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2023 Annual Survey Highlights

This year marks the 50th anniversary of the first cellphone call, and there is much to celebrate. CTIA's annual survey of key industry metrics finds that wireless networks support more data traffic than ever, as Americans in communities all across the country enjoy all that 5G has to offer—including innovations that are changing the way we grow our food, manage our energy grids, connect to the internet at home, and even track our health. Last year saw the biggest year-over-year increase in our industry's history.

This progress is thanks to another year of record investment into our nation's wireless networks, making them better, faster, and with greater coverage and capacity. Today, the U.S. has world-leading 5G availability, and 325 million Americans have access to a 5G network. Wireless progress extends beyond coverage—the industry now contributes $825 billion and 4.5 million jobs per year to the U.S. economy.

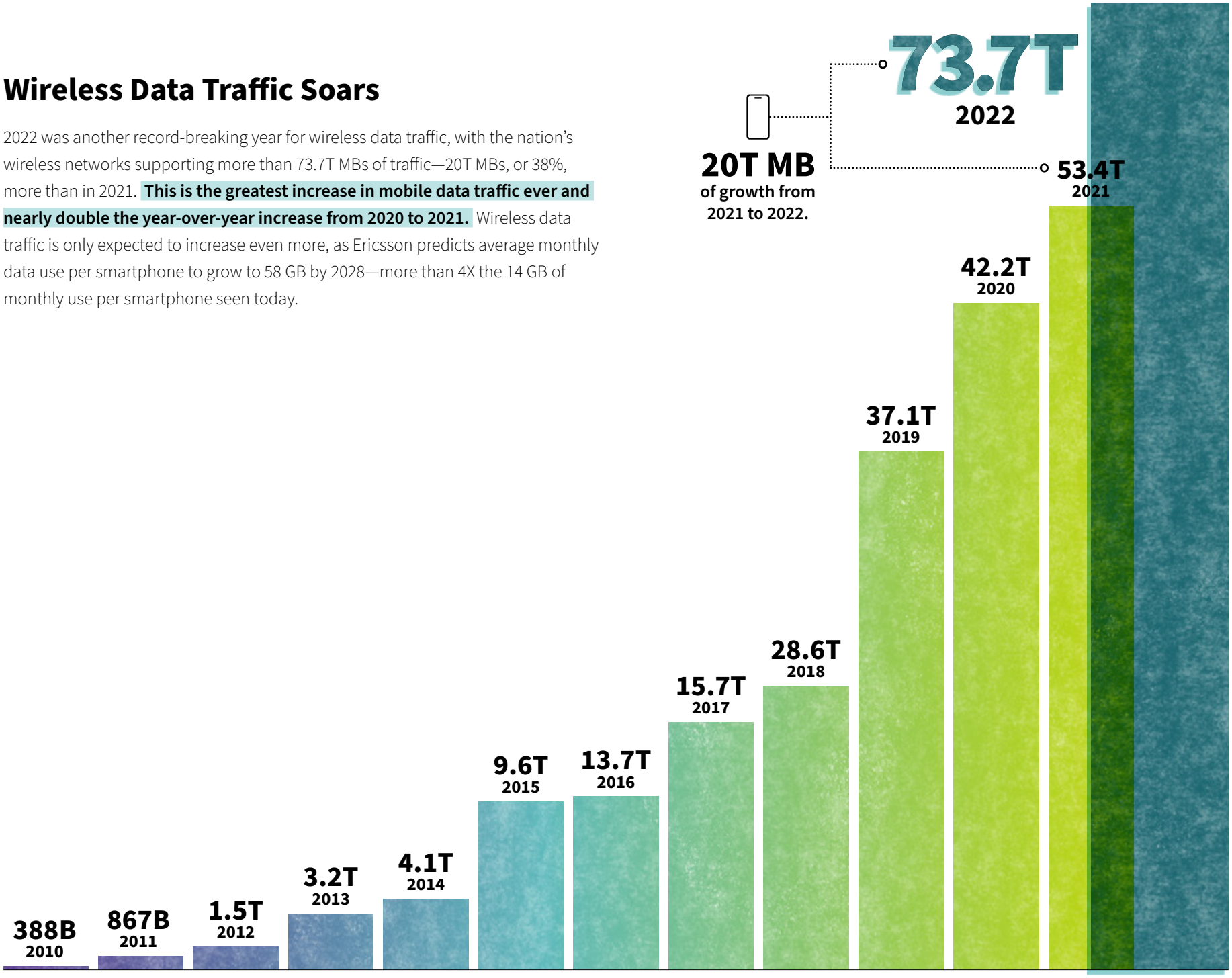
But with lapsed FCC auction authority and no clear pipeline of spectrum auctions, the U.S. is projected to not have enough spectrum to meet increasing demand for wireless data. To continue our success, we need at least 400 megahertz of new spectrum in the next five years and nearly 1500 megahertz by 2032.

