




# 2024

# Annual Survey Highlights



Thirty years ago, America jumpstarted the wireless era with the world's first spectrum auction. Today, CTIA's annual survey of industry data shows that wireless is increasingly integrated into the way all Americans live and work. In fact, this year's report shows that we've crossed a major milestone, with Americans using more than 100 trillion MBs of wireless for the first time, fueled by licensed spectrum.

This achievement is the result of the largest year-over-year increase in wireless data demand. And it reflects 5G's continued rapid adoption. Today, 40% of wireless connections are 5G, and more than 330 million Americans are covered by one or more 5G networks.

The impact is being felt across all sectors of our economy. For the second year running, 5G is America's fastest-growing home broadband solution. It's bringing real competition to cable, real choice to millions of Americans, and narrowing the digital divide. And 5G is helping companies like Rockwell Automation invent the next generation of smart manufacturing, the Cleveland Clinic enhance care with 5G-connected hospitals, and the Gallaudet University Bison football team level the playing field for deaf and hard of hearing players.

What makes all of this possible is wireless industry investment. This year, we cross another threshold, with cumulative wireless industry capital expenditures exceeding \$700 billion.

In fact, in fact, the recent *Wireless Investment and Economic Benefits* report found that this decade, the wireless industry has been the nation's second-largest source of direct investment. This is a testament to the wireless industry's long history of driving our economy forward.

But all of this is increasingly at risk. For more than a year, the FCC has been left without the authority to auction more spectrum, and there is no pipeline of spectrum to serve as the foundation for future wireless growth. To continue to meet the insatiable demand for wireless, drive innovation, and support America's economic competitiveness, the wireless industry needs access to more full-power, licensed spectrum—especially in the mid-band, the key range for 5G networks and where America lags other leading countries.

More spectrum will allow this incredible success story to continue and secure America's leading role as the world's wireless and innovation leader.



**Meredith Attwell Baker**, President and CEO

## Record Demand for Wireless Data

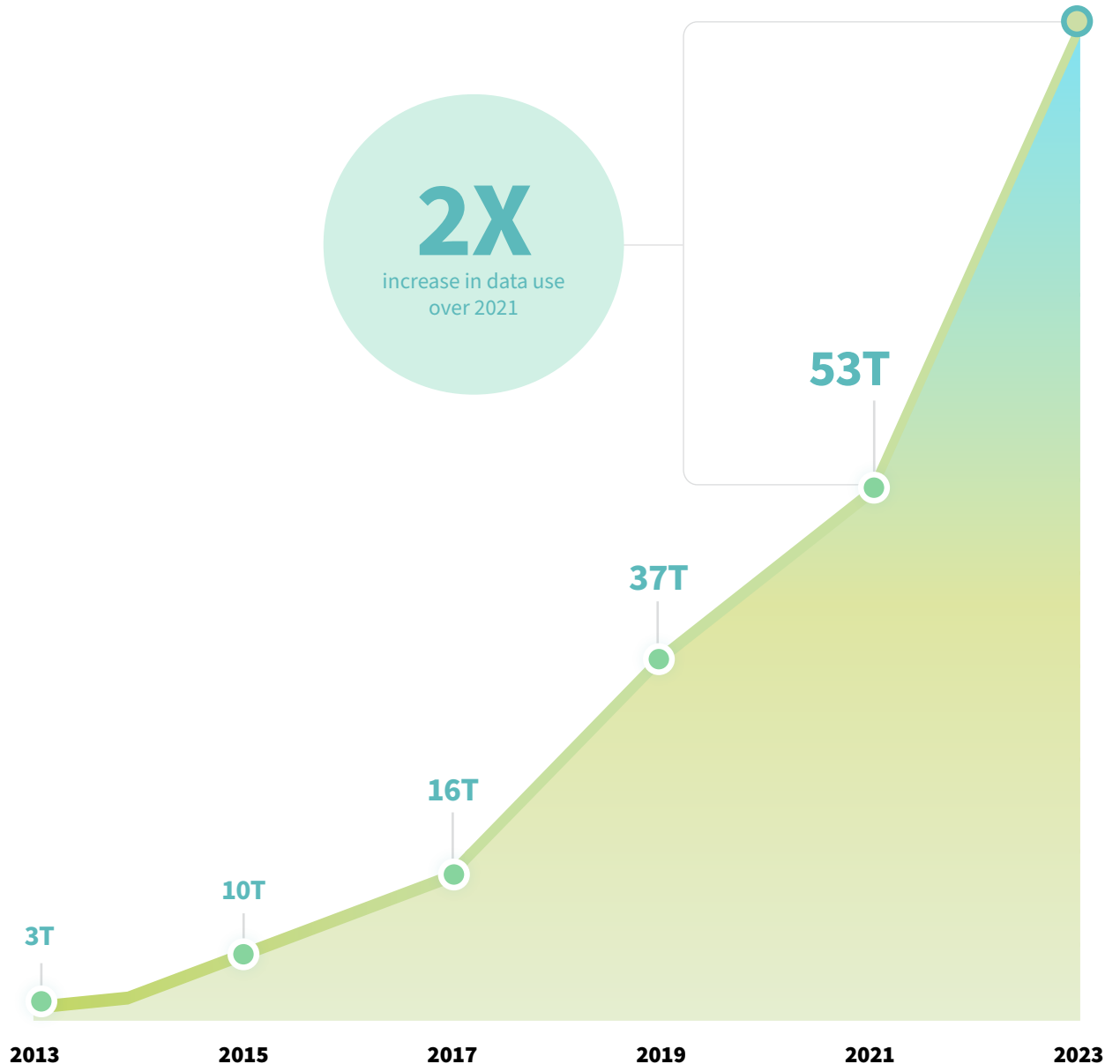
Demand for wireless data continued to skyrocket in 2023, with Americans using more than 100 trillion MBs—enough data for every single U.S. household to watch the first season of House of the Dragon every day for the entire year.

