; context, not a building criterion) | Verizon  | Zone tile median compared against this window's -100.0 dBm; healthy share compared against this window's baseline of 31% (n=1,554)                           | Like-for-like window after the concourse's in-building change |
| Concourse C zone (apron-weighted; context, not a building criterion) | Verizon  | Zone tile median compared against this window's -100.0 dBm; healthy share compared against this window's baseline of 31% (n=1,259)                           | Like-for-like window after the concourse's in-building change |
| Concourse D zone (apron-weighted; context, not a building criterion) | Verizon  | Zone tile median compared against this window's -102.0 dBm; healthy share compared against this window's baseline of 25% (n=1,361)                           | Like-for-like window after the concourse's in-building change |
| Concourse E zone (apron-weighted; context, not a building criterion) | Verizon  | Zone tile median compared against this window's -100.0 dBm; healthy share compared against this window's baseline of 29% (n=2,068)                           | Like-for-like window after the concourse's in-building change |
| Concourse F zone (apron-weighted; context, not a building criterion) | Verizon  | Zone tile median compared against this window's -93.0 dBm; healthy share compared against this window's baseline of 57% (n=1,895)                            | Like-for-like window after the concourse's in-building change |
| Domestic Terminal                                                    | Verizon  | Median over the footprint at or above -95.0 dBm (locked ladder; this window -94.0 dBm); healthy share compared against this window's baseline of 55% (n=378) | Like-for-like window after that building's change             |
| Concourse T                                                          | Verizon  | Median over the footprint at or above -95.0 dBm (locked ladder; this window -91.0 dBm); healthy share compared against this window's baseline of 71% (n=217) | Like-for-like window after that building's change             |
| Concourse A                                                          | Verizon  | Median over the footprint at or above -95.0 dBm (locked ladder; this window -91.0 dBm); healthy share compared against this window's baseline of 71% (n=211) | Like-for-like window after that building's change             |
| Concourse B                                                          | Verizon  | Median over the footprint at or above -95.0 dBm (locked ladder; this window -91.5 dBm); healthy share compared against this window's baseline of 71% (n=208) | Like-for-like window after that building's change             |
| Concourse C                                                          | Verizon  | Median over the footprint at or above -95.0 dBm (locked ladder; this window -91.5 dBm); healthy share compared against this window's baseline of 65% (n=196) | Like-for-like window after that building's change             |
| Concourse D                                                          | Verizon  | Median over the footprint at or above -95.0 dBm (locked ladder; this window -90.5 dBm); healthy share compared against this window's baseline of 77% (n=142) | Like-for-like window after that building's change             |
| Concourse E                                                          | Verizon  | Median over the footprint at or above -95.0 dBm (locked ladder; this window -95.0 dBm); healthy share compared against this window's baseline of 53% (n=379) | Like-for-like window after that building's change             |
| Concourse F                                                          | Verizon  | Median over the footprint at or above -95.0 dBm (locked ladder; this window -99.0 dBm); healthy share compared against this window's baseline of 36% (n=166) | Like-for-like window after that building's change             |

|                                           |                                      |                                                                                                                                                             |                                                   |
|-------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| International Terminal                    | Verizon                              | Median over the footprint at or above -95.0 dBm (locked ladder; this window -93.0 dBm); healthy share compared against this window's baseline of 61% (n=59) | Like-for-like window after that building's change |
| Gate C7 (OpenStreetMap ref, Concourse C)  | lowest reading this window: T-Mobile | Carrier-to-carrier spread compared against this window's 10.9 dB; a multi-carrier in-building source should compress it                                     | Like-for-like window                              |
| Gate C6 (OpenStreetMap ref, Concourse C)  | lowest reading this window: T-Mobile | Carrier-to-carrier spread compared against this window's 9.5 dB; a multi-carrier in-building source should compress it                                      | Like-for-like window                              |
| Gate D11 (OpenStreetMap ref, Concourse D) | lowest reading this window: Verizon  | Carrier-to-carrier spread compared against this window's 9.4 dB; a multi-carrier in-building source should compress it                                      | Like-for-like window                              |
| Gate C9 (OpenStreetMap ref, Concourse C)  | lowest reading this window: T-Mobile | Carrier-to-carrier spread compared against this window's 9.3 dB; a multi-carrier in-building source should compress it                                      | Like-for-like window                              |
| Gate T1 (OpenStreetMap ref, Concourse T)  | lowest reading this window: T-Mobile | Carrier-to-carrier spread compared against this window's 8.9 dB; a multi-carrier in-building source should compress it                                      | Like-for-like window                              |

Re-measurement uses the same instrument as this baseline (Ookla Cell Analytics, identical thresholds).

The window is like for like: the same 12-month length, or a matched shorter window that is disclosed alongside the result. Ookla's date-range comparison renders the before and after directly. Imagine Wireless re-measures over that window after any in-building change goes live; the crowdsourced tiles serve as the baseline-and-after comparison and acceptance itself is per-carrier commissioning.

## 15. Next layers to add

| Layer                                                                             | What it resolves                                                                                                                                          | Source                                                              |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| In-building system record                                                         | The items section 8 lists as not held, plus the per-building, per-carrier band and power plan and the jet-bridge hand-off design (Recommendation 1)       | City of Atlanta Department of Aviation, in-building system operator |
| Imagine knowledge-graph contracts                                                 | The graph's contracts query was not available at this issue; the DAS master, deployment and leadership rows are pinned and quoted (section 2)             | Imagine knowledge graph                                             |
| Google Places tenant capture                                                      | Deferred to the next issue: adds admin, services and lounge points to the OpenStreetMap list and thickens the category cells                              | Google Places (New) pull (Imagine Wireless)                         |
| Indoor mask                                                                       | OSM building-polygon mask shipped in this issue (section 4.7); Ookla native Indoor layer to be pinned as portal captures                                  | Ookla portal captures (Imagine Wireless)                            |
| Date-range comparison                                                             | Before and after for each building as the in-building layer changes; converts this snapshot into a trend                                                  | Ookla portal pull                                                   |
| Poor multi-network coverage                                                       | Vendor-ranked building-versus-carrier problem split; corroborates section 4.3                                                                             | Ookla portal pull                                                   |
| 3D Z-axis view                                                                    | 15 m vertical bands; the export is flat but the portal is not, and the Plane Train runs a level below the concourses                                      | Ookla portal pull                                                   |
| Per-gate passenger counts                                                         | Replaces the section 12 uniform-distribution proxy with measured exposure                                                                                 | Department of Aviation, airline schedules                           |
| Gate plan reconciliation                                                          | Aligns OpenStreetMap gate refs with the Department of Aviation's gate list and the Concourse D construction phases before gate-named criteria are adopted | City of Atlanta Department of Aviation                              |
| Wi-Fi controller telemetry                                                        | Airtime, retries, client density; converts presence into capacity                                                                                         | Wi-Fi operator, Department of Aviation                              |
| Public-safety (NFPA 1221) coverage                                                | Emergency responder radio coverage posture; FirstNet Band 14 is present in the data                                                                       | Authority having jurisdiction, integrator                           |
| Throughput and latency series                                                     | The Speedtest series per concourse and per carrier would pair throughput with the signal readings in this report, which carries neither                   | Ookla portal pull (Imagine Wireless)                                |
| Walk test: jet bridges, Plane Train tunnel, baggage corridors, construction zones | Areas crowdsourced cannot reach; the acceptance instrument                                                                                                | Scanner survey                                                      |

