**Wireless/Cellular Market 2022**

**Major Carriers Battle for 5G Supremacy**

The three primary wireless carriers – AT&T, T-Mobile and Verizon – are focused on advancing 5G technology, but, according to Opensignal’s January 2022 5G Experience Report, T-Mobile is leading the pack in four of the six 5G categories in the assessment.

Opensignal awarded T-Mobile the winner in 5G availability, 5G reach, 5G download speed and 5G upload speed. Verizon was the winner in 5G games experience and 5G voice app experience while AT&T wasn’t recognized in any of the six categories.

Consumers must be recognizing T-Mobile’s 5G leadership as the company reported 5.5 million new postpaid net customers during 2021 and an estimate of 5.0 million to 5.5 million more postpaid net customers for 2022.

**Comparisons of the Three Primary Wireless**

**Carriers’ 5G Competition, by Category, January 2022**

|  |  |  |  |
| --- | --- | --- | --- |
| Category | AT&T | T-Mobile | Verizon |
| 5G availability | 16.5% | 35.4% | 9.5% |
| 5G reach (10-point scale) | 5.2 | 7.4 | 3.7 |
| 5G games experience (100-point scale) | 72.7 | 72.4 | 79.9 |
| 5G voice app experience (100-point scale) | 80.7 | 80.6 | 82.2 |
| 5G download speed (in Mbps) | 49.1 | 150.0 | 56.2 |
| 5G upload speed (in Mbps) | 9.9 | 17.9 | 14.1 |

Opensignal, March 2022

**More Wireless Carriers’ 5G Insights**

Both Verizon and AT&T announced expansions of their 5G networks during January. Verizon’s mid-band 5G is reportedly being launched in 1,700 cities and addresses availability issues while AT&T only launched its expanded 5G service in eight metro areas.

Verizon and AT&T have had to delay the launch of their upgraded availability because of the possible disruption of airplanes’ radio altimeters. As of January 2022, approximately 78% of US commercial planes could land safely at airports with 5G C-band.

**Comparison of the Three Primary Wireless Carriers’ 5G**

**Availability in the 10 Most Populous US States, January 2022**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| State | AT&T | T-Mobile | Verizon | State | AT&T | T-Mobile | Verizon |
| #1: California | 27.5% | 32.8% | 13.7% | #6: Illinois | 24.5% | 39.3% | 16.9% |
| #2: Texas | 24.2% | 38.2% | 10.1% | #7: Ohio | 9.0% | 35.7% | 9.8% |
| #3: Florida | 23.4% | 34.2% | 7.5% | #8: Georgia | 24.4% | 36.7% | 10.5% |
| #4: New York | 15.5% | 38.5% | 7.0% | #9: North Carolina | 9.1% | 35.3% | 11.3% |
| #5: Pennsylvania | 14.0% | 37.2% | 9.1% | #10: Michigan | 5.2% | 33.9% | 10.8% |

Opensignal, March 2022

**Increasing Efforts to Bring Rural America Online**

The limited access of rural populations to broadband Internet service is a major topic in the wireless/cellular world. With $65 billion from the new infrastructure bill, many of these communities as well as many underserved urban neighborhoods will have better access.

Elon Musk’s Starlink orbiting satellites as a source of broadband service is widely known, but other companies have started or plan to launch similar systems. The major carriers (T-Mobile, Verizon and others) are bringing these populations into the digital age.

Fixed wireless access is a technology well-suited to rural and urban areas. It consists of wireless links between a cell tower and an antenna on a building rather than laying fiber-optic or cables to neighborhoods and homes.

**Comparisons of the Three Primary Wireless Carriers’ 5G Availability in the**

**10 US States with the Largest Percentages of Rural Populations\*, January 2022**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| State | AT&T | T-Mobile | Verizon | State | AT&T | T-Mobile | Verizon |
| #1: Maine | 14.5% | 36.6% | 1.9% | #6: Arkansas | 26.1% | 39.1% | 4.3% |
| #2: Vermont | NA | NA | NA | #7: South Dakota | 4.6% | 36.6% | 6.7% |
| #3: West Virginia | NA | NA | NA | #8: Kentucky | 20.0% | 39.3% | 8.9% |
| #4: Mississippi | 13.4% | 41.3% | 4.3% | #9: Alabama | 19.2% | 36.9% | 12.1% |
| #5: Montana | 5.3% | 38.8% | 4.0% | #10: North Dakota | NA | NA | NA |

Opensignal, March 2022 \*based on 2010 US Census

**Smartphone Sales Increase Despite Supply-Chain Issues**

Few products, digital or non-digital, are considered as essential to modern living than a smartphone, which is why 371.4 million of them were shipped globally during Q4 2021. This was a 6% YOY decrease, but largely because of components and supply-chain issues.

These challenges extended to Q4 2021 smartphone sales in the US, which were flat YOY, even though the holiday season typically generates more sales; however, shipments increased 10% YOY on the strength of the new Apple iPhone 13.