100T MB of data is nearly double the amount of data used just two years ago and represents the largest single-year increase in wireless data ever—26 trillion MBs—a 36% increase over 2022. In fact, Americans used more wireless data in 2023 than they did from 2010 to 2018 combined.

This explosion of wireless data demand reflects the increasingly central role 5G plays in day-to-day life—from 5G home broadband to connected healthcare, autonomous transportation, and advanced manufacturing. And this growth is projected to continue, with Ericsson predicting Americans' data use will increase by more than 3X by 2029.

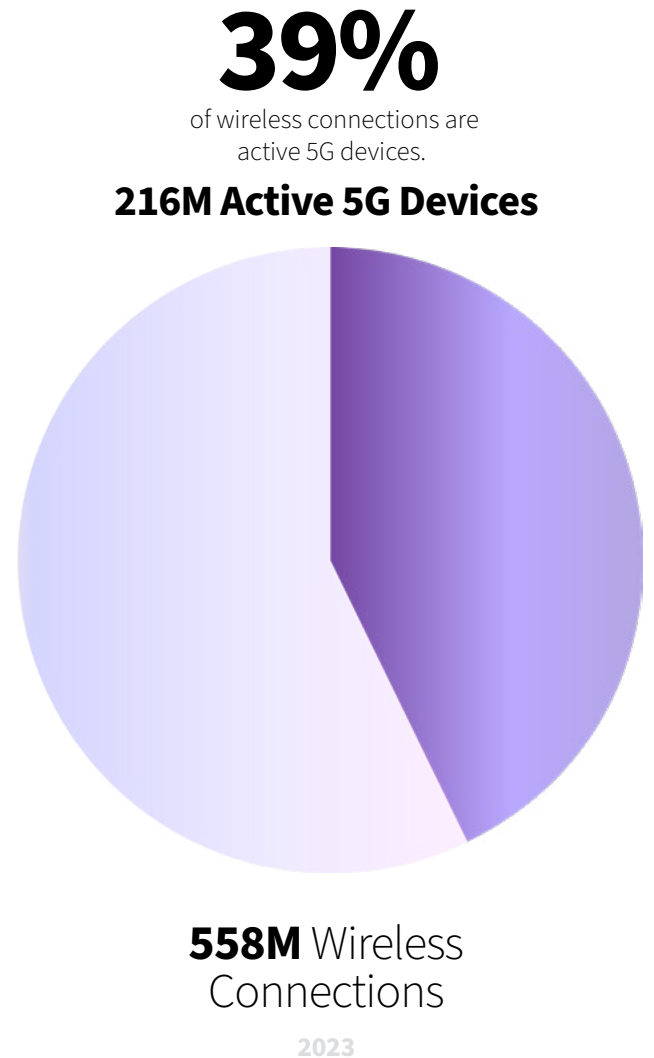
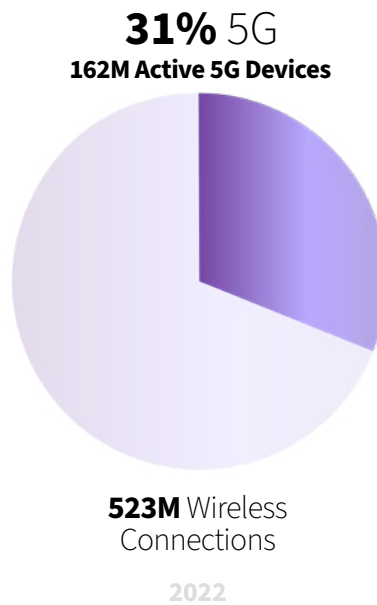
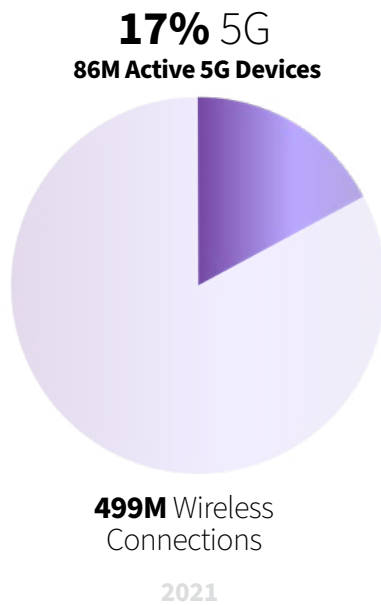
# 100.1T MB