## 16. Method, thresholds, confidence, and caveats

Measurement source: Ookla Cell Analytics per-carrier RF tile exports, the All Networks usage export and the Site Finder centroid workbooks for ATL, 12-month window 2025-09-01 through 2026-08-31, clipped to the KATL aerodrome polygon (OpenStreetMap way 208889095) plus a 200 m buffer, intersected with the single export rectangle shared by all four tile files (latitude 33.6248 to 33.6556, longitude -84.4601 to -84.3901). 85,763 on-airport RF tiles are retained from 135,967 exported; 44,155 usage tiles from 69,977. The rectangle contains the whole terminal and concourse area; the buffered aerodrome extends beyond it only over the south airfield and the north cargo apron, with no terminal and no gate in either strip. Measurement freshness at issue is 21 days, within the platform's 90-day policy. Join: tiles to gate and tenant points within an 80 m radius. Gates and gate refs come from a pinned OpenStreetMap inventory (201 gate points: Concourse T 21, Concourse A 29, Concourse B 32, Concourse C 34, Concourse D 41, Concourse E 32, Concourse F 12; the concourse letter in each ref sets the zone, a ref must carry a digit, and the build checks every gate against the pinned concourse footprint with a 150 m nearest-footprint fallback and fails on any disagreement; the airport fact sheet publishes 155 domestic and 43 international gates, 198 in all, with no per-concourse count, and the official 2012 International Terminal map publishes gates F1 to F14 for Concourse F; the Concourse D widening program adds and retires gate positions through 2029, so a per-concourse published count for this window is not held, held), so gate-named criteria must be reconciled against the Department of Aviation's gate plan before adoption. Tenants come from a pinned OpenStreetMap capture (284 points after hygiene, no polygons, no Z-axis). Tile-to-zone assignment: nearest gate or tenant point within 500 m (disclosed proxy). Building mask (section 4.7): point-in-polygon of tile centroids against the nine pinned OSM passenger-building footprints, so it selects tiles over a building, not tiles measured inside it. Tenant zone attribution: the concourse footprint the point sits in, else the concourse of the nearest lettered gate within 400 m (disclosed proxy). Site Finder: one LTE and one 5G workbook, deduplicated on technology, network, node id and position; centroids are Ookla's estimated positions. Maps: equirectangular axes in degrees, north up, no basemap tiles, rebuilt from the pinned CSVs. Central tendency: median for every headline figure; means only where labeled. Carrier mapping: the export's AT&T US, T-Mobile US and Verizon operators are printed as AT&T, T-Mobile and Verizon. Carrier ordering throughout: strongest at the gates first (AT&T, then T-Mobile and Verizon, which are tied), asserted against the data at build time.

Tile geometry and sample basis: each RF tile is 0.0001° by 0.0001°, about 9 m by 11 m at 33.6° N. The three carrier panels cover 44,634 unique tile centroids on the airport, 15,063 of them seen by all three carriers. The export carries no per-tile scan count, so every n in this report counts tiles, not scans. The 30-tile floor guards spatial support, not scan volume. Ookla aggregates each tile from its panel over the window.

*Field population: cell, PCI, and band fields populate only where Ookla resolved a serving cell, so their n is smaller than the RSRP n for the same carrier. The table shows the number of on-airport tiles that populate each field.*

| Field                 | AT&T   | T-Mobile | Verizon |
|-----------------------|--------|----------|---------|
| NR_SS_RSRP            | 10,316 | 27,860   | 18,800  |
| NR_Strongest_Cell     | 2,223  | 26,016   | 9,964   |
| NR_Strongest_PCI      | 2,223  | 26,021   | 9,963   |
| NR_Strongest_Band     | 2,223  | 26,021   | 9,964   |
| LTE_RSRP              | 24,687 | 21,275   | 23,342  |
| LTE_Strongest_Cell    | 24,709 | 21,412   | 23,371  |
| LTE_CQI               | 6,261  | 7,420    | 7,254   |
| Optimization_Priority | 22,026 | 16,924   | 21,171  |

|                      |        |        |        |
|----------------------|--------|--------|--------|
| General_LTE_Service  | 19,861 | 25,561 | 22,947 |
| All on-airport tiles | 25,823 | 32,992 | 26,948 |

Threshold ladder (locked, one ladder everywhere): 5G NR SS-RSRP and LTE RSRP healthy  $\geq -95$  dBm, at risk  $-95$  to  $-110$ , critical  $< -110$ . 5G SS-SINR healthy  $\geq 10$  dB, at risk 0 to 10, critical  $< 0$ . RSRQ healthy  $\geq -10$  dB. No venue-specified threshold was provided. Noise floor: margins under 1 dB are not rankings; every rank statement in this report prints its margin, and the T-Mobile-to-Verizon gate-median margin of 0.9 dB is reported as a tie. Minimum-sample rule: no chart or comparative claim ships on fewer than 30 underlying tiles or points. Concourse B, Concourse C, Concourse D, Concourse E clear the gate floor (Concourse T 21, Concourse A 29, Concourse F 12 gate points do not), and most tenant categories hold fewer than 30 points, so those tallies appear as counts with n visible and are not ranked; zone, terminal, building and category comparisons run on the tile basis for one consistent basis.

Units rule: Ookla User\_Density is the count of unique Android devices observed per tile over the measurement window, deduplicated. It does not count simultaneous users and it does not measure time spent, and neither reading appears anywhere in this report. Wi-Fi offload =  $\sum \text{Wi-Fi MB} \div \sum (\text{Wi-Fi} + \text{Mobile}) \text{ MB}$  by volume, computed at venue and zone level only on the All Networks panel. Per-carrier offload is not derivable from this dataset and is not implied. The offload figure cannot separate the public network from tenant or personal networks.

Sample basis and inference limits: crowdsourced background scans from consumer Android handsets (a panel Ookla characterizes as about 3% of devices; iOS devices are not sampled), aggregated per tile over 12 months. The panel's composition differs by carrier, so cross-carrier comparisons inherit a device-population bias this export cannot correct. Supported: medians, shares, and distributions at venue, zone, gate-cluster, building and tenant-category level with n disclosed. Not supported: throughput, latency, or jitter (not in this export), per-carrier Wi-Fi offload, sub-tile positioning, and floor separation. Nothing in this report is measured indoors: there is no indoor mask beyond the building-polygon selection and no Z-axis, and gate values are tiles within 80 m of a point that straddle the apron on both sides of a pier: the measured interior share of that join is a median of 22.4% across the 201 gate points (highest 68%), which is why terminal and building leaders in this report are named only on the building-polygon basis and gate-area results are reported as counts. The passenger-journey and tenant readings in sections 4.8 and 5.6 are interpretations of those same aggregates and are labelled as such.

Confidence tagging: an entity fact whose source document is pinned in this build and checksummed in the verification bundle is tagged "held" inline; an entity fact this build cites without holding a copy is tagged "not independently verified" inline. Measured claims reproduce from the raw exports through the audit dossier that accompanies this report, which also records capture dates for transcribed values (concourse airline assignments) and the public source behind every entity statement. The Imagine knowledge-graph snapshot is pinned in the build's source folder and tagged "Imagine knowledge graph" inline; the graph's contracts query was not available at this issue and its leadership rows are held without names. The 90-day freshness policy is Imagine Wireless's reporting policy.

*Population key for the several n printed for one carrier: all on-airport tiles (AT&T 25,823, T-Mobile 32,992, Verizon 26,948); tiles inside the terminal extent drawn on the maps (AT&T 13,951, T-Mobile 17,370, Verizon 15,081); 5G-reporting tiles (AT&T 10,316, T-Mobile 27,860, Verizon 18,800); 5G-reporting tiles inside the map extent (AT&T 5,506, T-Mobile 14,764, Verizon 11,229). Cell, PCI, and band fields are smaller still (table above).*

*Terms. 5G NR: the 5G New Radio air interface. SS-RSRP: synchronization-signal reference-signal received power, the 5G signal level, in dBm. RSRP: LTE reference-signal received power. SINR: signal-to-interference-plus-noise ratio, in dB. RSRQ: reference-signal received quality. p90, p95: the 90th and 95th percentiles. OSM: OpenStreetMap. DAS: distributed antenna system. MARTA: the*

Metropolitan Atlanta Rapid Transit Authority. NFPA 1221: the National Fire Protection Association standard for emergency communications systems. Tie-aware: a comparison that prints a tie whenever the margin is at or under the noise floor (1 dB, or 1 point of healthy share). Building basis: tiles whose centroid falls inside a pinned OSM passenger-building footprint. Apron-weighted gate basis: the 80 m join around each gate point, a median 22.4% of which sits over a building. Audit dossier: the folder of claims ledger, methodology, provenance manifest, findings log and cold-read record that accompanies this report and reproduces every measured number from the raw exports.