Samsung, typically second in shipments and shares to Apple, suffered from supply-chain issues, specifically, as it didn’t have a sufficient inventory of the S21 series, therefore, Q4 shipments decreased 11% compared to Q3.

**US Smartphone Shipments Market Share, Q1–Q4 2021**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Brand | Q1 | Q2 | Q3 | Q4 |
| Apple | 55% | 53% | 47% | 56% |
| Samsung | 27% | 26% | 34% | 22% |
| Lenovo\* | 5% | 12% | 9% | 12% |
| OnePlus | 1% | 2% | 3% | 2% |
| Others | 12% | 7% | 7% | 8% |

Counterpoint Research, February 2022 \*includes Motorola

(color represents the change from the previous quarter)

**Engaging with the Smartphone Owner**

Analyzing data from five of The Media Audit’s 2021 consumer/market surveys and representing different regions of the US shows the average age of adults 18+ who own a smartphone was 47.7 years and their average income was $68,900.

Looking at the data by generation reveals some interesting insights. Somewhat surprisingly, Gen Xers over-indexed slightly more, on average, at 104, with Baby Boomers at 101, on average, compared to 100 for Millennials and 90 for Gen Zers, but these are only the adults.

By percentage, 28.2% of Millennials owned a smartphone, on average, statistically tied with Boomers at 28.1%. Selecting the Ft. Myers-Naples, FL survey skewed the results as 38.1% of Boomers owned a smartphone there, but the other four markets were relatively equal.

**Percentages of Adults 18+ Who Own a Smartphone and The Top Five Media To Which They Are Heavily Exposed, On Average, in Selected Markets, 2021**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Media | Ft. Myers-Naples, FL | Nashville | Denver | Phoenix | Seattle-Tacoma |
| Internet\* | * 42.7% | * 45.3% | * 43.1% | * 43.9% | 44.5% |
| Video streaming\* | * 33.6% | * 40.6% | * 38.2% | * 38.7% | * 33.9% |
| TV† | * 34.8% | * 35.1% | * 28.2% | * 31.3% | * 29.2% |
| Social media\* | 30.1% | * 33.9% | * 28.3% | * 27.7% | * 27.0% |
| Audio streaming\* | * 21.9% | * 22.2% | * 28.6% | * 24.4% | * 25.0% |

Based on The Media Audit’s 2021 surveys

\*180+ min. during the average day †300+ min. during the average day

**Consumers’ Choices of Cellphone Carriers**

Another exploration of The Media Audit’s five 2021 consumer/market surveys finds adults 18+ who own a smartphone and have Verizon as their carrier are a bit older, on average, than AT&T and T-Mobile, or 51, 49 and 48, respectively.

The difference in average household income is more significant. T-Mobile customers averages $68,260, compared Verizon customers at $78,500 and AT&T customers at 78,800.

A similar correlation is revealed when comparing household incomes. T-Mobile customers with incomes of $35,000–$49,999 and $50,000–$74,999 over-indexed the most, on average, while AT&T and Verizon customers over-indexed in the higher income brackets.

**Percentages of Adults 18+ Who Plan to Buy One or More Smart Speaker\***

**by Their Cellphone Carrier, in Selected Markets, 2021**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Cellphone Carrier | Ft. Myers-Naples, FL | Nashville | Denver | Phoenix | Seattle-Tacoma |
| AT&T | * 19.3% | * 18.8% | * 19.0% | * 12.0% | 22.9% |
| T-Mobile | 14.6% | * 12.0% | * 18.9% | * 24.6% | * 20.4% |
| Verizon Wireless | * 16.9% | * 20.3% | * 19.6% | * 23.6% | * 16.9% |

Based on The Media Audit’s 2021 surveys \*next 12 months

**More Valuable Insights**

Although AT&T, T-Mobile and Verizon Wireless are the dominant wireless carriers, the J.D. Power 2022 US Wireless Purchase Experience StudySM shows two of the smaller carriers ranked highly with consumers. Cricket was first for mobile virtual network carriers and Consumer Cellular was first for value mobile virtual network carriers.

**Consumers’ Rankings of Wireless Carriers, July–December 2021**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mobile Network Carriers | | Mobile Virtual Network Carriers | | Value Mobile Virtual Network Carriers | |
| Carrier | Score\* | Carrier | Score\* | Carrier | Score\* |
| T-Mobile | 807 | Cricket | 826 | Consumer Cellular | 859 |
| Segment average | 775 | Metro by T-Mobile | 814 | Segment average | 821 |
| AT&T | 773 | Spectrum Mobile | 804 | TracFone | 814 |
| Verizon Wireless | 760 | Segment average | 804 | Straight Talk | 794 |
|  |  | Xfinity Mobile | 802 |  |  |
|  |  | Boost Mobile | 765 |  |  |

J.D. Power, February 2022 \*one a 1,000-point scale

*Sources:* Opensignal Website, 3/22; Fierce Wireless Website, 3/22; The Verge Website, 3/22; CTIA Website, 3/22; Counterpoint Research Website, 3/22; The Media Audit Website, 3/22; J.D. Power Website, 3/22.

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**Local Market and Station Information**