More spectrum will enable the wireless industry to meet the nation's wireless data needs, ensure continued U.S. economic security, and build on an impressive 50-year legacy of wireless innovation that is transforming the way we live, work, and connect.

Meredith

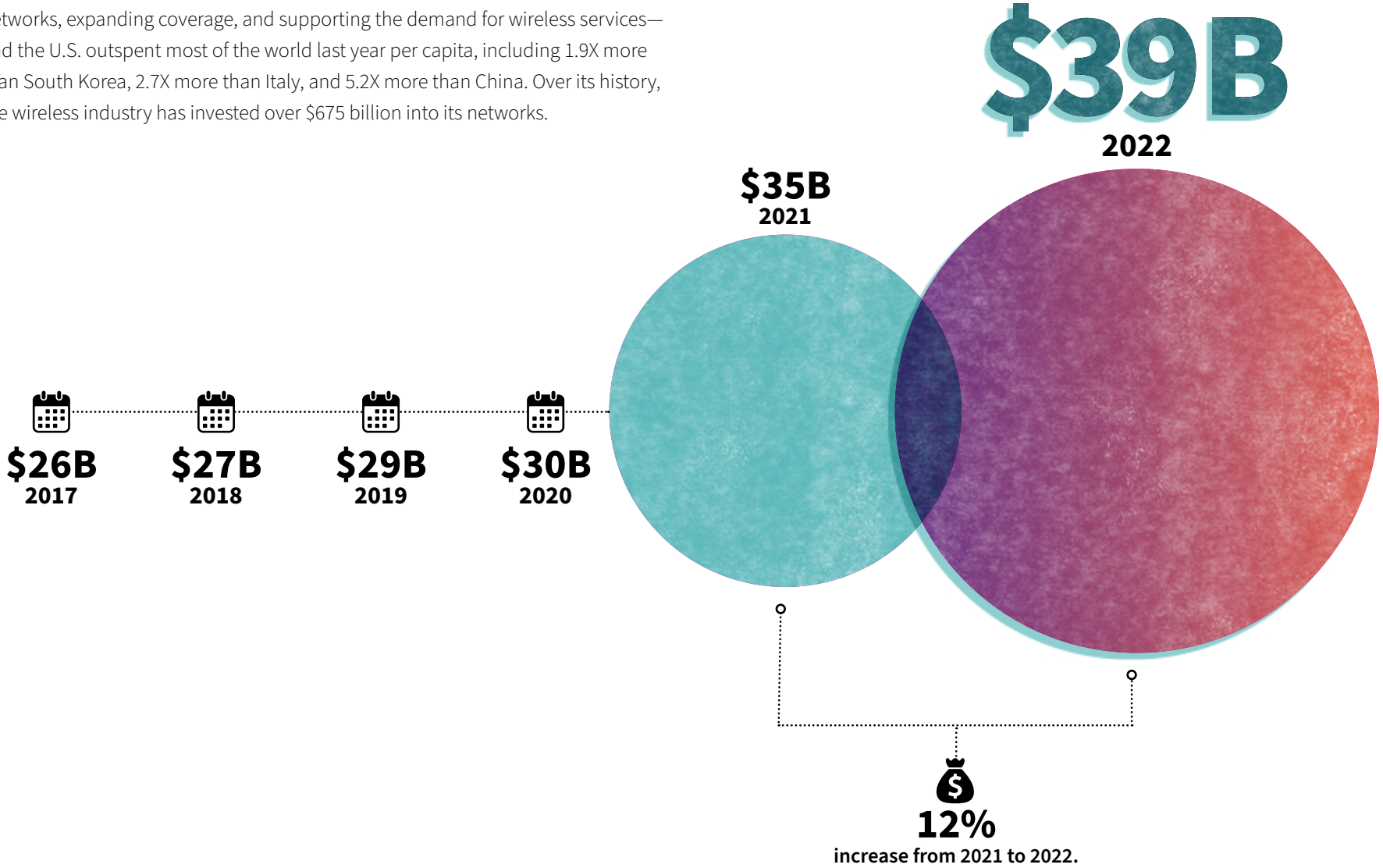
Wireless Data Traffic Soars

2022 was another record-breaking year for wireless data traffic, with the nation's wireless networks supporting more than 73.7T MBs of traffic—20T MBs, or 38%, more than in 2021. **This is the greatest increase in mobile data traffic ever and nearly double the year-over-year increase from 2020 to 2021.** Wireless data traffic is only expected to increase even more, as Ericsson predicts average monthly data use per smartphone to grow to 58 GB by 2028—more than 4X the 14 GB of monthly use per smartphone seen today.



Record Wireless Investment

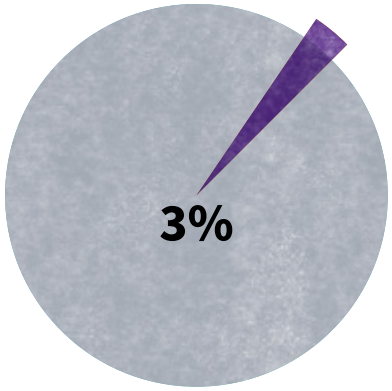
Wireless investment has increased for the fifth year in a row, with a historic $39 billion invested in wireless networks in 2022—up 12% from last year's previously record-setting total. This