Caveats: the dataset is gate-area and public-corridor weighted; it does not cover jet-bridge interiors, the Plane Train tunnel or baggage corridors. PCI diversity, serving-cell volatility, band distributions and Site Finder positions are aggregate proxies or estimates, not active traces, registry data or carrier network-management data. The optimization priority index is Ookla's vendor-defined layer, reported as such. Engineering inferences about cause are labeled as inferences where they appear.

Provenance discipline: every numerical value in this report is computed from the cited source files at build time, or carries an inline "held" tag when its source document is pinned in the build and checksummed in the verification bundle, or an inline "not independently verified" tag when this build cites a public record without holding a copy. No value is estimated or invented. Photographs are illustrative material from Wikimedia Commons under the licenses listed in the audit dossier and in each caption; they are not measurements.

## Appendix A. Lowest-reading mapped points per carrier (all categories, terminal and periphery; $n \geq 30$ tiles only)

The 284 mapped points blend terminal concessions with periphery points (parking, the hotel, the fire stations). That mix is deliberate: it is the periphery bucket of the section 5.2 proxy. This table is an inventory of the lowest-reading points on or near airport property. Only points whose per-carrier aggregate rides on  $n \geq 30$  tiles appear.

### AT&T

| RSRP (dBm) | Zone            | Category        | Point                                     | n (tiles) |
|------------|-----------------|-----------------|-------------------------------------------|-----------|
| -104.5     | (outside zones) | transport_admin | S Cargo Dr @ Airport Loop Rd              | 43        |
| -102.9     | (outside zones) | transport_admin | Riverdale Rd @ Airport Blvd               | 35        |
| -102.6     | (outside zones) | transport_admin | Maynard H Jackson Jr Blvd @ S Loop Rd     | 72        |
| -101.2     | (outside zones) | transport_admin | South Parking Deck                        | 97        |
| -100.6     | (outside zones) | transport_admin | Riverdale Rd @ Terminal Pkwy              | 46        |
| -99.3      | Concourse T     | transport_admin | Terminal North Hourly                     | 130       |
| -99.2      | Concourse T     | transport_admin | South Hourly                              | 96        |
| -98.7      | Concourse T     | transport_admin | Terminal North Daily                      | 119       |
| -98.0      | Concourse F     | food            | Belgian Beer Cafe 'Transit'               | 140       |
| -97.7      | Concourse T     | transport_admin | South Parking Hourly                      | 73        |
| -97.6      | Concourse A     | retail          | InMotion                                  | 178       |
| -97.6      | Concourse T     | transport_admin | North Parking Daily                       | 100       |
| -97.4      | Concourse A     | retail          | Shellis News                              | 176       |
| -97.4      | Concourse T     | transport_admin | Terminal North Economy                    | 99        |
| -97.3      | Concourse F     | retail          | Sean John                                 | 168       |
| -97.1      | Concourse F     | retail          | CNN International                         | 155       |
| -97.0      | Concourse F     | transport_admin | Airport International Terminal - Arrivals | 108       |
| -97.0      | Concourse T     | food            | Caribou Coffee                            | 180       |
| -97.0      | (outside zones) | other           | FedEx Ship Center                         | 49        |
| -97.0      | Concourse T     | retail          | Patricia Nash                             | 176       |

### T-Mobile

| RSRP (dBm) | Zone            | Category        | Point                   | n (tiles) |
|------------|-----------------|-----------------|-------------------------|-----------|
| -104.9     | (outside zones) | transport_admin | International Park-Ride | 48        |
| -102.5     | (outside zones) | transport_admin | South Parking Deck      | 105       |
| -101.8     | (outside zones) | transport_admin | Park & Wait Lot         | 78        |

|       |             |                 |                                           |     |
|-------|-------------|-----------------|-------------------------------------------|-----|
| -99.8 | Concourse T | food            | Coffee Beanery                            | 183 |
| -99.7 | Concourse T | transport_admin | Terminal South Daily                      | 178 |
| -99.6 | Concourse D | retail          | Atlanta Today                             | 155 |
| -99.6 | Concourse T | transport_admin | South Hourly                              | 181 |
| -99.0 | Concourse T | retail          | LATHER                                    | 185 |
| -98.7 | Concourse T | food            | Caribou Coffee                            | 182 |
| -98.7 | Concourse D | food            | Popeyes Louisiana Kitchen                 | 184 |
| -98.7 | Concourse D | food            | Wolfgang Puck                             | 185 |
| -98.6 | Concourse D | food            | Atlanta Braves All Star Grill             | 186 |
| -98.6 | Concourse T | retail          | Patricia Nash                             | 182 |
| -98.6 | Concourse D | food            | Roast Coffee                              | 186 |
| -98.5 | Concourse D | retail          | ATL Today                                 | 184 |
| -98.4 | Concourse D | food            | Chicken and Beer                          | 175 |
| -98.4 | Concourse F | food            | Starbucks F9                              | 186 |
| -98.3 | Concourse D | food            | IHOP                                      | 181 |
| -98.3 | Concourse F | food            | Jekyll Island Seafood                     | 191 |
| -98.2 | Concourse F | transport_admin | Airport International Terminal - Arrivals | 131 |

## Verizon

| RSRP (dBm) | Zone            | Category        | Point                         | n (tiles) |
|------------|-----------------|-----------------|-------------------------------|-----------|
| -106.9     | (outside zones) | transport_admin | S Cargo Dr @ Airport Loop Rd  | 32        |
| -104.2     | (outside zones) | transport_admin | International Park-Ride       | 32        |
| -102.8     | Concourse T     | food            | Coffee Beanery                | 141       |
| -101.6     | Concourse T     | services        | Truist - ATM                  | 120       |
| -101.3     | Concourse D     | retail          | Atlanta Today                 | 160       |
| -101.1     | (outside zones) | transport_admin | South Parking Deck            | 65        |
| -100.8     | Concourse D     | food            | Wolfgang Puck                 | 188       |
| -100.6     | Concourse F     | retail          | CNN International             | 142       |
| -100.5     | Concourse D     | food            | Chicken and Beer              | 185       |
| -100.4     | Concourse D     | food            | Atlanta Braves All Star Grill | 186       |
| -100.4     | Concourse F     | food            | Maison Mathis                 | 131       |
| -100.4     | Concourse T     | retail          | Patricia Nash                 | 160       |
| -100.4     | Concourse D     | food            | Popeyes Louisiana Kitchen     | 186       |
| -100.4     | Concourse D     | food            | Roast Coffee                  | 186       |
| -100.3     | Concourse D     | retail          | ATL Today                     | 185       |
| -100.3     | Concourse T     | retail          | LATHER                        | 166       |
| -100.3     | Concourse T     | services        | Traveler Worldwide Money      | 178       |
| -100.2     | Concourse T     | food            | Caribou Coffee                | 163       |
| -100.0     | Concourse T     | lounge          | Delta Sky Club (Concourse T)  | 182       |
| -99.9      | Concourse T     | retail          | Atlanta Business Chronicle    | 157       |

## Appendix B. Strongest-serving band tables per carrier (with footprint share)

The same top-6 bands as section 9.1, extended with each band's share of the carrier's band-reporting tile footprint. Labels are Ookla's, printed verbatim (legend in section 9.1).

