



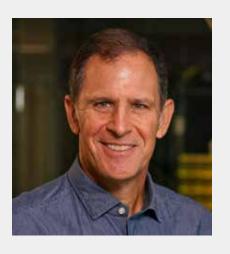


2012-2019

### **TABLE OF CONTENTS**

Letter from Jonathan Spalter	1
Key Findings	3
US vs. EU Broadband Deployment » Coverage	
Households Covered with Fixed Broadband at Any Speed	4
Households Covered with Fixed Broadband at NGA Speed	5
Households Covered with Fixed Broadband > 100 Mbps	6
Households with 2 or More Wired Facilities Based Competing Providers	7
Households with 2 or More Facilities Based Competing Providers	8
US vs. EU Broadband Adoption » <i>Take-Up</i>	
Share of Households with Fixed Broadband Subscription at Any Speed	9
Share of Households with Fixed Broadband Subscription ≥ 30 Mbps	10
Share of Households with Fixed Broadband Subscription ≥ 100 Mbps	11
Share of Households with Broadband Subscriptions at 3 Speed Intervals	12
Why is the US Ahead?	13

**USTELECOM PARTNER Arthur Menko, BPI-Telcodata** 



# THE U.S. LEADS ON BROADBAND: THE KEY QUESTION IS WHY

THE U.S. STANDS AT A CROSSROADS for its innovation policy. Congress and the Administration are stepping up with historic funding that works shoulder to shoulder with broadband companies to close the digital divide. As a result, we as a country are able to contemplate all the possibilities that the future of a universally connected nation might hold.

But as we look to this future, it is imperative that we understand our nation's path to global leadership in the information age. This means confronting persistent myths with data-driven facts when it comes to assessing the state of U.S. broadband. One of the most common and misguided claims is that the European Union's (EU) more intensive framework for broadband regulation has somehow yielded a superior online experience for its consumers.

The findings of this report flatly debunk this claim, and the data is undeniable: The U.S. leads the EU in broadband deployment and adoption—and this lead is even larger when rural areas and at higher-speed offerings are considered.

Put another way, if the U.S. had followed the EU's more regulatory path, then our nation's digital divide could be more than triple what it is today—leaving an additional 39.5 million<sup>1</sup> Americans without access to a broadband-fueled world of opportunities.

EU leaders are keenly aware of their disadvantage. As far back as 2012, Europe's chief telecom regulator warned that the "attachment to 20th century policy mindsets and business models is hurting Europe's economy." The following year, the full European Commission decried its "regulatory mess," noting "the effect is that Europe is losing the global race to build fast fixed broadband connections. Concretely: telecoms companies are under-performing, other businesses are losing competitiveness and frustrated consumers are stuck in the internet slow lane."

<sup>1</sup> Based on 2019 census figures and U.S. broadband services ≥ 30Mbps down/3 Mbps up.

<sup>2</sup> https://telecoms.com/45731/kroes-europe-flattened-by-global-competitors-without-more-ict-investment/

<sup>3</sup> https://ec.europa.eu/commission/presscorner/detail/en/MEMO\_13\_756

#### LETTER FROM JONATHAN SPALTER

While European governments imposed heavy regulation on broadband—chilling investment in better, stronger and more farreaching networks—the U.S. bounded ahead by crafting a more collaborative approach between the public and private sectors. One outcome?

Broadband companies invest more than three times as much in telecommunications infrastructure per household in the U.S. than in the EU—about \$700 per home each year.

This policy approach that encourages capital-intensive infrastructure work also has delivered to U.S. consumers a far more competitive broadband marketplace, with twice the facilities-based competition as EU consumers enjoy. This, in turn, has fueled a cascade of additional benefits from falling U.S. broadband prices<sup>4</sup> to greater network resilience in times of crisis to the ability of American consumers to more fully utilize digital tools and resources, as evidenced by the fact that the average U.S. subscriber uses 60% more data than its European counterparts.<sup>5</sup>

From addressing the pandemic through remote work, telehealth and online learning to growing information-based jobs and entrepreneurial opportunities, our nation continues to reap the rewards of U.S. broadband leadership. As we look to the future, we should do so with a clear-eyed understanding of how we got here: The U.S. leads because smart infrastructure has been advanced by smart policy that helped spark more than \$1.8 trillion—and counting—in private sector U.S. infrastructure investment.