investment is essential to upgrading networks, expanding coverage, and supporting the demand for wireless services—and the U.S. outspent most of the world last year per capita, including 1.9X more than South Korea, 2.7X more than Italy, and 5.2X more than China. Over its history, the wireless industry has invested over $675 billion into its networks.



More Connections for More 5G Devices

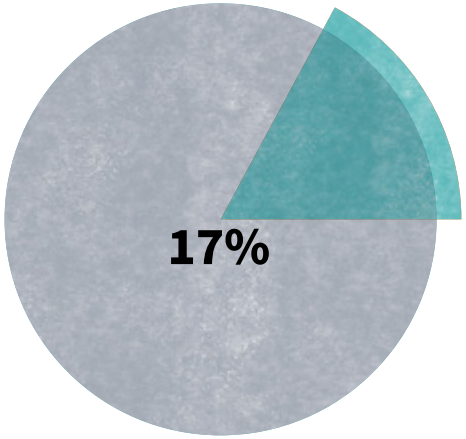
5G adoption and use have exploded since its launch. **By the end of 2022, the U.S. had nearly 162 million active 5G devices—nearly double the number of 5G devices in 2021.** And more devices mean more connections. In 2022, wireless connections grew to nearly 523 million. This means there are 1.6 connections for every person in the U.S. 5G devices already account for nearly one-third of these connections and play an integral role in unlocking the power of IoT, with 5G networks' high capacity enabling thousands of sensors to work together and support innovations like smart cities, advanced manufacturing, and precision agriculture.

31%
of wireless connections are active 5G devices.



