#### The 5G race in 2021: who's currently in the lead across 85 markets?

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

AT&T maintains its lead for Everyday 5G download speeds, T-Mobile continues to provide the most widespread Everyday 5G availability, while Verizon delivers the best 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 85 of those cities. To provide a snapshot of which carrier(s) is leading the 5G race to date in 1H 2021, we looked at the number of markets that each network delivered:



Highest Everyday 5G availability



Fastest Everyday 5G download speeds



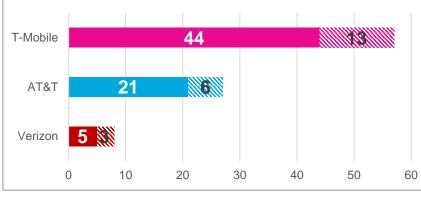
Highest Everyday 5G data reliability success rates

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 recently tested cities 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.

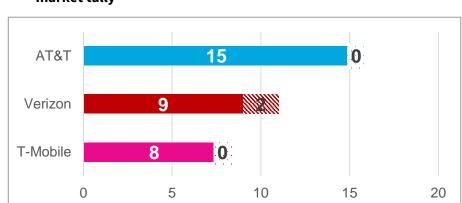
# Market tally leaderboard by category - 1H 2021 to date (plus results from 20 recently tested cities)





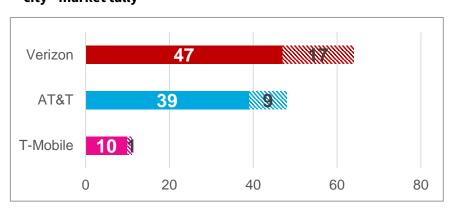
The chart above shows the number of cities in which each carrier registered the highest Everyday 5G availability.

### 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

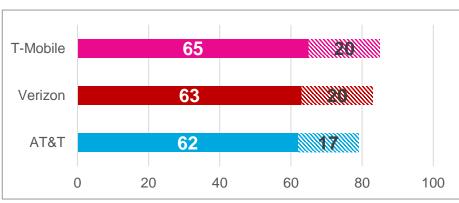


The chart above shows the number of cities in which carrier registered the highest Everyday 5G data reliability success rates for both getting connected and staying connected in the same city.

First 65 markets tested-1H 2021 20 markets recently tested

Note: Everyday 5G availability, speed, and reliability tallies can include ties.

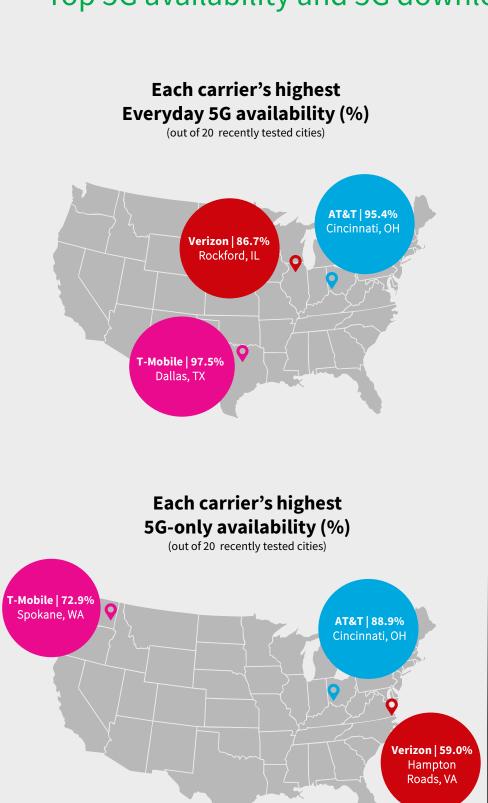
### Number of cities with 5G out of 85 - market tally

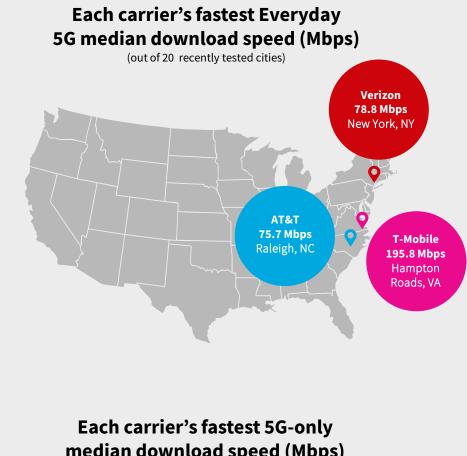


The chart above shows the number of cities in which carrier registered either Everyday 5G or 5G-only results during testing.

The market tally charts above show which carrier(s) is leading the 5G race in each performance category across all 85 markets tested to date in 2021 (including ties). 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 visit our blog for the complete list of all 85 markets tested so far 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 - Raleigh, NC

AT&T didn't register any 5G results in Raleigh in 2H 2020, but this time, AT&T's Everyday 5G availability was 63.4%, while the carrier's Everyday 5G median download speed in Raleigh clocked in at 75.7 Mbps.