Jonathan Spalter

President and CEO, USTelecom

<sup>4</sup> https://www.ustelecom.org/wp-content/uploads/2020/09/USTelecom-2020-Broadband-Pricing-Index.pdf

<sup>5</sup> https://openvault.com/complimentary-report-4q20/

### **KEY FINDINGS**

The U.S. handily leads the EU in both broadband infrastructure deployment and broadband adoption—at all speeds—and this lead grows when comparing higher speed offerings.

- · Deployment: U.S. leads EU by 12 percentage points at 30 Mbps; 25 pp lead for ≥100 Mbps.
- · Adoption: U.S. leads EU by 9.4 pp at 30 Mbps; 21.4 pp lead for ≥100 Mbps.

The U.S. infrastructure advantage is most significant when comparing rural areas, despite the EU definition of "rural" including more population-dense areas (which allows costs to be spread across a much larger customer base).

• U.S. leads EU in rural deployment by 22.3 pp at 30 Mbps.

**U.S.** dominance on broadband adoption reinforces prior research showing encouraging progress on **U.S.** broadband affordability—with *U.S.* broadband prices declining, even as the costs of many other essential goods and services continue to rise.

Broadband providers invest substantially more in U.S. versus EU infrastructure (≥3x on a per household basis). This can be attributed to a more collaborative public-private U.S. policy framework that encourages investment in facilities-based competition rather than imposing heavy government regulation (e.g. open access, unbundling).

One added advantage of the United States' pro-investment approach is that its consumers enjoy twice the facilities-based competition as their EU counterparts. It also has infused the country with extensive physical network redundancy and capacity, which can bolster resilience in times of crisis—from surging online traffic amid a pandemic to acts of cyberwarfare.

### HOUSEHOLDS COVERED WITH FIXED BROADBAND AT ANY SPEED

» U.S. & EU in All Areas and Rural

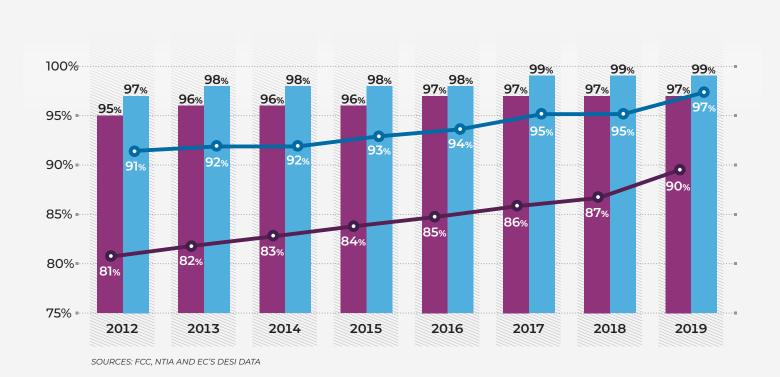
EU ALL AREAS US ALL AREAS EU RURAL US RURAL

#### **KEY TAKEAWAYS**

The U.S. leads the EU in broadband coverage at any speed.

This lead extends substantially when comparing rural areas.

This U.S. rural edge exists despite the more restrictive U.S. definition of rural.