Data used in 2023



## Wireless Connections and 5G Devices

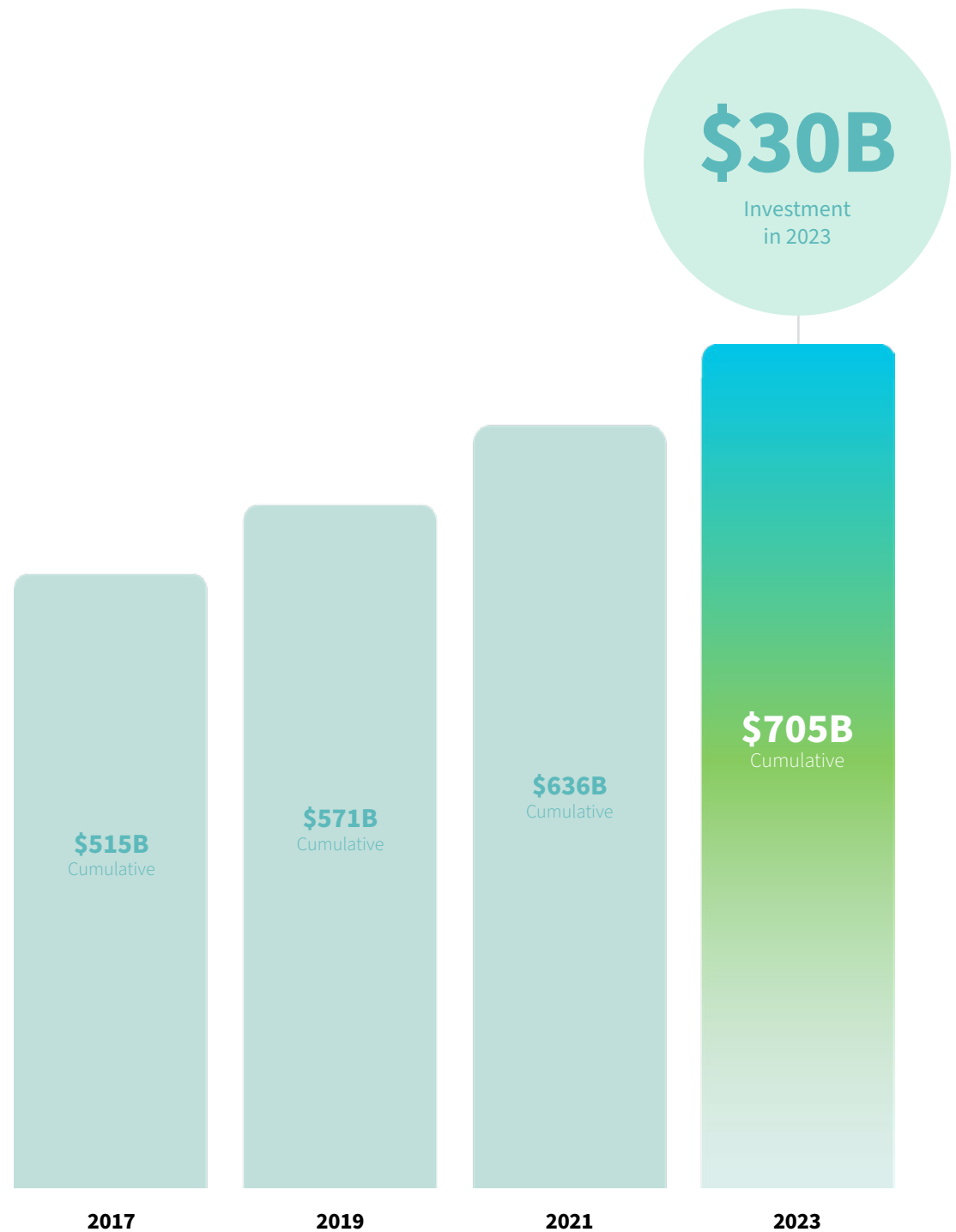
5G is increasingly embedded into the way Americans live and work. Today, nearly 40% of all wireless devices—from phones to smartwatches, IoT devices, and more—have a 5G connection, a 34% increase over 2022. This growth helped propel the total number of wireless connections to 558 million, more than 1.6 wireless connections for every American.



## Wireless Investment Powers America

The wireless industry invests billions of dollars every year to build, upgrade, and maintain its networks, including \$30 billion last year alone. Wireless carriers have invested \$705 billion to date—and \$190 billion of that investment has been spent since 2018, the year 5G was launched.

