State of Mobile Networks: USA (July 2018)

4G speeds are on the rise once again in the U.S. Operators are beginning to cross the 30 Mbps barrier for 4G download speeds, but perhaps more telling are the results we're seeing on the regional level. In big cities like New York and Detroit we're measuring speeds approaching 50 Mbps, an indication of network capabilities to come. Analyzing more than 6 billion measurements, OpenSignal once again sends the U.S., comparing the 50 and 95 markets of the country's big four service providers.

Report Facts

6,137,424,784	385,879	Mar 10 - Jul 10, 2018	USA
Total Measurements	Test Devices	Sample Period	Location

Highlights

T-Mobile and Verizon pass the 20 Mbps mark in 4G download speed

T-Mobile once again grabbed our 4G download speed award, but we recently published speeds that put Verizon's 4G speeds at a T-Mobile level or near let's. Sprint. Both operators surpassed 20 Mbps in our latest speed tests, marking a notable milestone.

Sprint's 4G gains continue

Sprint has been seeing plenty of speed gains in 4G metrics. Compared to last year, Sprint's 4G download speeds have risen with 4TEF in our 4G availability category. Sprint also claims units 600 Mbps of matching PSTN's 30 Download speed of 31.1 Mbps. It such measurements.

Verizon and T-Mobile deadlock in 4G availability

Verizon has caught up to T-Mobile in our 4G availability metrics. The two carriers now are tied for the top spot in our 4G availability metrics. T-Mobile and Verizon users on average were able to find an LTE signal 85.7% of the time.

AT&T expands its lead in LTE response time

For the second report in a row, AT&T has cut its 4G latency down by far more than any other carrier. The network now averages response time of 54.1 milliseconds in our 50 metrics, an improvement of more than a tiny over six months.

Awards Table

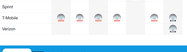
Test your network and contribute to our reports

Download our report! All our analysis is based on real-world measurements from the OpenSignal app. Download the app, participate in crowdsourcing, and vote on future reports.

Google Play | App Store

Performance by Metric

Download Speed: 4G



This metric shows the average download speed for each operator on LTE connections as measured by OpenSignal users.

Download Speed: 3G

This metric shows the average download speed for each operator on 3G connections as measured by OpenSignal users.

Download Speed: Overall

This metric shows the average download speed experienced by OpenSignal users on 2G, 3G and 4G networks. Overall speed doesn't just factor in 2G and 3G, it also factors in how much time users spend on each network. Operators with more 2G availability tend to have lower overall speeds because their customers spend more time connecting to slower 2G networks.

Upload Speed: 4G

This metric shows the average upload speed for each operator on LTE connections as measured by OpenSignal users.

Latency: 4G

This metric shows the average latency for each operator on LTE connections as measured by OpenSignal users. Latency is the time it takes for a packet of data to travel from a device to a server and back. In general, a lower score is better. Latency is a sign of a more responsive network.

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Availability: 4G

This metric shows the proportion of time OpenSignal users had an LTE connection available to them on each operator's network. It's a measure of how often users can access a 4G network rather than a measure of geographic or population coverage.

Regional Performance

This chart shows the regional winners in each category OpenSignal measures. Click on the icons to see a more detailed graph showing each operator's metrics in a particular region.

Legend: Download Speed: 4G | Download Speed: 3G | Upload Speed: 4G | Latency: 4G | Availability: 4G

Region	Download Speed: 4G	Download Speed: 3G	Upload Speed: 4G	Latency: 4G	Availability: 4G
Atlanta-Sandy Springs-Roswell GA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Austin-Round Rock TX	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Baltimore-Columbia-Towson MD	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Boston-Cambridge-Newton MA-NH	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Buffalo-Cheektowaga-Niagara Falls NY	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Charlotte-Concord-Gastonia NC-SC	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Chicago-Naperville-Elgin IL-IN-WI	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Cincinnati OH-KY-IN	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Cleveland-Elyria OH	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Columbus OH	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Dallas-Fort Worth-Arlington TX	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Denver-Aurora-Lakewood CO	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Detroit-Warren-Dearborn MI	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Grand Rapids-Wyoming MI	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Houston-The Woodlands-Sugar Land TX	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Indianapolis-Carmel-Anderson IN	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Jacksonville FL	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Kansas City MO-KS	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Las Vegas-Henderson-Paradise NV	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Los Angeles-Long Beach-Anaheim CA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Louisville-Jefferson County KY-IN	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Miami-Fort Lauderdale-West Palm Beach FL	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Milwaukee-Waukesha-West Allis WI	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Minneapolis-St. Paul-Bloomington MN-WI	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Nashville-Davidson--Murfreesboro--Franklin TN	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
New York-Newark-Jersey City NY-NJ-PA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Oklahoma City OK	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Orlando-Kissimmee-Sanford FL	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Philadelphia-Camden-Wilmington PA-NJ-DE-MD	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Phoenix-Mesa-Scottsdale AZ	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Pittsburgh PA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Portland-Vancouver-Hillsboro OR-WA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Providence-Warwick RI-MA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Richmond VA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Riverside-San Bernardino-Ontario CA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Sacramento--Roseville--Arden-Arcade CA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Salt Lake City UT	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
San Antonio-New Braunfels TX	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
San Diego-Carlsbad CA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
San Francisco-Oakland-Hayward CA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
San Jose-Sunnyvale-Santa Clara CA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Seattle-Tacoma-Bellevue WA	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
St. Louis MO-IL	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Tampa-St. Petersburg-Clearwater FL	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Virginia Beach-Norfolk-Newport News VA-NC	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Washington-Arlington-Alexandria DC-VA-MD-WV	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile
Worcester MA CT	T-Mobile	T-Mobile	T-Mobile	T-Mobile	T-Mobile

Analysis

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Our Methodology

OpenSignal measures the real-world experience of mobile users across the globe. We collect a wide variety of measurements from our app, including network speed and coverage measurements, across a large and representative sample of smartphone handsets.

Our data sources are collected on the basis of the day, mere day of the year, under conditions of normal use of the app by the participating mobile subscribers. When conditions make our sample a statistically insufficient one, we don't include the measurements recorded in the places where this is the case. We also only include results from 4G mobile devices and for the new carrier experience 5.

We continually adapt our methodology to best represent the changing landscape of smartphones and mobile networks. For more information on our methodology, please see our methodology page. If you have questions about our methodology, or would like to collect and analyze our data, see our methodology page.

For the purposes of our report, 4G LTE, 3G data sources are collected from a sample period of Mar. 10 - Jul. 10, 2018.

For every metric we've calculated statistical confidence intervals and have enough data to report on every operator in every region. When confidence intervals are overlapping in certain metrics, we measured results are the closest to statistically significant. In these cases, we've rounded up to the nearest tenth. For 5G metrics, we have enough data to report on some operators in some markets, but not enough to report on all operators in all markets.

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Business Solutions

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