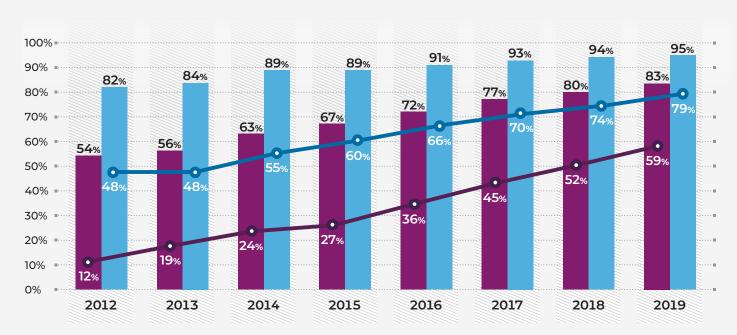


The EU defines rural areas as  $\leq$  263 people per square mile. In the U.S. on average there are 17.4 people per square mile in rural areas. A majority (57%) of the EU's rural census blocks would be considered non-rural in the U.S.

# HOUSEHOLDS COVERED WITH FIXED BROADBAND AT NGA SPEED

» U.S. & EU in All Areas and Rural





SOURCES: FCC, NTIA AND EC'S DESI DATA

US speeds:  $\geq 25/3$  (2012-14) and 30 Mbps (2015-2019); EU speeds:  $\geq 30$  Mbps down and any speed up.

#### **KEY TAKEAWAYS**

The U.S. lead on deployment grows when considering only higher-speed offerings.

In 2019, the U.S. was ahead by:

- 12 percentage points overall
- 20 percentage points in rural areas

## HOUSEHOLDS COVERED WITH FIXED BROADBAND ≥100 MBPS

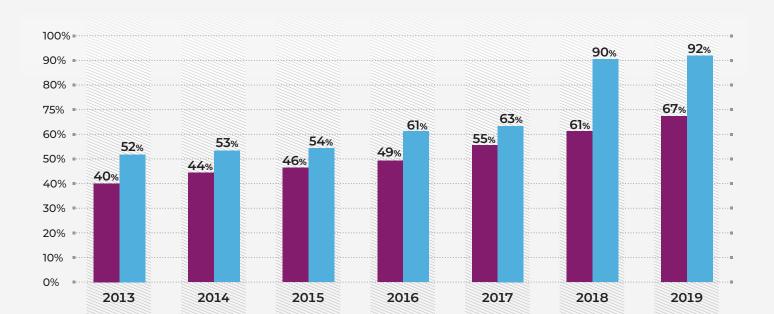
» U.S. & EU in All Areas

EU ALL AREAS US ALL AREAS

#### **KEY TAKEAWAYS**

The higher speed the offering, the more the U.S. pulls ahead on access.

Lead extends to 25 percentage points in 2019 for ≥100 Mbps.

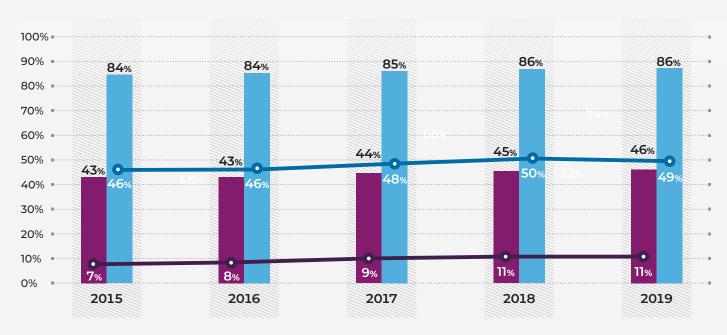


SOURCES: FCC, NTIA AND EC'S DESI DATA

# HOUSEHOLDS WITH 2 OR MORE WIRED FACILITIES-BASED COMPETING PROVIDERS

» U.S. & EU in All Areas and Rural





SOURCES: FCC, NTIA AND EC'S DESI DATA

US: 2 or more Wired Providers | EU: A Cable and Telco Provider

#### **KEY TAKEAWAYS**

There is nearly 2x more facilitiesbased wired competition in the U.S. vs. EU

There is a 5X U.S. edge when comparing rural areas in 2019.

