



August 21, 2023

Via Electronic Filing <<https://www.lujan.senate.gov/usf/>>

The Honorable Senator Ben Ray Luján  
498 Russell Senate Office Building  
Washington, DC 20510

Re: Universal Service Fund Working Group – Request for Comment

The Computer & Communications Industry Association (CCIA)<sup>1</sup> is pleased to respond to the Working Group’s Request for Comment regarding the future of the Universal Service Fund (USF). This submission focuses on the Working Group’s consideration of the USF contribution base in Question 7(a).

### **Digital Services Providers Continue to Invest in Internet Infrastructure**

Digital services providers, which include social media platforms, app stores, networking sites, and e-commerce facilitators, have made and continue to make investments in the nation’s telecommunications infrastructure, which has inured to the benefit of both end users and the owners of telecommunications networks. According to the attached excerpt from Analysys Mason, *The Impact of Tech Companies’ Network Investment on the Economics of Broadband ISPs* (October 2022), these entities spent **\$312 Billion** in North America (the United States and Canada) on Internet infrastructure during the period 2011-2021. This investment has decreased the overall costs for telecommunications companies to haul Internet traffic, with an estimated **\$670 Million saved** in 2022 alone. Data such as this shows that digital services providers already are making meaningful contributions to networks and the provision of Internet connectivity.

CCIA notes that the discussion of network funding in foreign jurisdictions has resulted in similar findings. For example, Ofcom concluded in October 2022 that digital services providers, which it calls Content and Application Providers (CAPs), “can and do take actions to reduce certain costs on ISPs’ networks by using services or making investments which tend to improve the efficiency of traffic delivery.”<sup>2</sup>

In fact, responding to the European Commission 2023 Exploratory Consultation entitled *The future of the electronic communications sector and its infrastructure*, the National Telecommunications and Information Administration (NTIA) wrote on behalf of the United States that CAPs and Large Traffic Generators

build and operate networks, including large international fiber and submarine cable systems, that deliver popular services and applications.

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<sup>1</sup> For more than fifty years, CCIA has promoted open markets, open systems, and open networks. CCIA members employ more than 1.6 million workers, invest more than \$100 billion in research and development, and contribute trillions of dollars in productivity to the global economy. The list of CCIA members is available at <https://ccianet.org/about/members/>.

<sup>2</sup> *Consultation: Net Neutrality Review*, Section 7.35 (Ofcom Oct. 21, 2022).

<[https://www.ofcom.org.uk/\\_\\_data/assets/pdf\\_file/0028/245926/net-neutrality-review.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0028/245926/net-neutrality-review.pdf)>.

They develop or acquire content, operate data centers, and incur other obligations that contribute to the ecosystem's total costs.<sup>3</sup>

These findings by the United States and Britain warrant a degree of deference in this discussion as to whether digital services providers should also be required to fund telcos' network investment.

### **Responses to Proposals that Digital Services Providers Be Required to Contribute to Telecom Networks' Infrastructure Investment**

On the question whether digital services providers should be required to fund network owners' investment in facilities, NTIA stated that,

Mandating direct payments to telecom operators in the EU absent assurances on spending could reinforce the dominant market position of the largest operators. It could give operators a new bottleneck over customers, raise costs for end users, and alter incentives for CAPs/LTGs to make efficient decisions regarding network investment and interconnection. It is difficult to understand how a system of mandatory payments imposed on only a subset of content providers could be enforced without undermining net neutrality.<sup>4</sup>

Similarly, the Body of European Regulators for Electronic Communications (BEREC),<sup>5</sup> in its response to the European Commission's 2023 Exploratory Consultation, stated that telecommunications network investment should continue to be funded by the "public general budget" and by "providers of electronic communications networks and services."<sup>6</sup> BEREC **did not agree** that "online digital players or data generators" should contribute to network operators' investment funding.

### **Ensuring the Future of Broadband Deployment Via USF**

The sustainability of USF can be secured through one action by the Federal Communications Commission (FCC): include all providers of Internet connectivity in the USF contribution base. CCIA refers to the USForward report, *FCC Must Reform USF Contributions Now: An Analysis of the Options* (September 2021), an excerpt of which is also attached here. This report estimates

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<sup>3</sup> United States Comments on European Consultation ([May 25, 2023](#)) (Question 54), <<https://www.ntia.gov/other-publication/2023/united-states-comments-european-consultation-future-electronic>>.

<sup>4</sup> See *supra* n.2.

<sup>5</sup> BEREC [Mission & Strategy](#):

The Body of European Regulators for Electronic Communications (BEREC) contributes to the development and better functioning of the internal market for electronic communications networks and services. It does so by aiming to ensure a consistent application of the European Union (EU) regulatory framework and by aiming to promote an effective internal market in the telecoms sector, in order to bring even greater benefits to consumers and businesses alike.

<<https://www.berec.europa.eu/en/berec/mission-strategy>>.