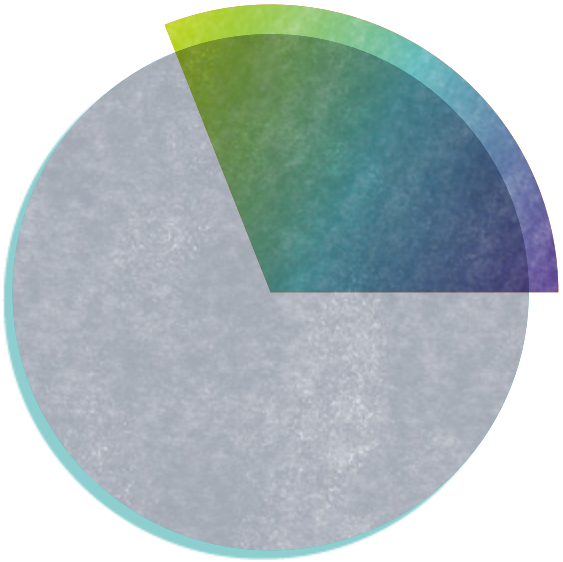
2020

469M Wireless Connections | **14M** Active 5G Devices



2021

499M Wireless Connections | **86M** Active 5G Devices



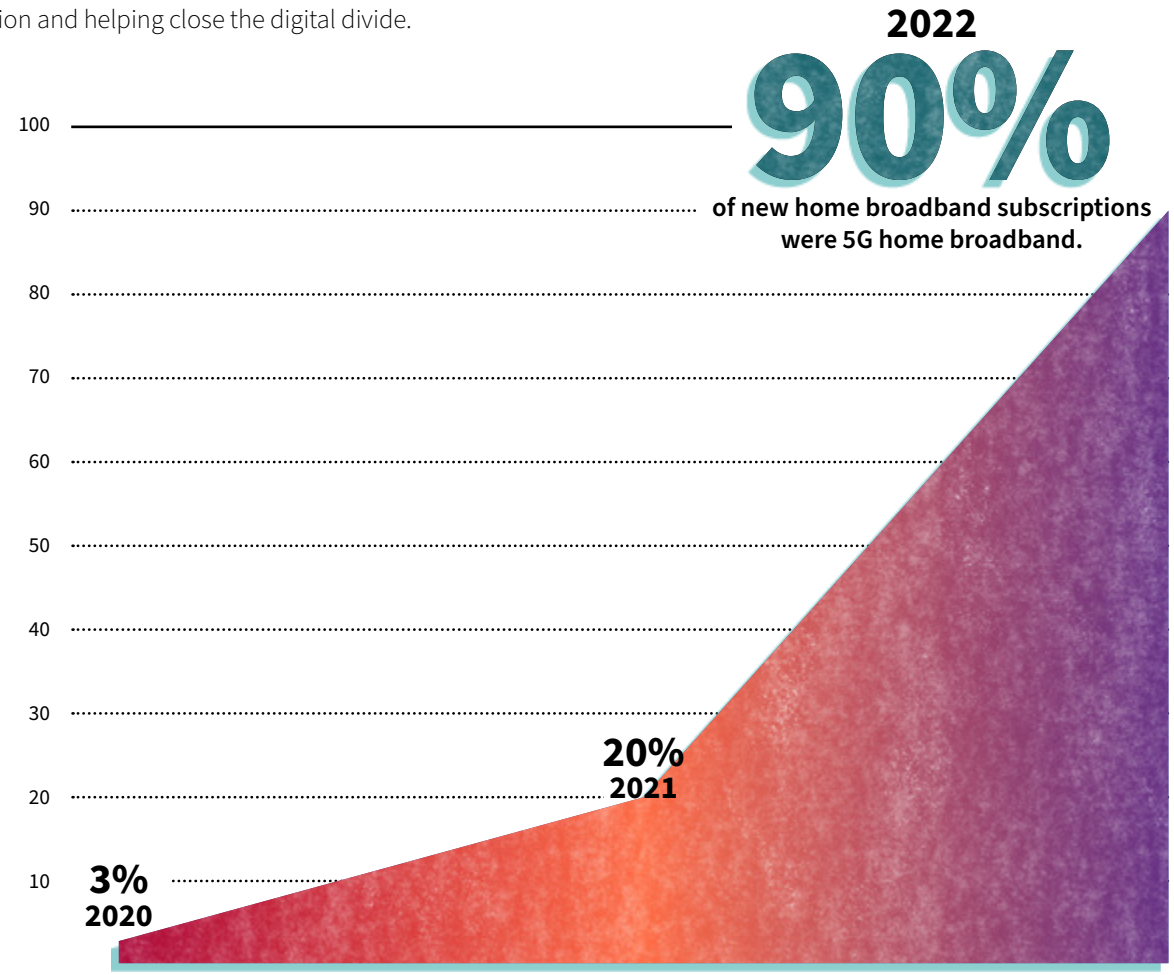
2022

523M Wireless Connections | **162M** Active 5G Devices

5G Home Broadband Offers New Competition and Consumer Savings

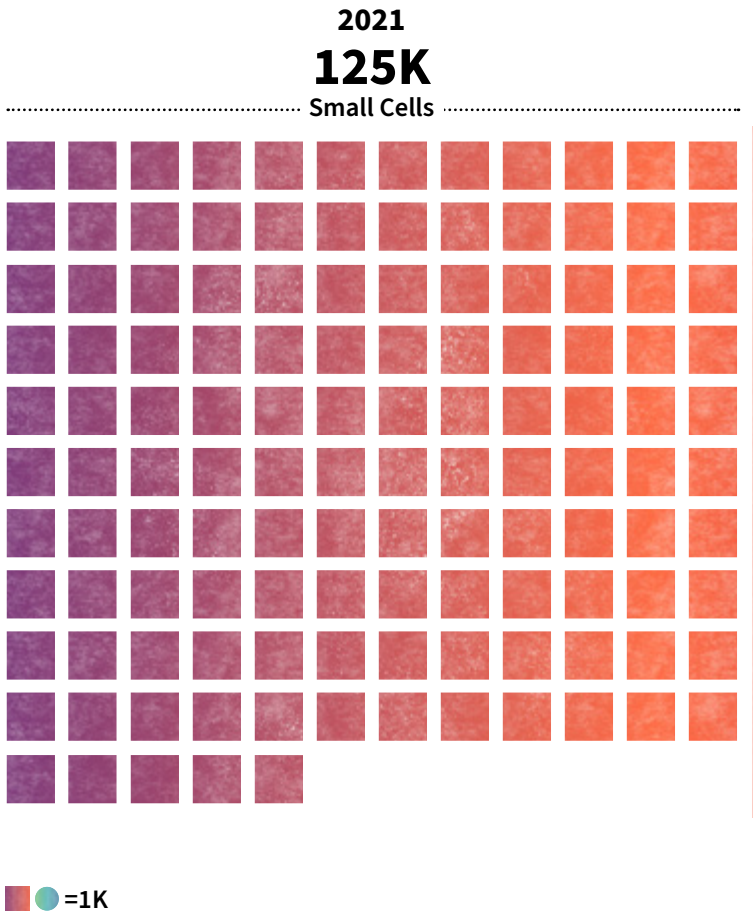
5G is not only transforming our mobile use, but our lives at home. **5G home broadband coverage is growing at a breakneck pace, and it now covers more than 94 million households across the nation.