### AT&T: 5G NR strongest-serving band (n=2,223 tiles that report the 5G NR strongest-band field)

| Band   | Tile count (n) | Share of the 5G NR band-reporting tiles |
|--------|----------------|-----------------------------------------|
| NR3700 | 1,054          | 47.4%                                   |
| NR850  | 582            | 26.2%                                   |
| NR3500 | 550            | 24.7%                                   |
| NR2100 | 25             | 1.1%                                    |
| NR1900 | 11             | 0.5%                                    |
| NR2500 | 1              | 0.0%                                    |
| Total  | 2,223          | 100.0%                                  |

### AT&T: LTE strongest-serving band (n=24,687 tiles that report the LTE strongest-band field)

| Band                | Tile count (n) | Share of the LTE band-reporting tiles |
|---------------------|----------------|---------------------------------------|
| LTE1900             | 7,833          | 31.7%                                 |
| LTE2100             | 5,728          | 23.2%                                 |
| LTE2300             | 4,809          | 19.5%                                 |
| LTE700              | 3,965          | 16.1%                                 |
| LTE700PS            | 2,085          | 8.4%                                  |
| LTE800              | 250            | 1.0%                                  |
| all other LTE bands | 17             | 0.1%                                  |
| Total               | 24,687         | 100.0%                                |

**T-Mobile: 5G NR strongest-serving band (n=26,021 tiles that report the 5G NR strongest-band field)**

| Band   | Tile count (n) | Share of the 5G NR band-reporting tiles |
|--------|----------------|-----------------------------------------|
| NR2500 | 14,411         | 55.4%                                   |
| NR1900 | 5,356          | 20.6%                                   |
| NR2600 | 3,875          | 14.9%                                   |
| NR600  | 2,376          | 9.1%                                    |
| NR3700 | 3              | 0.0%                                    |
| Total  | 26,021         | 100.0%                                  |

**T-Mobile: LTE strongest-serving band (n=21,271 tiles that report the LTE strongest-band field)**

| Band    | Tile count (n) | Share of the LTE band-reporting tiles |
|---------|----------------|---------------------------------------|
| LTE2100 | 12,039         | 56.6%                                 |
| LTE1900 | 7,316          | 34.4%                                 |
| LTE700  | 1,111          | 5.2%                                  |
| LTE1800 | 765            | 3.6%                                  |
| LTE600  | 40             | 0.2%                                  |
| Total   | 21,271         | 100.0%                                |

**Verizon: 5G NR strongest-serving band (n=9,964 tiles that report the 5G NR strongest-band field)**

| Band   | Tile count (n) | Share of the 5G NR band-reporting tiles |
|--------|----------------|-----------------------------------------|
| NR3700 | 6,282          | 63.0%                                   |
| NR1900 | 1,990          | 20.0%                                   |
| NR850  | 1,095          | 11.0%                                   |
| NR3500 | 588            | 5.9%                                    |
| NR2100 | 8              | 0.1%                                    |
| NR2500 | 1              | 0.0%                                    |
| Total  | 9,964          | 100.0%                                  |

**Verizon: LTE strongest-serving band (n=23,342 tiles that report the LTE strongest-band field)**

| Band    | Tile count (n) | Share of the LTE band-reporting tiles |
|---------|----------------|---------------------------------------|
| LTE2100 | 18,162         | 77.8%                                 |
| LTE700  | 2,770          | 11.9%                                 |
| LTE800  | 1,959          | 8.4%                                  |
| LTE1900 | 450            | 1.9%                                  |
| LTE5500 | 1              | 0.0%                                  |
| Total   | 23,342         | 100.0%                                |

## Appendix C. Full gate table

*Per-gate mean 5G NR RSRP and SINR per carrier, with the per-carrier tile n. Healthy means RSRP ≥ -95.0 dBm. The last column gives the strongest gate-area reading and its margin over the next carrier, and reads TIE where that margin is at or under 1 dB,*

which is this instrument's resolution: tile RSRP is integer-valued, so a decimal in these columns comes from averaging integers and carries no finer resolution. A gate-area reading is not a building verdict, because a median 22.4% of each gate's joined tiles sit over a building (section 16); the third column prints that share per gate so a reader can discount an individual gate. Gate refs follow the OpenStreetMap inventory; the zone is the concourse letter in the ref.

