The 5G race in 2021: who's currently in the lead across 65 markets?

	AT&T	T-Mobile	Verizon
Everyday 5G availability			
Everyday 5G download speeds			
Everyday 5G data reliability			(9)

AT&T leads when it comes to Everyday 5G download speeds, T-Mobile offers the most widespread

Everyday 5G availability, while Verizon registers the top Everyday 5G data reliability in the most cities.

The 5G landscape can change quickly. RootMetrics tests the 125 most populated metros in the US every six months, and so far in 1H 2021, we've tested 65 of those markets. To provide a snapshot of which carrier is leading the 5G race to date in 1H 2021, we looked at the number of markets in which each network delivered:



Highest Everyday 5G availability



Fastest Everyday 5G download speeds



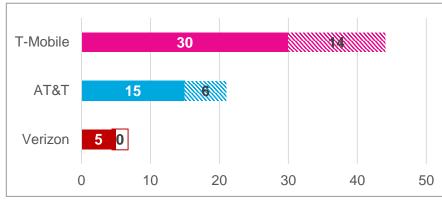
Highest Everyday 5G data reliability success rates

The carrier with the highest market tally in each category is the current leader. It's that simple. We've also included results from 20 cities recently tested in 2021 to show trends and progress.

To provide the best view of the Everyday 5G experience, we look at both 5G-only and Everyday 5G results. To most accurately reflect the average consumer 5G experience, the leaderboard above is based on Everyday 5G results. See below and read our <u>blog</u> to learn more about Everyday 5G performance.

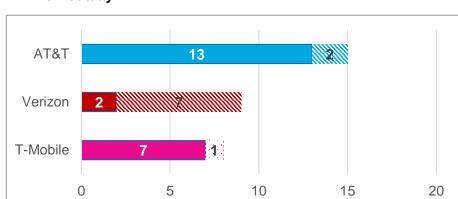
Market tally leaderboard by category - 1H 2021 to date (plus results from 20 recently tested cities)

Highest Everyday 5G availability - market tally



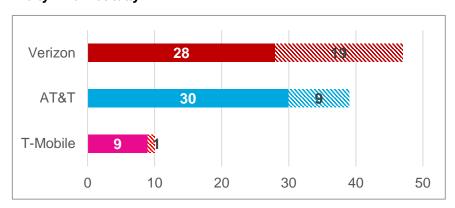
The chart above shows the number of cities in which each carrier registered the highest Everyday 5G availability.

Fastest Everyday 5G download speeds in the same city - market tally



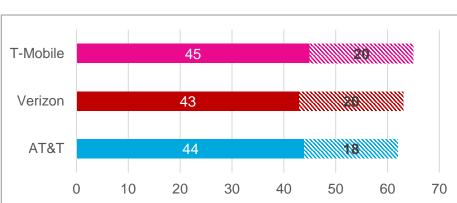
The chart above shows the number of cities in which each carrier delivered the fastest Everyday 5th percentile, median, and 95th percentile 5G download speeds in the same city.

Highest Everyday 5G data reliability success rates in the same city - market tally



The chart above shows the number of cities in which carrier registered the highest Everyday 5G data reliability success rates for both getting connected and staying connected in the same city.

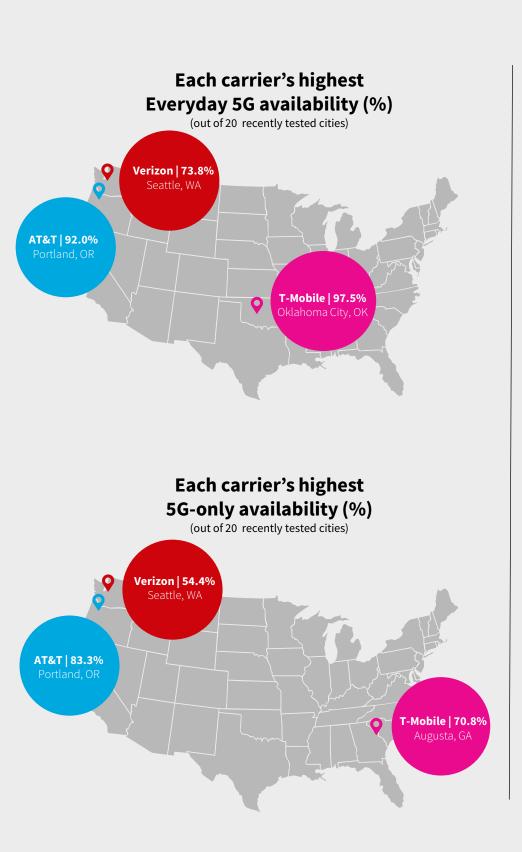
Number of cities with 5G out of 65 - market tally