# HOUSEHOLDS WITH 2 OR MORE FACILITIES-BASED COMPETING PROVIDERS

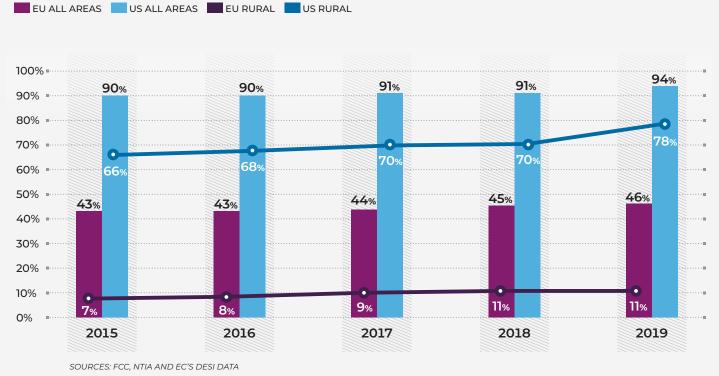
» U.S. & EU in All Areas and Rural

#### **KEY TAKEAWAYS**

Adding fixed wireless to the competitive mix, U.S. consumers enjoy an even greater advantage.

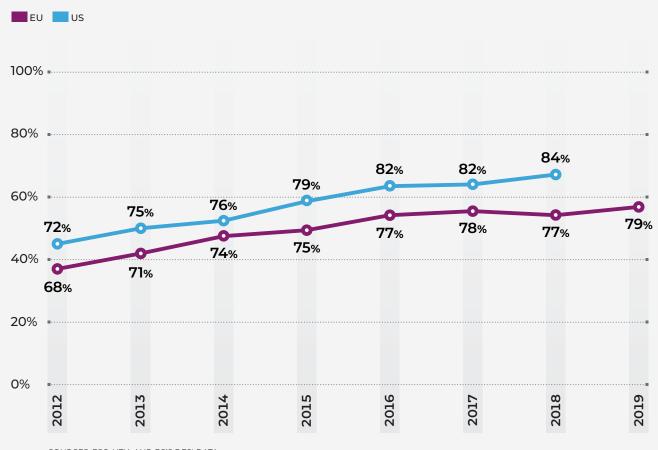
There is over 2x more facilitiesbased competition in the U.S. vs. EU

There is a nearly 8X U.S. edge when comparing rural areas in 2019.



US: 2 or more Fixed Providers | EU: A Cable and Telco Provider

# SHARE OF HOUSEHOLDS WITH FIXED BROADBAND SUBSCRIPTION AT ANY SPEED



### **KEY TAKEAWAYS**

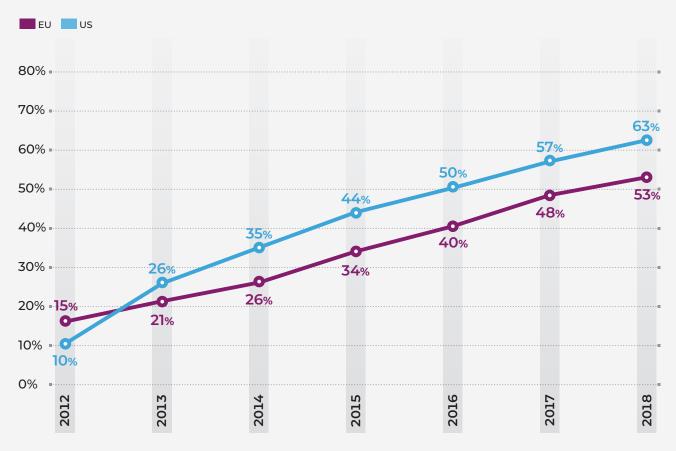
Not only do more Americans have access to highspeed broadband, but significantly more Americans also have adopted the service in their homes.