| Zone | Gate | Over a building | AT&T RSRP / SINR (n) | T-Mobile RSRP / SINR (n) | Verizon RSRP / SINR (n) | Strongest gate-area reading (margin) |
|------|------|-----------------|----------------------|--------------------------|-------------------------|--------------------------------------|
| T    | T1   | 8%              | -90.4 / +13.6 (129)  | -99.3 / +4.9 (131)       | -97.4 / +9.8 (126)      | AT&T +7.0 dB                         |
| T    | T2   | 11%             | -90.4 / +14.1 (145)  | -98.0 / +5.8 (157)       | -96.5 / +10.3 (146)     | AT&T +6.1 dB                         |
| T    | T3   | 15%             | -93.7 / +12.7 (164)  | -95.9 / +8.5 (175)       | -97.6 / +9.7 (163)      | AT&T +2.2 dB                         |
| T    | T4   | 15%             | -96.0 / +12.1 (165)  | -96.5 / +8.8 (178)       | -99.6 / +8.9 (162)      | TIE (0.5 dB)                         |
| T    | T5   | 16%             | -96.6 / +12.0 (178)  | -98.8 / +7.0 (182)       | -100.0 / +9.1 (173)     | AT&T +2.2 dB                         |
| T    | T6   | 19%             | -95.5 / +12.6 (178)  | -98.3 / +7.0 (184)       | -99.9 / +9.3 (181)      | AT&T +2.8 dB                         |
| T    | T7   | 28%             | -94.4 / +14.4 (179)  | -97.4 / +8.4 (186)       | -99.0 / +10.3 (186)     | AT&T +3.0 dB                         |
| T    | T8   | 45%             | -94.0 / +15.7 (177)  | -96.0 / +11.1 (187)      | -96.5 / +11.6 (182)     | AT&T +2.0 dB                         |
| T    | T9   | 57%             | -94.2 / +17.7 (178)  | -95.0 / +13.3 (187)      | -94.3 / +15.6 (173)     | TIE (0.1 dB)                         |
| T    | T10  | 52%             | -94.5 / +16.3 (175)  | -95.2 / +12.2 (183)      | -95.3 / +15.0 (168)     | TIE (0.7 dB)                         |
| T    | T11  | 38%             | -94.8 / +14.7 (176)  | -94.9 / +11.0 (184)      | -96.8 / +13.7 (165)     | TIE (0.1 dB)                         |
| T    | T12  | 22%             | -95.9 / +11.8 (168)  | -94.9 / +9.6 (165)       | -98.6 / +11.4 (153)     | TIE (1.0 dB)                         |
| T    | T13  | 18%             | -97.1 / +12.1 (152)  | -95.6 / +9.3 (152)       | -99.4 / +10.8 (142)     | T-Mobile +1.5 dB                     |
| T    | T14  | 17%             | -94.8 / +13.7 (145)  | -95.4 / +10.2 (153)      | -97.6 / +12.5 (141)     | TIE (0.6 dB)                         |
| T    | T15  | 21%             | -92.9 / +16.6 (141)  | -95.7 / +10.9 (147)      | -95.3 / +14.3 (136)     | AT&T +2.4 dB                         |
| T    | T16  | 25%             | -92.6 / +18.0 (148)  | -95.4 / +11.3 (150)      | -94.5 / +15.0 (138)     | AT&T +1.9 dB                         |
| T    | T17  | 26%             | -93.8 / +19.4 (128)  | -95.7 / +10.5 (138)      | -95.4 / +14.2 (128)     | AT&T +1.6 dB                         |
| T    | T18  | 23%             | -95.9 / +18.6 (127)  | -96.5 / +9.3 (133)       | -97.4 / +13.0 (132)     | TIE (0.6 dB)                         |
| T    | T19  | 22%             | -96.4 / +18.2 (122)  | -96.6 / +9.2 (133)       | -97.6 / +13.0 (133)     | TIE (0.2 dB)                         |
| T    | T20  | 22%             | -96.9 / +17.2 (117)  | -96.8 / +9.2 (127)       | -97.4 / +13.2 (131)     | TIE (0.1 dB)                         |
| T    | T21  | 22%             | -97.4 / +16.1 (117)  | -96.5 / +9.6 (124)       | -97.8 / +13.0 (128)     | TIE (0.9 dB)                         |
| A    | A1   | 23%             | -95.1 / +11.1 (124)  | -97.7 / +7.6 (145)       | -98.6 / +7.7 (158)      | AT&T +2.6 dB                         |
| A    | A2   | 24%             | -94.9 / +11.6 (159)  | -96.7 / +8.1 (174)       | -99.3 / +8.1 (182)      | AT&T +1.8 dB                         |
| A    | A3   | 26%             | -95.5 / +11.9 (163)  | -96.1 / +8.9 (182)       | -99.1 / +8.1 (188)      | TIE (0.6 dB)                         |
| A    | A4   | 21%             | -94.9 / +13.1 (178)  | -95.5 / +9.6 (191)       | -98.2 / +8.7 (195)      | TIE (0.6 dB)                         |
| A    | A5   | 22%             | -95.1 / +12.7 (180)  | -95.5 / +9.8 (193)       | -98.5 / +8.3 (195)      | TIE (0.4 dB)                         |
| A    | A6   | 22%             | -95.3 / +14.8 (178)  | -94.9 / +10.3 (188)      | -97.1 / +9.4 (191)      | TIE (0.4 dB)                         |
| A    | A7   | 22%             | -96.0 / +13.6 (178)  | -94.7 / +10.5 (193)      | -97.2 / +9.0 (195)      | T-Mobile +1.3 dB                     |
| A    | A9   | 23%             | -95.5 / +15.4 (181)  | -94.3 / +10.4 (193)      | -96.2 / +10.2 (194)     | T-Mobile +1.2 dB                     |
| A    | A10  | 23%             | -95.4 / +15.2 (176)  | -94.9 / +10.4 (189)      | -95.9 / +11.0 (185)     | TIE (0.5 dB)                         |
| A    | A11  | 22%             | -95.2 / +14.7 (176)  | -95.2 / +9.9 (191)       | -95.5 / +11.3 (187)     | TIE (0.0 dB)                         |
| A    | A12  | 21%             | -95.2 / +14.6 (175)  | -96.0 / +9.3 (183)       | -95.4 / +11.7 (175)     | TIE (0.2 dB)                         |
| A    | A15  | 20%             | -95.3 / +13.6 (182)  | -96.5 / +9.2 (191)       | -96.7 / +11.1 (186)     | AT&T +1.2 dB                         |
| A    | A16  | 28%             | -92.9 / +15.2 (172)  | -95.2 / +10.4 (185)      | -95.8 / +12.0 (183)     | AT&T +2.3 dB                         |
| A    | A17  | 30%             | -92.5 / +15.1 (181)  | -94.9 / +10.8 (188)      | -95.9 / +11.9 (187)     | AT&T +2.4 dB                         |
| A    | A18  | 33%             | -92.7 / +15.4 (177)  | -93.4 / +11.8 (187)      | -95.9 / +12.2 (187)     | TIE (0.7 dB)                         |
| A    | A19  | 34%             | -93.7 / +14.7 (192)  | -93.8 / +11.3 (193)      | -96.7 / +11.7 (192)     | TIE (0.1 dB)                         |
| A    | A20  | 34%             | -94.2 / +15.9 (176)  | -93.9 / +11.6 (187)      | -96.6 / +12.0 (185)     | TIE (0.3 dB)                         |
| A    | A21  | 29%             | -95.4 / +14.2 (182)  | -94.5 / +10.6 (184)      | -97.6 / +11.3 (182)     | TIE (0.9 dB)                         |
| A    | A24  | 23%             | -97.6 / +14.1 (170)  | -96.0 / +9.6 (183)       | -98.3 / +10.9 (177)     | T-Mobile +1.6 dB                     |
| A    | A25  | 23%             | -97.3 / +14.0 (169)  | -95.7 / +9.5 (175)       | -97.7 / +11.0 (177)     | T-Mobile +1.6 dB                     |
| A    | A26  | 23%             | -96.3 / +15.6 (169)  | -95.6 / +9.9 (176)       | -97.1 / +11.6 (178)     | TIE (0.7 dB)                         |
| A    | A27  | 23%             | -96.1 / +15.9 (166)  | -94.9 / +9.9 (172)       | -96.9 / +11.9 (177)     | T-Mobile +1.2 dB                     |
| A    | A28  | 23%             | -95.3 / +15.1 (172)  | -95.8 / +10.4 (172)      | -96.1 / +12.8 (176)     | TIE (0.5 dB)                         |
| A    | A29  | 23%             | -95.2 / +15.9 (164)  | -95.2 / +11.2 (176)      | -96.4 / +12.2 (177)     | TIE (0.0 dB)                         |
| A    | A30  | 22%             | -96.1 / +13.5 (174)  | -95.2 / +11.5 (171)      | -96.2 / +12.6 (176)     | TIE (0.9 dB)                         |
| A    | A31  | 19%             | -95.7 / +13.6 (164)  | -94.6 / +11.5 (169)      | -95.9 / +12.9 (171)     | T-Mobile +1.1 dB                     |
| A    | A32  | 17%             | -96.1 / +12.5 (148)  | -94.7 / +11.7 (157)      | -96.0 / +13.3 (160)     | T-Mobile +1.3 dB                     |
| A    | A33  | 15%             | -96.0 / +12.0 (130)  | -95.1 / +11.0 (144)      | -96.2 / +13.2 (144)     | TIE (0.9 dB)                         |
| A    | A34  | 11%             | -96.7 / +10.9 (119)  | -95.4 / +10.6 (137)      | -96.5 / +12.6 (139)     | T-Mobile +1.1 dB                     |
| B    | B1   | 14%             | -90.3 / +16.2 (112)  | -98.0 / +7.0 (147)       | -96.6 / +10.3 (138)     | AT&T +6.3 dB                         |
| B    | B2   | 14%             | -92.2 / +15.5 (129)  | -99.0 / +7.3 (170)       | -97.4 / +10.1 (156)     | AT&T +5.2 dB                         |