#### **T-Mobile – Hampton** Roads, VA

T-Mobile's Everyday 5G median download speed in Hampton Roads, VA, nearly quadrupled since 2H 2020, jumping from 56.5 Mbps to an outstanding 195.8 Mbps. The carrier's Everyday 5G availability in the market also improved, increasing from 44.1% in 2H 2020 to 67.1% this time.

#### **Verizon – New York City** and Tri-State Area, NY

Verizon showed great progress in the New York City metro area, where it didn't register any 5G results in 2H 2020. In 1H 2021, however, Verizon's 5G availability in the market was 35.0%, and the carrier posted an Everyday 5G median download speed of 78.8 Mbps.

### Carrier stories - 20 recently tested cities 1H 2021

**AT&T offers higher** availability and faster speeds in the latest 20 markets, but its overall speed lead shrinks.

**Improved Everyday 5G** availability: AT&T recorded 5G results in 17 of 20 recently tested markets, and the carrier's Everyday 5G availability improved in 16 of those cities since 2H 2020. AT&T also posted Everyday 5G availability above 90% in five cities in recent testing, a number higher than that of Verizon (0) but lower than that of T-Mobile (10).

Faster Everyday 5G download speeds in recent testing: AT&T showed improved Everyday 5G median download speeds in 12 of its 17 cities with 5G during recent testing.

**Strong Everyday 5G data** reliability: AT&T's Everyday 5G data reliability remained outstanding in recent testing. AT&T tied or led the way for both getting and staying connected in 9 out of 20 markets (compared to 1 for T-Mobile and 17 for Verizon).

T-Mobile impresses with the single fastest Everyday 5G median download speed in recent testing, nearly hitting 200 Mbps in Hampton Roads, VA.

More Everyday 5G since 2H **2020:** T-Mobile's Everyday 5G availability improved in 19 out of 20 recently tested cities since 2H 2020. The carrier also extended its lead for Everyday 5G availability through 85 markets to date in 1H 2021, delivering the highest Everyday 5G availability in 13 out of 20 recent cities, compared to 6 for AT&T and 3 for Verizon (all tallies can include ties).

**Faster Everyday 5G median** download speeds in 19 out of 20 cities: For the second straight 5G Scorecard, T-Mobile clocked faster Everyday 5G median download speeds in 19 out of 20 cities since 2H 2020.

T-Mobile's mid-band 5G shines in Hampton Roads, VA: T-Mobile increased its usage of mid-band spectrum in Hampton Roads, and the carrier clocked by far the fastest Everyday 5G median download speed in recent testing at 195.8 Mbps. The next-fastest Everyday 5G median download speed? Verizon's 78.8 Mbps in the New York City metro area.

Verizon expands its lead for **Everyday 5G reliability** through 85 markets, while showing improved speed and availability results in recent testing.

With excellent results in recent testing, Verizon extends its lead for Everyday 5G data reliability: Verizon led the competition for Everyday 5G data reliability in recent testing. Verizon tied or led the way for both getting and staying connected in 17 cities, compared to 9 for AT&T and 1 for T-Mobile.

With a strong speed performance in the latest 20 markets, Verizon gains ground on AT&T in the Everyday 5G download speed race: Verizon was the only carrier in recent testing that clocked the fastest 5th percentile, median, and 95th percentile 5G download speeds in the same city, doing so in two markets. In the process, Verizon narrowed the gap with AT&T in the Everyday 5G speed race after 85 cities tested to date.

5G in more places since 2H **2020:** 7. The number of recently tested cities where Verizon registered 5G results in 1H 2021 but not in the second half of 2020.

### 20 recently tested cities

Testing across all 20 markets took place from March 25 - May 9, 2021.



Cincinnati, OH Concord, CA Dallas, TX Denton, TX Grand Rapids, MI Hampton Roads, VA Houston, TX Miami, FL Mobile, AL

Charlotte, NC

New York City and Tri-State Area, NY Pittsburgh, PA Raleigh, NC

Riverside, CA Rockford, IL Sacramento, CA San Diego, CA Spokane, WA Tampa, FL

Nashville, TN

To see the complete list of all 85 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 increasingly common user experience.

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 85 total cities to date in 1H 2021 and may include ties.

To determine the leaders, we looked at the total number of cities that each carrier registered the:

Highest Everyday 5G availability

percentile, median, and 95th percentile

performance, visit the <u>methodology page</u> of our website.

- Fastest Everyday 5G download speeds in the same city across three key download speed metrics: 5<sup>th</sup>

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

Note: If one carrier records the fastest Everyday 5G median download speed in a market but another network has the fastest 5<sup>th</sup> or 95<sup>th</sup> percentile speed, no speed leader is awarded in that city. Similarly, in markets where one

carrier has the highest Everyday 5G data reliability success rate for getting connected but another is best for staying connected, there is no reliability leader in that city.

within individual cities, for additional performance metrics, or over a longer period of time. To learn more about 5G performance in the US, view our <u>previous 5G Scorecard</u>. To learn how we test network

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