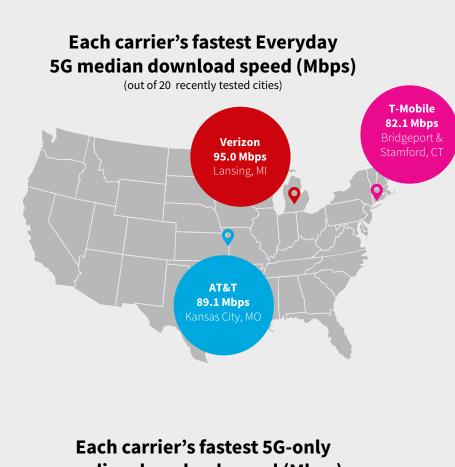


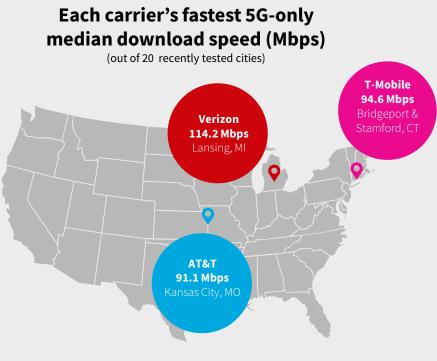
The chart above shows the number of cities in which carrier registered either Everyday 5G or 5G-only results during testing.

The market tally charts above show which carrier is leading the 5G race in each performance category across all 65 markets tested to date in 2021. To show recent performance trends, we've also included market tallies (shaded bars) for each carrier across 20 cities recently tested in 1H 2021. See below for a list of all 20 recently tested cities, and check our <u>blog</u> for the complete list of all 65 markets tested to date in 1H 2021.

Top 5G availability and 5G download speeds – 20 recently tested cities







Improvement stories –20 recently cities tested in 1H 2021 (Compared to the 20 same cities tested in 2H 2020)

AT&T - Cleveland, OH

Good news for AT&T 5G users in Cleveland: AT&T's Everyday 5G availability jumped from 0.5% in 2H 2020 to 61.4% in 1H 2021. Further, its Everyday 5G median download speed more than doubled, increasing from 20.9 Mbps to 48.3 Mbps since 2H 2020.

T-Mobile - Bridgeport & Stamford, CT

T-Mobile's Everyday 5G median download speed in Bridgeport and Stamford improved from 24.5 Mbps in 2H 2020 to 82.1 Mbps this time. The carrier's Everyday 5G availability in the city also improved, going from 59.1% to 82.7% since 2H 2020.

Verizon - Lansing, MI

Verizon's biggest improvement since 2H 2020 came in Lansing, where its Everyday 5G median download speed nearly doubled (from 48.8 Mbps to 95.0 Mbps). Verizon also showed nice gains down the road in Detroit, with its Everyday 5G availability jumping from 0.4% to a much higher 29.7% since 2H 2020.

Carrier stories - 20 recently tested cities 1H 2021

AT&T leads the pack for **Everyday 5G download** speeds after 65 markets, and its availability and download speeds showed improvement in recent testing.

Better Everyday 5G availability: 16. The number of cities out of 20 in which AT&T registered higher Everyday 5G availability since 2H 2020.

Faster Everyday 5G download speeds: 14. The number of cities where AT&T delivered faster Everyday 5G median download speeds in recent testing compared to 2H 2020.