|   |     |     |                     |                     |                     |               |
|---|-----|-----|---------------------|---------------------|---------------------|---------------|
| B | B3  | 16% | -91.7 / +15.8 (139) | -98.3 / +7.5 (165)  | -97.4 / +10.3 (159) | AT&T +5.7 dB  |
| B | B4  | 18% | -93.0 / +14.9 (153) | -98.6 / +8.2 (179)  | -97.5 / +11.4 (165) | AT&T +4.5 dB  |
| B | B5  | 21% | -93.4 / +15.1 (174) | -98.0 / +8.3 (185)  | -97.2 / +11.1 (187) | AT&T +3.8 dB  |
| B | B6  | 22% | -92.9 / +14.9 (168) | -98.6 / +8.8 (189)  | -98.0 / +11.0 (180) | AT&T +5.1 dB  |
| B | B7  | 22% | -93.4 / +14.4 (184) | -98.2 / +9.0 (193)  | -97.6 / +10.9 (188) | AT&T +4.2 dB  |
| B | B9  | 22% | -92.9 / +15.5 (180) | -97.9 / +9.9 (192)  | -98.4 / +10.0 (188) | AT&T +5.0 dB  |
| B | B10 | 23% | -91.8 / +17.1 (168) | -98.1 / +10.3 (182) | -98.1 / +11.3 (181) | AT&T +6.3 dB  |
| B | B11 | 22% | -91.2 / +17.7 (180) | -97.6 / +10.1 (192) | -98.6 / +10.4 (186) | AT&T +6.4 dB  |
| B | B12 | 24% | -91.4 / +18.3 (168) | -97.7 / +10.9 (182) | -98.4 / +11.3 (181) | AT&T +6.3 dB  |
| B | B13 | 22% | -92.7 / +17.7 (177) | -97.2 / +11.1 (190) | -98.4 / +10.4 (182) | AT&T +4.5 dB  |
| B | B14 | 24% | -92.7 / +17.9 (168) | -97.4 / +11.4 (183) | -98.0 / +11.2 (178) | AT&T +4.7 dB  |
| B | B16 | 35% | -92.4 / +16.7 (177) | -96.8 / +10.9 (192) | -96.7 / +11.9 (183) | AT&T +4.3 dB  |
| B | B17 | 37% | -92.3 / +17.5 (184) | -96.0 / +11.2 (189) | -96.3 / +11.6 (187) | AT&T +3.7 dB  |
| B | B18 | 41% | -92.4 / +16.8 (187) | -96.3 / +11.1 (194) | -96.0 / +12.0 (187) | AT&T +3.6 dB  |
| B | B19 | 41% | -92.8 / +16.3 (186) | -96.2 / +10.8 (189) | -97.0 / +10.7 (189) | AT&T +3.4 dB  |
| B | B20 | 37% | -93.2 / +16.3 (181) | -96.1 / +11.0 (193) | -98.3 / +10.8 (189) | AT&T +2.9 dB  |
| B | B21 | 37% | -93.5 / +15.8 (181) | -95.7 / +10.7 (183) | -97.4 / +9.6 (184)  | AT&T +2.2 dB  |
| B | B22 | 33% | -94.4 / +15.2 (178) | -96.7 / +10.4 (193) | -98.9 / +10.5 (190) | AT&T +2.3 dB  |
| B | B23 | 35% | -94.4 / +15.5 (183) | -95.9 / +10.9 (186) | -98.0 / +10.2 (184) | AT&T +1.5 dB  |
| B | B24 | 24% | -96.8 / +13.1 (170) | -97.2 / +10.1 (187) | -100.1 / +9.8 (184) | TIE (0.4 dB)  |
| B | B25 | 25% | -96.2 / +13.9 (178) | -97.1 / +10.0 (186) | -99.7 / +9.5 (184)  | TIE (0.9 dB)  |
| B | B26 | 24% | -97.2 / +13.9 (165) | -97.2 / +10.2 (187) | -99.1 / +10.8 (178) | TIE (0.0 dB)  |
| B | B27 | 24% | -96.9 / +14.7 (166) | -97.4 / +10.0 (182) | -98.2 / +10.1 (183) | TIE (0.5 dB)  |
| B | B28 | 24% | -95.3 / +15.0 (163) | -96.7 / +9.9 (187)  | -97.7 / +11.9 (182) | AT&T +1.4 dB  |
| B | B29 | 24% | -95.2 / +15.0 (163) | -96.6 / +10.0 (179) | -97.4 / +11.1 (180) | AT&T +1.4 dB  |
| B | B31 | 22% | -94.0 / +17.0 (161) | -95.9 / +10.1 (180) | -96.1 / +11.2 (179) | AT&T +1.9 dB  |
| B | B32 | 21% | -94.8 / +16.2 (162) | -95.8 / +10.4 (183) | -96.9 / +11.6 (174) | TIE (1.0 dB)  |
| B | B33 | 16% | -94.3 / +15.7 (140) | -95.0 / +9.7 (157)  | -94.9 / +11.7 (165) | TIE (0.6 dB)  |
| B | B34 | 14% | -94.3 / +14.4 (126) | -94.9 / +9.5 (146)  | -94.7 / +12.6 (147) | TIE (0.4 dB)  |
| B | B36 | 13% | -94.3 / +15.4 (113) | -95.0 / +9.4 (130)  | -94.5 / +12.7 (133) | TIE (0.2 dB)  |
| C | C1  | 12% | -92.9 / +13.1 (117) | -97.9 / +8.3 (148)  | -98.6 / +9.8 (142)  | AT&T +5.0 dB  |
| C | C2  | 12% | -92.6 / +13.2 (114) | -98.0 / +8.4 (142)  | -98.5 / +10.3 (137) | AT&T +5.4 dB  |
| C | C3  | 14% | -92.3 / +13.4 (120) | -97.7 / +8.4 (148)  | -98.5 / +9.8 (144)  | AT&T +5.4 dB  |
| C | C4  | 17% | -90.8 / +15.3 (147) | -97.6 / +9.4 (172)  | -98.9 / +10.0 (155) | AT&T +6.8 dB  |
| C | C5  | 16% | -90.5 / +15.3 (148) | -97.2 / +9.7 (171)  | -99.1 / +9.5 (159)  | AT&T +6.7 dB  |
| C | C6  | 23% | -86.9 / +18.7 (150) | -96.4 / +11.1 (173) | -95.9 / +12.3 (153) | AT&T +9.0 dB  |
| C | C7  | 22% | -85.8 / +19.5 (150) | -96.7 / +10.9 (177) | -96.4 / +11.6 (159) | AT&T +10.6 dB |
| C | C9  | 23% | -86.6 / +19.3 (136) | -95.9 / +11.6 (168) | -95.5 / +12.3 (146) | AT&T +8.9 dB  |
| C | C10 | 24% | -87.1 / +19.2 (139) | -95.6 / +11.9 (169) | -94.7 / +13.2 (144) | AT&T +7.6 dB  |
| C | C12 | 23% | -87.7 / +20.5 (127) | -95.0 / +12.5 (167) | -95.3 / +13.3 (137) | AT&T +7.3 dB  |
| C | C13 | 24% | -88.7 / +19.9 (119) | -95.2 / +12.5 (163) | -94.8 / +13.6 (135) | AT&T +6.1 dB  |
| C | C14 | 24% | -89.5 / +19.5 (126) | -94.9 / +12.3 (160) | -94.5 / +14.9 (136) | AT&T +5.0 dB  |
| C | C15 | 24% | -88.5 / +19.7 (116) | -94.8 / +12.5 (155) | -94.7 / +14.0 (136) | AT&T +6.2 dB  |
| C | C16 | 24% | -89.2 / +19.3 (124) | -94.3 / +12.8 (159) | -95.2 / +13.2 (140) | AT&T +5.1 dB  |
| C | C17 | 24% | -88.9 / +20.2 (123) | -94.0 / +13.0 (157) | -95.1 / +13.7 (138) | AT&T +5.1 dB  |
| C | C20 | 34% | -89.9 / +19.8 (137) | -93.2 / +14.5 (168) | -94.1 / +12.3 (157) | AT&T +3.3 dB  |
| C | C21 | 34% | -90.5 / +19.4 (140) | -93.4 / +14.7 (166) | -95.4 / +11.7 (155) | AT&T +2.9 dB  |
| C | C22 | 38% | -89.0 / +20.4 (152) | -92.6 / +15.0 (180) | -95.0 / +11.2 (170) | AT&T +3.6 dB  |
| C | C30 | 36% | -90.7 / +19.1 (181) | -94.2 / +12.4 (191) | -98.1 / +8.4 (185)  | AT&T +3.5 dB  |
| C | C33 | 38% | -90.8 / +19.4 (169) | -94.0 / +13.0 (186) | -97.7 / +8.5 (190)  | AT&T +3.2 dB  |
| C | C34 | 30% | -91.9 / +18.2 (172) | -95.3 / +10.2 (188) | -98.4 / +7.9 (180)  | AT&T +3.4 dB  |
| C | C35 | 36% | -92.4 / +18.7 (174) | -94.5 / +11.7 (186) | -98.2 / +8.3 (185)  | AT&T +2.1 dB  |
| C | C36 | 27% | -91.4 / +17.5 (172) | -95.8 / +9.9 (192)  | -97.4 / +9.1 (183)  | AT&T +4.4 dB  |
| C | C37 | 27% | -91.8 / +17.7 (170) | -95.4 / +9.8 (190)  | -97.6 / +8.8 (184)  | AT&T +3.6 dB  |
| C | C40 | 25% | -91.7 / +15.3 (166) | -96.2 / +9.4 (191)  | -96.2 / +10.6 (185) | AT&T +4.5 dB  |
| C | C41 | 25% | -91.5 / +16.0 (169) | -95.5 / +9.4 (188)  | -96.1 / +9.9 (183)  | AT&T +4.0 dB  |
| C | C42 | 26% | -89.9 / +15.9 (175) | -95.7 / +8.9 (191)  | -96.3 / +10.3 (187) | AT&T +5.8 dB  |
| C | C43 | 26% | -90.6 / +15.6 (169) | -95.8 / +9.1 (192)  | -95.5 / +10.4 (185) | AT&T +4.9 dB  |
| C | C46 | 19% | -90.1 / +15.4 (162) | -94.9 / +9.0 (178)  | -98.0 / +9.6 (169)  | AT&T +4.8 dB  |