** When it comes to customer preference, 5G home accounted for 90% of net broadband additions in 2022 over other options like cable, fiber, or DSL. In fact, the two fastest-growing home broadband providers are wireless companies offering 5G home broadband, creating more competition and helping close the digital divide.

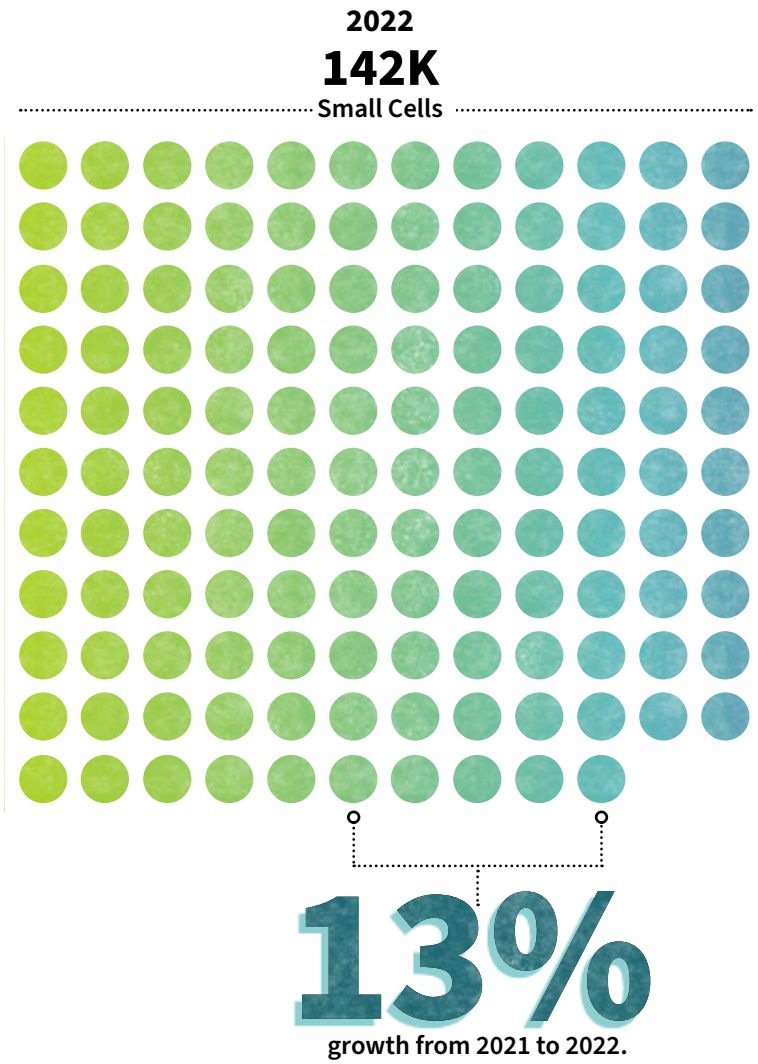
94M
households are covered by 5G home broadband, a 2.4x increase from 2021 to 2022.