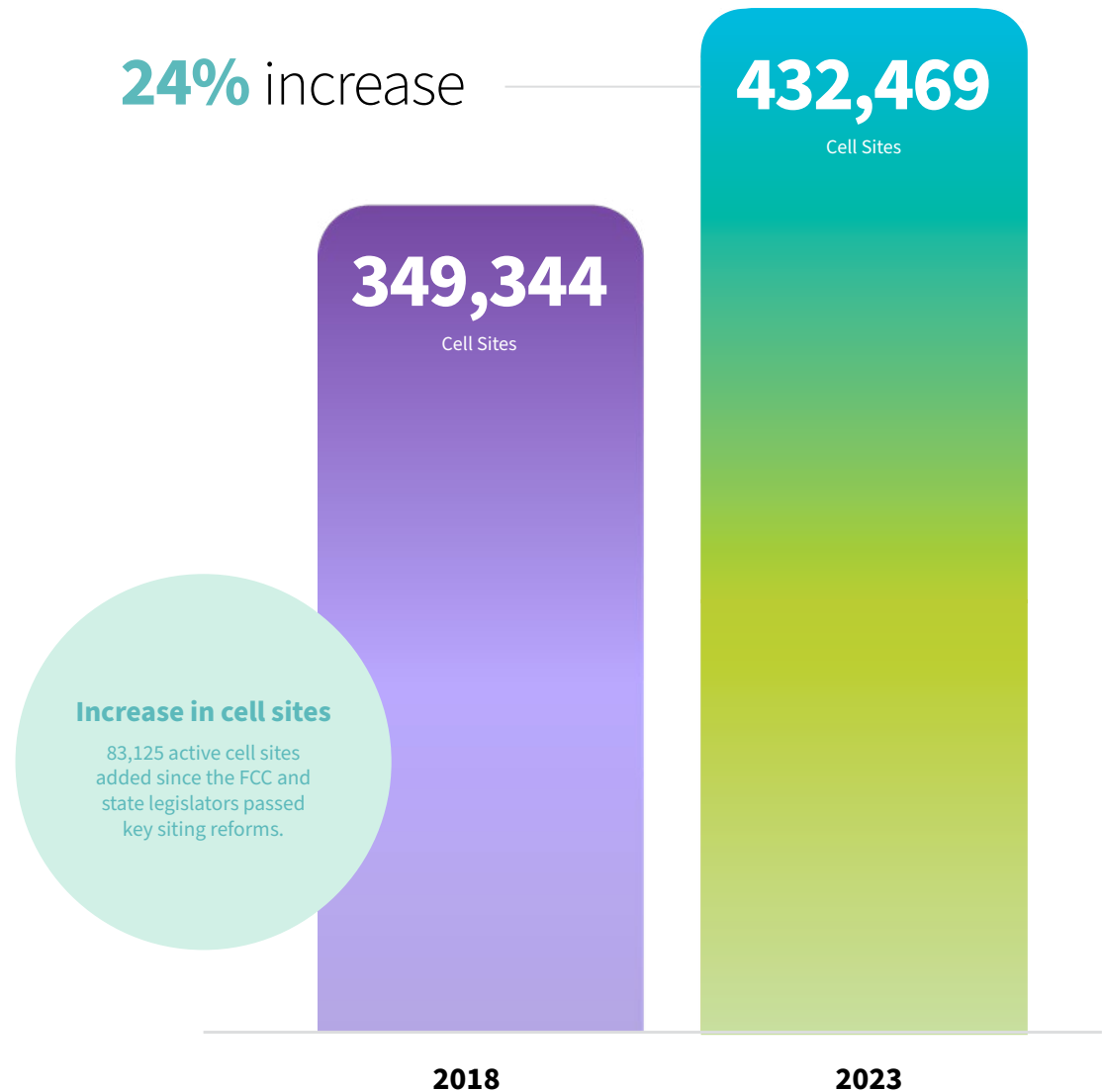
This investment fuels American economic competitiveness as the wireless industry delivers reliable, resilient, and secure connectivity to Americans from coast to coast. In fact, since 2020, America’s wireless industry has been the second largest investor in America’s economy.