|   |     |     |                     |                     |                     |              |
|---|-----|-----|---------------------|---------------------|---------------------|--------------|
| C | C47 | 22% | -89.3 / +16.2 (173) | -95.5 / +8.4 (191)  | -97.0 / +9.7 (182)  | AT&T +6.2 dB |
| C | C49 | 18% | -90.4 / +15.1 (162) | -95.3 / +8.2 (185)  | -98.0 / +9.0 (175)  | AT&T +4.9 dB |
| C | C50 | 17% | -90.5 / +14.8 (153) | -95.4 / +7.7 (168)  | -98.7 / +8.8 (160)  | AT&T +4.9 dB |
| C | C52 | 16% | -91.0 / +14.3 (157) | -95.4 / +7.9 (174)  | -98.6 / +8.8 (168)  | AT&T +4.4 dB |
| C | C55 | 16% | -90.6 / +14.3 (160) | -95.7 / +7.9 (175)  | -99.0 / +8.6 (170)  | AT&T +5.1 dB |
| D | D1  | 10% | -94.4 / +11.1 (140) | -99.7 / +4.5 (156)  | -101.3 / +7.9 (161) | AT&T +5.3 dB |
| D | D1A | 9%  | -93.0 / +11.5 (124) | -99.2 / +4.6 (145)  | -100.9 / +7.8 (145) | AT&T +6.2 dB |
| D | D2  | 10% | -94.1 / +11.1 (129) | -99.6 / +4.5 (149)  | -101.2 / +8.0 (154) | AT&T +5.5 dB |
| D | D3  | 13% | -95.3 / +11.5 (160) | -99.3 / +5.4 (167)  | -101.2 / +8.0 (176) | AT&T +4.0 dB |
| D | D4  | 13% | -95.4 / +11.6 (163) | -99.1 / +5.3 (168)  | -101.1 / +8.4 (178) | AT&T +3.7 dB |
| D | D5  | 18% | -96.0 / +12.2 (164) | -98.5 / +6.2 (178)  | -100.7 / +7.8 (187) | AT&T +2.5 dB |
| D | D6  | 18% | -95.4 / +12.5 (170) | -98.5 / +5.9 (179)  | -100.7 / +8.3 (185) | AT&T +3.1 dB |
| D | D7  | 19% | -95.5 / +12.9 (169) | -98.7 / +6.6 (183)  | -100.8 / +7.9 (184) | AT&T +3.2 dB |
| D | D8  | 18% | -95.6 / +13.0 (167) | -98.8 / +6.2 (180)  | -100.6 / +8.2 (184) | AT&T +3.2 dB |
| D | D8A | 19% | -95.1 / +13.1 (171) | -98.5 / +6.7 (183)  | -100.3 / +8.2 (187) | AT&T +3.4 dB |
| D | D9  | 17% | -93.0 / +14.1 (169) | -98.4 / +7.0 (182)  | -99.8 / +8.0 (186)  | AT&T +5.4 dB |
| D | D9A | 17% | -90.4 / +16.5 (168) | -98.4 / +7.3 (179)  | -98.3 / +9.8 (178)  | AT&T +7.9 dB |
| D | D10 | 17% | -94.4 / +13.2 (173) | -98.4 / +7.0 (182)  | -99.6 / +8.3 (183)  | AT&T +4.0 dB |
| D | D11 | 16% | -88.9 / +16.1 (165) | -98.1 / +7.2 (178)  | -98.3 / +9.7 (175)  | AT&T +9.2 dB |
| D | D12 | 17% | -91.2 / +15.2 (177) | -98.6 / +6.9 (183)  | -98.7 / +9.6 (182)  | AT&T +7.4 dB |
| D | D13 | 23% | -89.9 / +17.5 (167) | -97.2 / +9.0 (178)  | -97.2 / +11.2 (174) | AT&T +7.3 dB |
| D | D14 | 23% | -90.0 / +17.0 (174) | -97.2 / +8.6 (183)  | -97.5 / +11.0 (176) | AT&T +7.2 dB |
| D | D15 | 31% | -89.6 / +20.3 (177) | -96.1 / +10.7 (189) | -96.2 / +13.2 (181) | AT&T +6.5 dB |
| D | D16 | 32% | -90.5 / +19.5 (177) | -95.7 / +10.7 (186) | -96.0 / +13.5 (183) | AT&T +5.2 dB |
| D | D21 | 30% | -90.8 / +20.3 (166) | -95.8 / +10.7 (173) | -97.4 / +12.2 (188) | AT&T +5.0 dB |
| D | D23 | 23% | -92.2 / +19.3 (150) | -95.7 / +9.5 (162)  | -96.9 / +12.2 (181) | AT&T +3.5 dB |
| D | D24 | 24% | -92.0 / +18.9 (147) | -95.0 / +9.7 (153)  | -96.9 / +13.0 (174) | AT&T +3.0 dB |
| D | D25 | 15% | -93.0 / +16.1 (144) | -96.8 / +8.0 (163)  | -97.2 / +11.9 (177) | AT&T +3.8 dB |
| D | D26 | 17% | -91.8 / +18.2 (141) | -96.2 / +8.0 (158)  | -97.0 / +12.6 (174) | AT&T +4.4 dB |
| D | D27 | 15% | -91.6 / +18.2 (137) | -97.1 / +7.7 (169)  | -97.1 / +11.9 (166) | AT&T +5.5 dB |
| D | D28 | 16% | -92.3 / +16.9 (130) | -96.9 / +7.2 (164)  | -96.9 / +12.8 (156) | AT&T +4.6 dB |
| D | D29 | 16% | -92.4 / +16.5 (143) | -96.6 / +7.8 (177)  | -97.2 / +12.1 (166) | AT&T +4.2 dB |
| D | D30 | 15% | -93.0 / +15.8 (133) | -96.9 / +7.3 (170)  | -96.4 / +13.1 (156) | AT&T +3.4 dB |
| D | D31 | 15% | -92.2 / +15.5 (147) | -97.2 / +7.6 (181)  | -97.9 / +11.6 (162) | AT&T +5.0 dB |
| D | D32 | 15% | -92.2 / +16.5 (141) | -96.5 / +7.4 (181)  | -96.8 / +12.7 (155) | AT&T +4.3 dB |
| D | D33 | 15% | -91.7 / +16.4 (151) | -97.3 / +7.6 (184)  | -98.4 / +11.3 (161) | AT&T +5.6 dB |
| D | D34 | 14% | -92.2 / +15.0 (153) | -97.6 / +7.1 (187)  | -98.6 / +11.6 (155) | AT&T +5.4 dB |
| D | D35 | 12% | -93.3 / +13.6 (158) | -97.6 / +7.9 (180)  | -98.9 / +11.0 (167) | AT&T +4.3 dB |
| D | D36 | 14% | -92.3 / +14.8 (158) | -97.4 / +7.3 (189)  | -98.6 / +11.7 (157) | AT&T +5.1 dB |
| D | D38 | 12% | -93.0 / +14.4 (159) | -97.6 / +7.7 (185)  | -98.9 / +11.1 (159) | AT&T +4.6 dB |
| D | D39 | 9%  | -92.3 / +14.4 (151) | -97.4 / +8.0 (166)  | -98.7 / +10.7 (161) | AT&T +5.1 dB |
| D | D40 | 10% | -92.7 / +14.0 (162) | -97.5 / +8.1 (181)  | -98.7 / +10.8 (163) | AT&T +4.8 dB |
| D | D41 | 8%  | -92.3 / +14.2 (151) | -97.3 / +8.1 (165)  | -98.7 / +10.3 (161) | AT&T +5.0 dB |
| D | D42 | 9%  | -92.5 / +14.2 (160) | -97.6 / +7.6 (176)  | -98.4 / +11.0 (161) | AT&T +5.1 dB |
| D | D44 | 7%  | -92.4 / +14.1 (157) | -97.5 / +7.7 (171)  | -98.5 / +10.6 (160) | AT&T +5.1 dB |
| D | D46 | 8%  | -92.4 / +14.1 (155) | -97.5 / +8.0 (172)  | -98.8 / +10.3 (162) | AT&T +5.1 dB |
| E | E1  | 15% | -98.7 / +7.4 (117)  | -99.3 / +3.1 (161)  | -101.2 / +7.9 (144) | TIE (0.6 dB) |
| E | E2  | 17% | -98.8 / +7.4 (134)  | -99.3 / +3.7 (168)  | -101.9 / +7.8 (162) | TIE (0.5 dB) |
| E | E3  | 19% | -98.9 / +7.2 (153)  | -98.4 / +3.8 (190)  | -100.9 / +8.8 (169) | TIE (0.5 dB) |
| E | E4  | 22% | -96.2 / +10.5 (170) | -97.5 / +5.9 (185)  | -100.8 / +8.8 (179) | AT&T +1.3 dB |
| E | E5  | 22% | -96.5 / +9.6 (172)  | -97.3 / +5.5 (188)  | -100.5 / +9.0 (172) | TIE (0.8 dB) |
| E | E6  | 22% | -95.0 / +12.1 (179) | -97.3 / +7.5 (187)  | -99.6 / +9.2 (181)  | AT&T +2.3 dB |
| E | E7  | 23% | -95.0 / +11.8 (181) | -97.5 / +7.5 (188)  | -99.0 / +9.2 (181)  | AT&T +2.5 dB |
| E | E8  | 23% | -92.7 / +14.1 (177) | -98.0 / +8.0 (188)  | -98.5 / +9.9 (179)  | AT&T +5.3 dB |
| E | E9  | 27% | -93.4 / +14.1 (170) | -97.9 / +8.2 (185)  | -97.8 / +9.6 (179)  | AT&T +4.4 dB |
| E | E10 | 35% | -90.3 / +17.9 (173) | -97.5 / +9.7 (187)  | -95.9 / +10.6 (169) | AT&T +5.6 dB |
| E | E11 | 54% | -91.8 / +18.2 (185) | -97.4 / +11.5 (192) | -96.2 / +11.1 (178) | AT&T +4.4 dB |
| E | E12 | 68% | -90.8 / +20.1 (179) | -96.8 / +13.2 (188) | -95.5 / +13.0 (170) | AT&T +4.7 dB |
| E | E14 | 54% | -92.1 / +17.7 (183) | -97.3 / +11.5 (193) | -97.4 / +11.2 (176) | AT&T +5.2 dB |