Strong Everyday 5G data reliability but currently trailing Verizon: AT&T's Everyday 5G data reliability was generally outstanding, but in terms of offering the highest Everyday 5G data reliability success rates for both getting and staying connected in the same city, AT&T's 9 such cities in recent testing trailed Verizon's 19 (but far surpassed T-Mobile's 1).

T-Mobile delivers faster Everyday 5G download speeds and continues to offer the broadest Everyday 5G availability, nearly hitting 100% in Oklahoma City, OK.

Improved Everyday 5G availability: 16. The number of markets in which T-Mobile offered higher Everyday 5G availability in recent 1H 2021 testing compared to 2H 2020.

Faster Everyday 5G download speed in nearly every city: 19. The number of cities out of 20 in which T-Mobile delivered faster Everyday 5G median download speeds since 2H 2020.

Everyday 5G availability above 90% in the most cities: T-Mobile and AT&T were the only carriers to register Everyday 5G availability above 90%, but T-Mobile did so in the most cities at 5, compared to 1 for AT&T. T-Mobile's availability was particularly strong in Oklahoma City, where it approached 100.0% (97.5%).

With a strong showing in the latest 20 cities, Verizon leads the race for Everyday 5G reliability and gained ground on AT&T for Everyday 5G download speeds across all 65 metros.

Verizon takes the lead for **Everyday 5G reliability:** Verizon registered the highest Everyday 5G data reliability success rates for both getting and staying connected in the same city in the most markets in recent testing (19 out of 20). In the process, Verizon now leads AT&T in the Everyday 5G reliability race after testing 65 markets in 1H 2021.

Verizon picks up speed and narrows the gap with AT&T:

Verizon delivered the fastest Everyday 5G download speeds (across all three download speed metrics; see below for details) in more cities than the competition in recent testing. AT&T still leads the Everyday 5G download speed race after testing all 65 markets 1H 2021 to date, but Verizon gained ground on AT&T and surpassed T-Mobile in the process.

Expanded Everyday 5G availability: Among the 20 cities we recently tested, Verizon recorded 5G results in every city. In 14 of those markets, Verizon didn't register any 5G results in 2H 2020.

20 recently tested cities

Testing across all 20 markets took place from February 7 - April 3, 2021.



Albany, NY Atlanta, GA Augusta, GA Austin, TX Bridgeport and Stamford, CT Orlando, FL Cleveland, OH Detroit, MI Hudson Valley, NY Indio, CA Kansas City, MO

Lansing, MI Los Angeles, CA Oklahoma City, OK Philadelphia, PA Portland, OR San Francisco, CA Seattle, WA Stockton, CA

Kissimmee, FL

To see the complete list of all 65 markets we've tested to date in 1H 2021, visit our blog post.



A note about Everyday 5G results

The Everyday 5G results in this scorecard include a combination of results recorded on both 5G-only and "5G mixed mode. 5G mixed mode is the user experience of switching between 5G and 4G LTE during the same data activity, an experience becoming more and more common.

With 5G growing fast and users switching between 5G-only and 5G mixed mode more and more often, Everyday 5G results offer the most accurate picture of the daily 5G experience when connected to 5G at least a portion of the time.

We've also included 5G-only results to provide a look at how 5G would perform if it were ubiquitous today.

To learn more about Everyday 5G results, check out our new blog.

The fine print about our 5G scorecard results

To provide a current look at the 5G race early in 2021, the Everyday 5G leaderboard above is based on testing

across 65 total cities to date in 1H 2021. To determine the leaders, we looked at how many cities each carrier registered the:

- Highest Everyday 5G availability
- Fastest Everyday 5G download speeds in the same city across three key download speed metrics (5th percentile, median, and 95th percentile)

Highest Everyday 5G data reliability success rates for both connected and staying connected in the same city

within individual cities, for additional performance metrics, or over a longer period of time.

our latest <u>5G report</u>. To learn how we test network performance, visit the <u>methodology page</u> of our website.

To learn more about the state of the 5G landscape across the first 45 cities we tested in the first half of 2021, read

Results in this scorecard should not be used to infer which carrier is the leader across a larger set of markets,