SOURCES: FCC, NTIA AND EC'S DESI DATA

#### **KEY TAKEAWAYS**

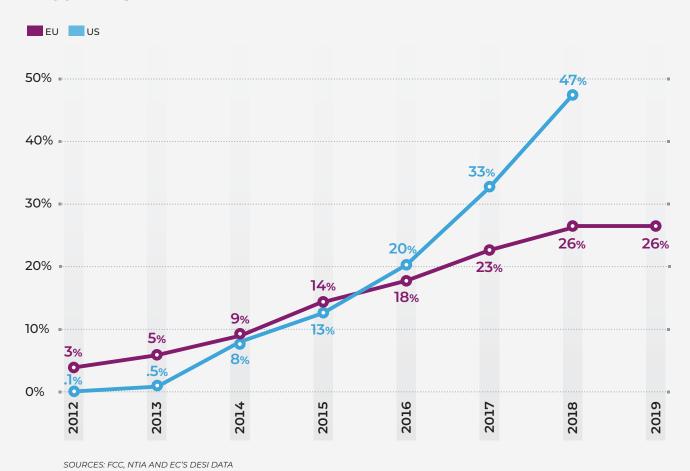
Like deployment, the U.S. adoption advantage grows at higher speeds—with U.S. consumer takeup rates nearly 10 percentage points ahead of EU consumers.

## SHARE OF HOUSEHOLDS WITH FIXED BROADBAND SUBSCRIPTION ≥ 30 MBPS



SOURCES: FCC, NTIA AND EC'S DESI DATA

# SHARE OF HOUSEHOLDS WITH FIXED BROADBAND SUBSCRIPTION ≥ 100 MBPS



#### **KEY TAKEAWAYS**

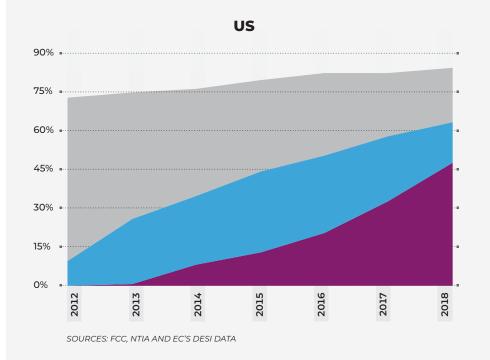
At the fastest speeds, the U.S. has a 20+ percentage point lead on broadband adoption.

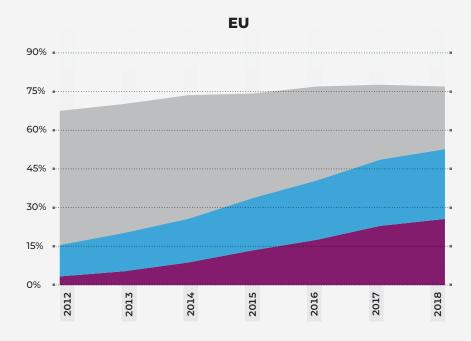
### SHARE OF HOUSEHOLDS WITH BROADBAND SUBSCRIPTIONS AT 3 SPEED INTERVALS



#### **KEY TAKEAWAYS**

More American consumers are adopting broadband overall, and far more are choosing higher-speed service offerings than EU consumers.

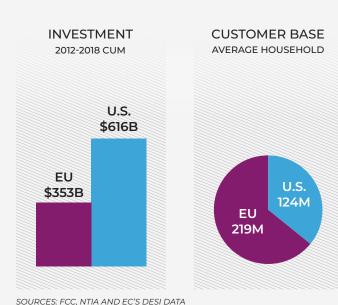




### WHY IS THE U.S. AHEAD?

### **TELECOM INFRASTRUCTURE INVESTMENT 2012-2018**









### **KEY TAKEAWAYS**

Broadband companies invest far more in the U.S. as a whole...

**U.S. +75%** (CUM)

...Despite a far smaller customer base

**U.S. -43%** (# of households vs. EU)

...and per household

**U.S. +208%** (CUM)

...every year

**U.S. +\$478/household** (Avg Annual Investment)

Denominated in 2018 U.S. dollars. All figures are 2012-2018 CUM. Investment figures include residential, business and mobile services.