|   |     |     |                     |                     |                      |                  |
|---|-----|-----|---------------------|---------------------|----------------------|------------------|
| E | E15 | 40% | -92.2 / +15.1 (158) | -97.6 / +8.4 (185)  | -99.3 / +8.7 (172)   | AT&T +5.4 dB     |
| E | E16 | 27% | -92.7 / +14.2 (132) | -97.3 / +7.8 (180)  | -96.9 / +10.2 (158)  | AT&T +4.2 dB     |
| E | E17 | 23% | -92.3 / +15.1 (121) | -97.5 / +7.5 (158)  | -98.7 / +8.6 (140)   | AT&T +5.2 dB     |
| E | E18 | 20% | -92.2 / +15.2 (108) | -97.4 / +7.2 (144)  | -94.9 / +11.6 (121)  | AT&T +2.7 dB     |
| E | E26 | 47% | -91.0 / +16.6 (166) | -95.5 / +11.2 (182) | -96.7 / +10.6 (157)  | AT&T +4.5 dB     |
| E | E27 | 39% | -92.5 / +15.2 (168) | -97.0 / +9.5 (193)  | -96.5 / +9.0 (163)   | AT&T +4.0 dB     |
| E | E28 | 32% | -94.3 / +12.5 (160) | -96.4 / +9.0 (177)  | -96.5 / +8.1 (161)   | AT&T +2.1 dB     |
| E | E29 | 33% | -96.0 / +11.8 (157) | -97.6 / +8.6 (186)  | -96.7 / +8.0 (168)   | TIE (0.7 dB)     |
| E | E30 | 28% | -95.8 / +13.4 (154) | -97.6 / +8.2 (182)  | -96.5 / +8.4 (159)   | TIE (0.7 dB)     |
| E | E31 | 27% | -96.4 / +13.4 (162) | -98.1 / +8.6 (185)  | -97.5 / +8.7 (170)   | AT&T +1.1 dB     |
| E | E32 | 21% | -95.1 / +15.7 (143) | -96.6 / +10.3 (172) | -97.7 / +9.5 (154)   | AT&T +1.5 dB     |
| E | E33 | 25% | -94.9 / +14.9 (151) | -97.8 / +9.8 (187)  | -96.8 / +10.0 (168)  | AT&T +1.9 dB     |
| E | E34 | 18% | -94.3 / +16.4 (124) | -95.6 / +11.1 (162) | -97.5 / +9.6 (140)   | AT&T +1.3 dB     |
| E | E35 | 21% | -95.5 / +17.4 (125) | -96.2 / +11.1 (164) | -96.9 / +10.5 (131)  | TIE (0.7 dB)     |
| E | E36 | 20% | -95.1 / +17.3 (118) | -95.9 / +11.1 (159) | -97.1 / +10.2 (130)  | TIE (0.8 dB)     |
| E | E37 | 17% | -94.4 / +16.6 (108) | -95.2 / +11.2 (144) | -97.6 / +9.6 (125)   | TIE (0.8 dB)     |
| E | E40 | 11% | -97.9 / +15.2 (96)  | -98.4 / +9.7 (133)  | -98.4 / +9.5 (127)   | TIE (0.5 dB)     |
| E | E41 | 10% | -98.7 / +15.2 (89)  | -99.4 / +9.3 (126)  | -99.1 / +9.3 (126)   | TIE (0.4 dB)     |
| E | E42 | 10% | -98.4 / +14.4 (91)  | -99.0 / +9.6 (127)  | -99.4 / +9.4 (125)   | TIE (0.6 dB)     |
| F | F1  | 18% | -97.9 / +12.2 (125) | -97.6 / +6.7 (169)  | -99.0 / +11.2 (132)  | TIE (0.3 dB)     |
| F | F2  | 18% | -97.9 / +12.3 (122) | -97.8 / +6.8 (167)  | -99.9 / +10.2 (127)  | TIE (0.1 dB)     |
| F | F3  | 23% | -98.0 / +12.8 (129) | -96.6 / +7.8 (173)  | -98.4 / +11.5 (131)  | T-Mobile +1.4 dB |
| F | F4  | 32% | -97.6 / +14.0 (137) | -97.5 / +8.0 (177)  | -101.3 / +9.7 (141)  | TIE (0.1 dB)     |
| F | F5  | 35% | -98.0 / +12.0 (144) | -96.5 / +8.6 (180)  | -99.9 / +11.1 (131)  | T-Mobile +1.5 dB |
| F | F6  | 40% | -97.3 / +13.3 (151) | -98.3 / +8.6 (179)  | -101.2 / +10.6 (141) | TIE (1.0 dB)     |
| F | F7  | 51% | -96.9 / +14.6 (169) | -97.1 / +9.7 (189)  | -96.3 / +15.0 (150)  | TIE (0.6 dB)     |
| F | F8  | 52% | -95.5 / +15.5 (166) | -98.9 / +9.8 (182)  | -98.5 / +11.7 (165)  | AT&T +3.0 dB     |
| F | F9  | 58% | -96.9 / +15.0 (175) | -97.4 / +10.1 (188) | -96.6 / +14.7 (156)  | TIE (0.3 dB)     |
| F | F10 | 62% | -96.1 / +15.8 (182) | -98.2 / +10.6 (182) | -98.2 / +12.8 (175)  | AT&T +2.1 dB     |
| F | F12 | 34% | -93.8 / +15.4 (172) | -97.6 / +7.6 (182)  | -98.2 / +10.9 (172)  | AT&T +3.8 dB     |
| F | F14 | 21% | -94.7 / +14.4 (154) | -97.7 / +6.7 (162)  | -97.3 / +12.1 (156)  | AT&T +2.6 dB     |