Small Cells Support Enhanced Coverage

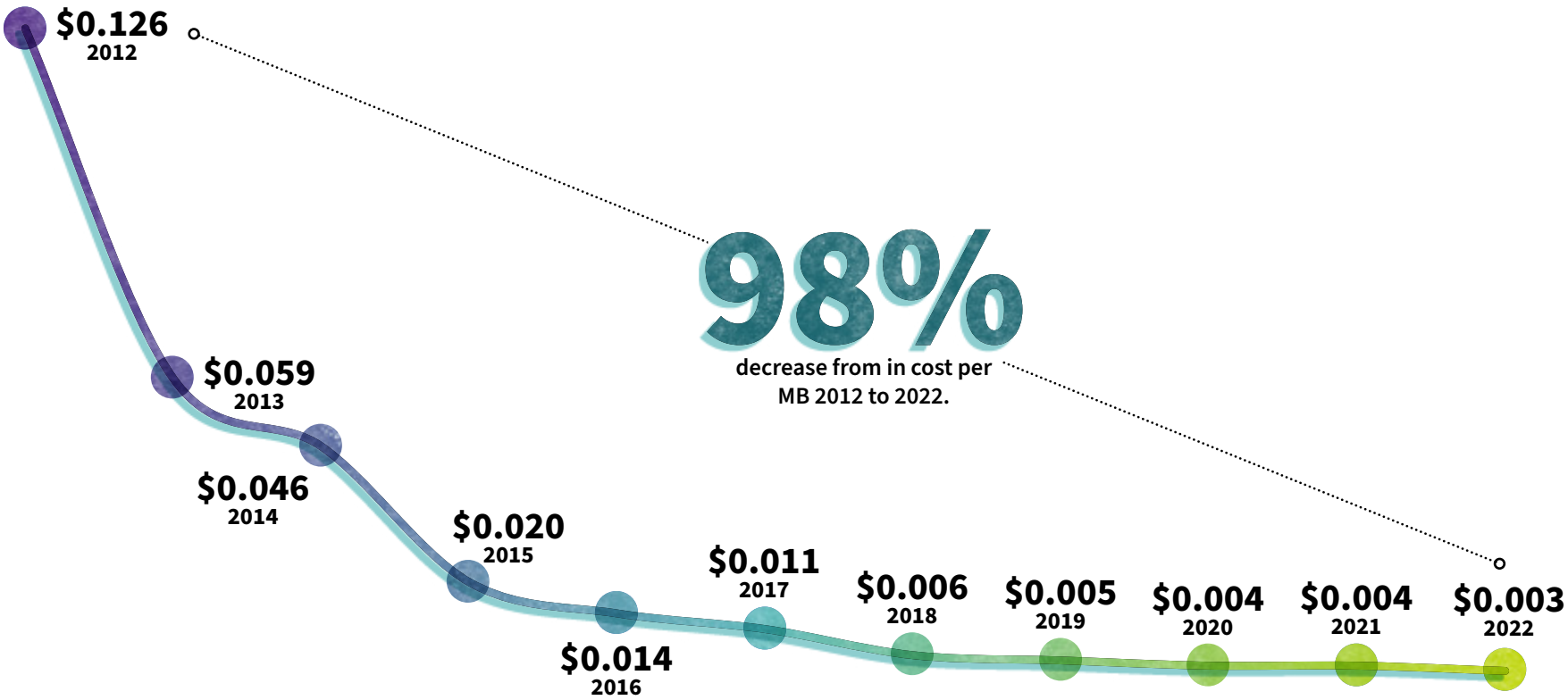
5G networks need a diverse array of infrastructure, from thousand-foot towers to backpack-sized small cells. These small cells make up a growing percentage of total cell sites—more than 34% in 2022—helping drive greater wireless capacity and coverage to support our nation's growing data needs. **In 2022, there were more than 142,000 small cells operating across the U.S.—a 13% increase over 2021.**