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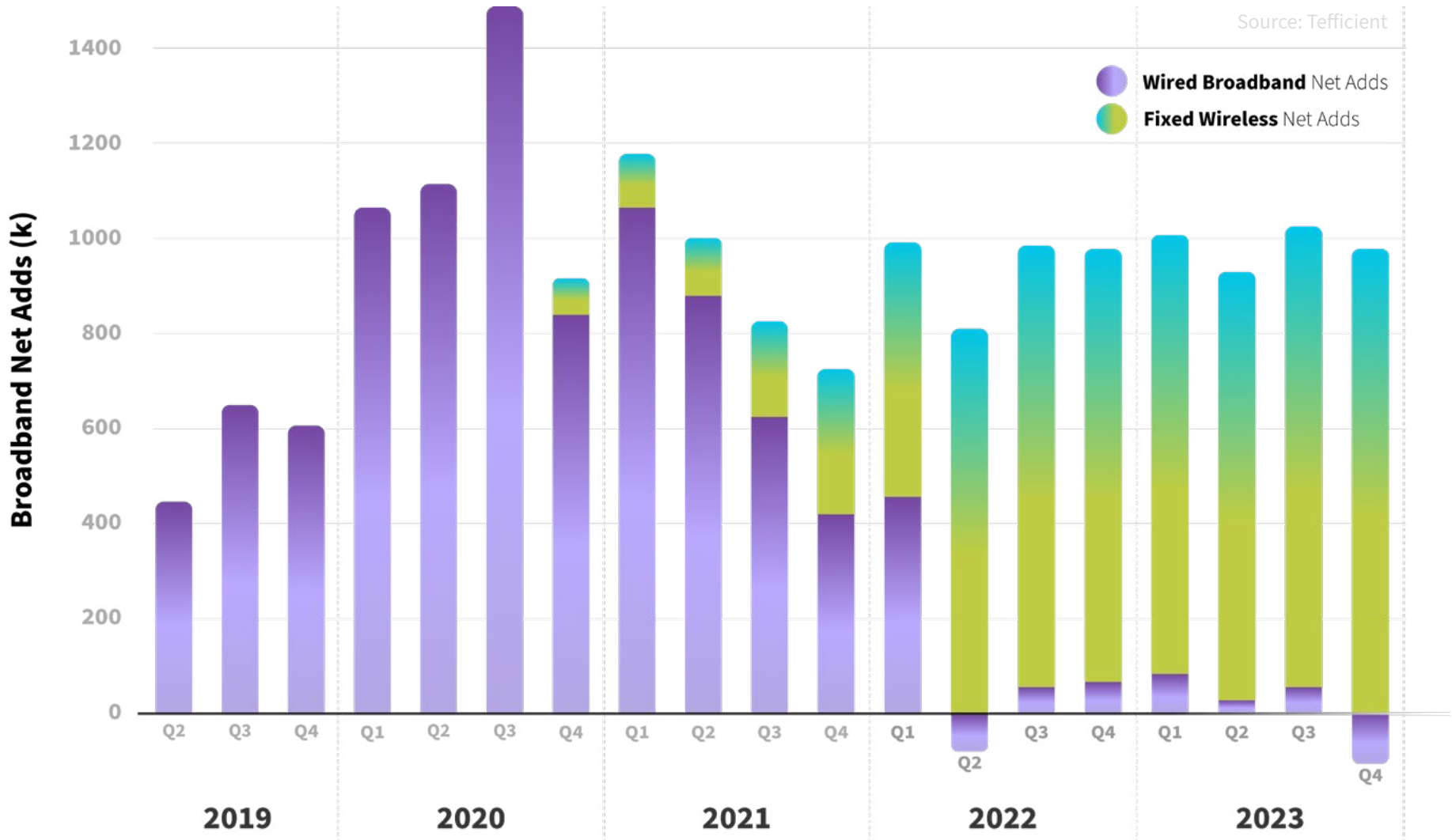
## More Cell Sites Support More Demand

To support the skyrocketing demand for 5G, the wireless industry continues to build out more cell sites, the physical backbone of our nation's wireless networks. By the end of 2023, there were 432,469 operational cell sites across the U.S.—a 24% increase since pivotal wireless siting reforms were enacted in 2018.



## 5G Home Broadband Continues to Bridge the Digital Divide

Today, thanks to 5G, more Americans than ever before have a real choice in how to connect to broadband at home, and they're using that freedom to select 5G home broadband. Over the past two years, 95% of net new broadband subscribers chose 5G home service—and importantly, 1 out of 5 net 5G home adds were entirely new home broadband subscribers, underscoring 5G's role in helping to close the digital divide.