Wireless Brings Savings for Consumers

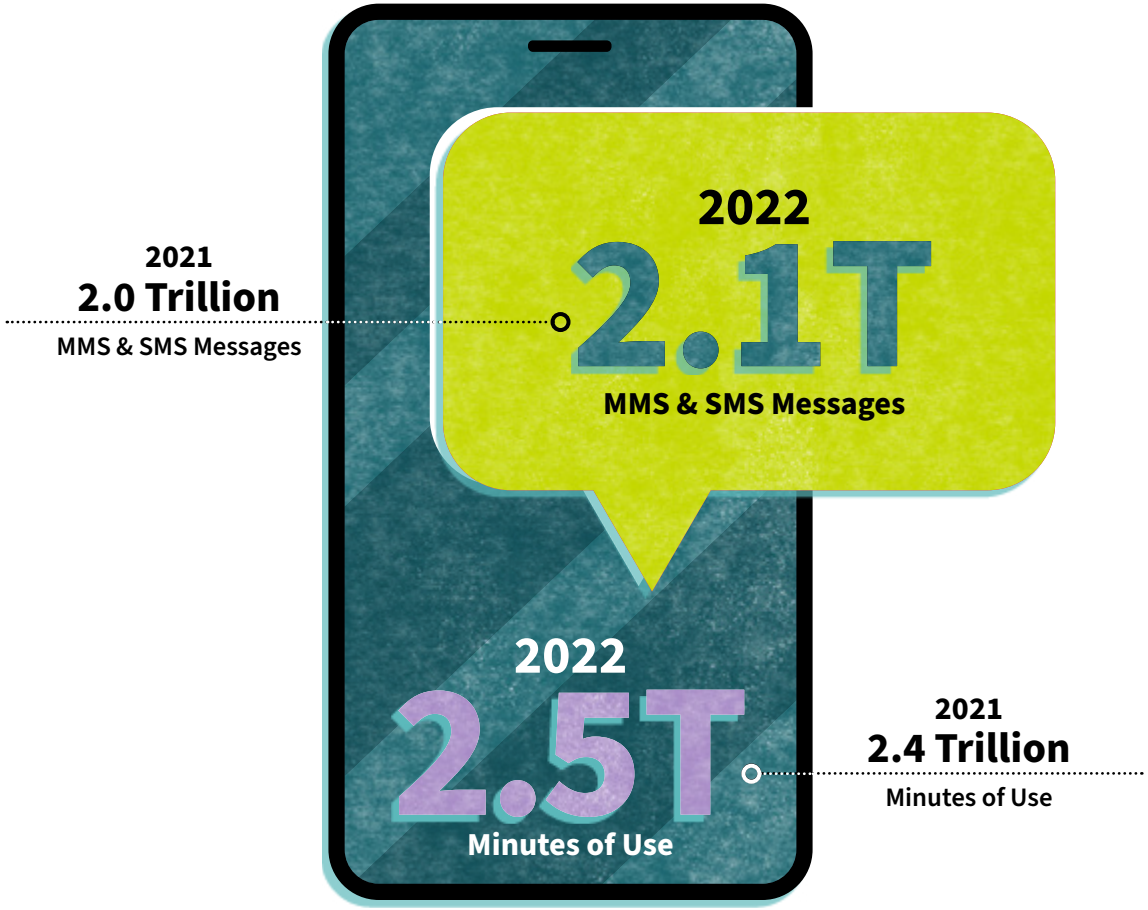
Wireless continues to offer consumers more for their dollar in a tightening economy. **The cost per megabyte of data decreased by 98 percent from 2012 to 2022.** At the same time, new offerings like 5G home broadband are introducing competitive pricing into home broadband markets, leading to savings even for those who don't subscribe to it. Econ One reports that new competition from 5G home broadband drives down cable pricing, and more spectrum will amplify those results, resulting in a predicted $8.1 billion in savings for consumers.



Talking and Texting by the Trillions

Wireless consumers continue to robustly use wireless networks to connect through voice and text. **In 2022, Americans spent more than 2.5 trillion minutes on voice calls, a nearly 5% increase from 2021.** That's more than 4.7 million years of voice minutes, or enough time for every fan who attended Taylor Swift's Eras tour to listen to her Midnights album over 20,400 times.

U.S. wireless customers also exchanged more than 2.1 trillion text messages, 6% more messages than they exchanged last year.



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