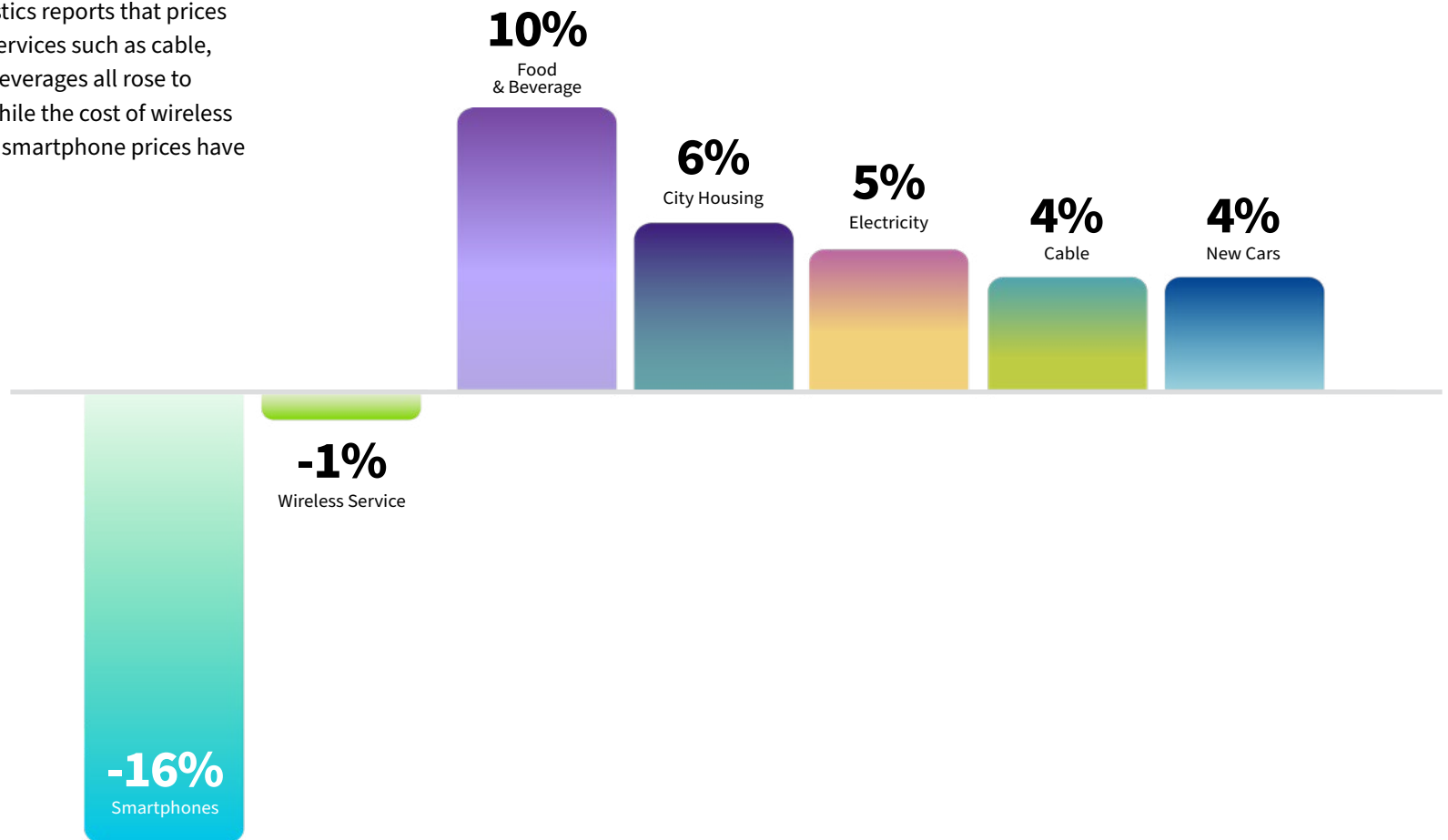


## Wireless Costs Less While Consumers Use More

America’s wireless customers continue to get more for less. Today, Americans pay \$.002 per MB of wireless data—a 97% decrease from a decade prior and a 50% decrease since 2020, when the average cost of consumer goods and services began to soar.

The Bureau of Labor Statistics reports that prices for consumer goods and services such as cable, electricity, and food and beverages all rose to 10% from 2022 to 2023, while the cost of wireless service decreased 1% and smartphone prices have dropped 16%.

### Prices of Goods from 2020-2023







2.4T

Minutes of Use in 2023

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## Voice and Text

Americans continue to rely heavily on voice, SMS, and MMS messaging to keep in touch. Last year, Americans exchanged over 2.1 trillion SMS and MMS messages, or more than 67,000 messages every second. Americans also collectively spent more than 2.4 trillion minutes talking on the phone—enough time to listen to Beyoncé’s full Cowboy Carter album 31 billion times.

2.1T

SMS and MMS messages  
exchanged in 2023

ctia™

The logo consists of the lowercase letters 'ctia' in a white, sans-serif font. A small 'TM' trademark symbol is positioned to the upper right of the letter 'a'. Below the letters, there is a horizontal row of six white dots, each centered under one of the letters: 'c', 't', 'i', 'a', and two additional dots under the 'a'.