<sup>6</sup> BEREC [Response](#) at 32, <<https://www.berec.europa.eu/system/files/2023-05/BEREC%20EU%20Survey%20response%20-%20EC%20Exploratory%20Consultation.pdf>>.



that by adding broadband services to the pool of USF-assessable revenue, upward of **\$260 Million** in additional, annual USF funding would come available while bringing the USF contribution factor, which is 29.2% for 3Q23, down to just over **3%**.

### Additional Considerations Regarding the Expansion of the USF Contribution Base

As the Working Group is likely aware, the FCC has stated that the Communications Act of 1934 does not permit the regulation of digital services providers, and thus the FCC cannot add them to the USF contribution base.<sup>7</sup>

Further, CCIA is concerned that requiring digital services providers to fund telcos’ networks would have repercussions abroad. As stated above, several foreign jurisdictions continue to examine proposals to require digital services providers to pay for telcos’ network investments. In addition to the concerns presented herein – namely, that such a mandate is not necessary to ensure network quality and might result in service degradation – there is a trade-related concern.

As CCIA explained in its annual comments to USTR for its National Trade Estimate Report, demands that digital services providers remit revenue for telcos’ network buildouts

threaten digital trade between the U.S. and key export markets; undermine the Internet ecosystem both locally and globally by establishing sender-party-pays mandates in the mold of telephony; and result in vast inefficiencies for consumers and CAPs alike by disincentivizing the investments online companies make to improve traffic delivery, such as caching servers and data centers.<sup>8</sup>

CCIA has also observed that:

Given the targeted nature of these provisions towards U.S. companies and the conditioning of market presence on payments to local industry leaders, these proposals often contravene provisions of trade agreements and WTO rules that are aimed at streamlining foreign investment and liberalizing the free flow of services.<sup>9</sup>

Redesigning USF to include digital services in the contribution base might embolden other jurisdictions to erect their own models of revenue extraction.

\* \* \* \*

<sup>7</sup> WC Docket No. 21-476, *FCC Report to Congress on the Future of the Universal Service Fund*, FCC 22-67 ¶¶ 107-111 ([Aug. 15, 2023](https://www.fcc.gov/document/fcc-reports-congress-future-universal-service-fund)), <<https://www.fcc.gov/document/fcc-reports-congress-future-universal-service-fund>>.

<sup>8</sup> Docket No. USTR–2022–0013, *Request for Comments on Significant Foreign Trade Barriers for the 2023 National Trade Estimate Report*, Comments of CCIA Regarding Foreign Trade Barriers to U.S. Exports for 2023 Reporting at 23 ([Oct. 28, 2022](https://ccianet.org/library/ccia-comments-2023-national-trade-estimate-reporting/)), <https://ccianet.org/library/ccia-comments-2023-national-trade-estimate-reporting/>.

<sup>9</sup> CCIA [webpage](https://ccianet.org/advocacy/trade/global-digital-trade-barriers/) *Key Global Digital Trade Threats*, <https://ccianet.org/advocacy/trade/global-digital-trade-barriers/>.



Thank you for your work on this vital issue. CCIA remains available for any additional information that your office or the Working Group might need.

Sincerely,

Stephanie Joyce  
Chief of Staff and Senior Vice President  
CCIA

# **ATTACHMENTS**



SUMMARY REPORT FOR INCOMPAS

# THE IMPACT OF TECH COMPANIES' NETWORK INVESTMENT ON THE ECONOMICS OF BROADBAND ISPs

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OCTOBER 2022



[analysismason.com](https://www.analysismason.com)

## Disclaimer

This report was commissioned by INCOMPAS, the internet and competitive networks association (formerly COMPTEL), a US-based industry trade association advocating for competition policy across all networks, and prepared independently by Analysys Mason.

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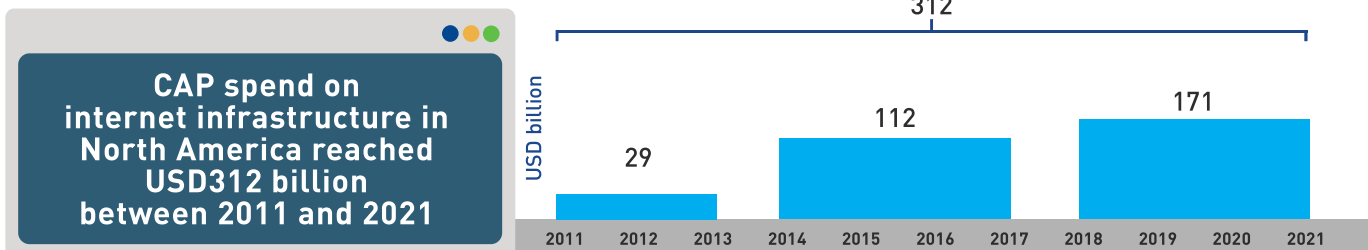
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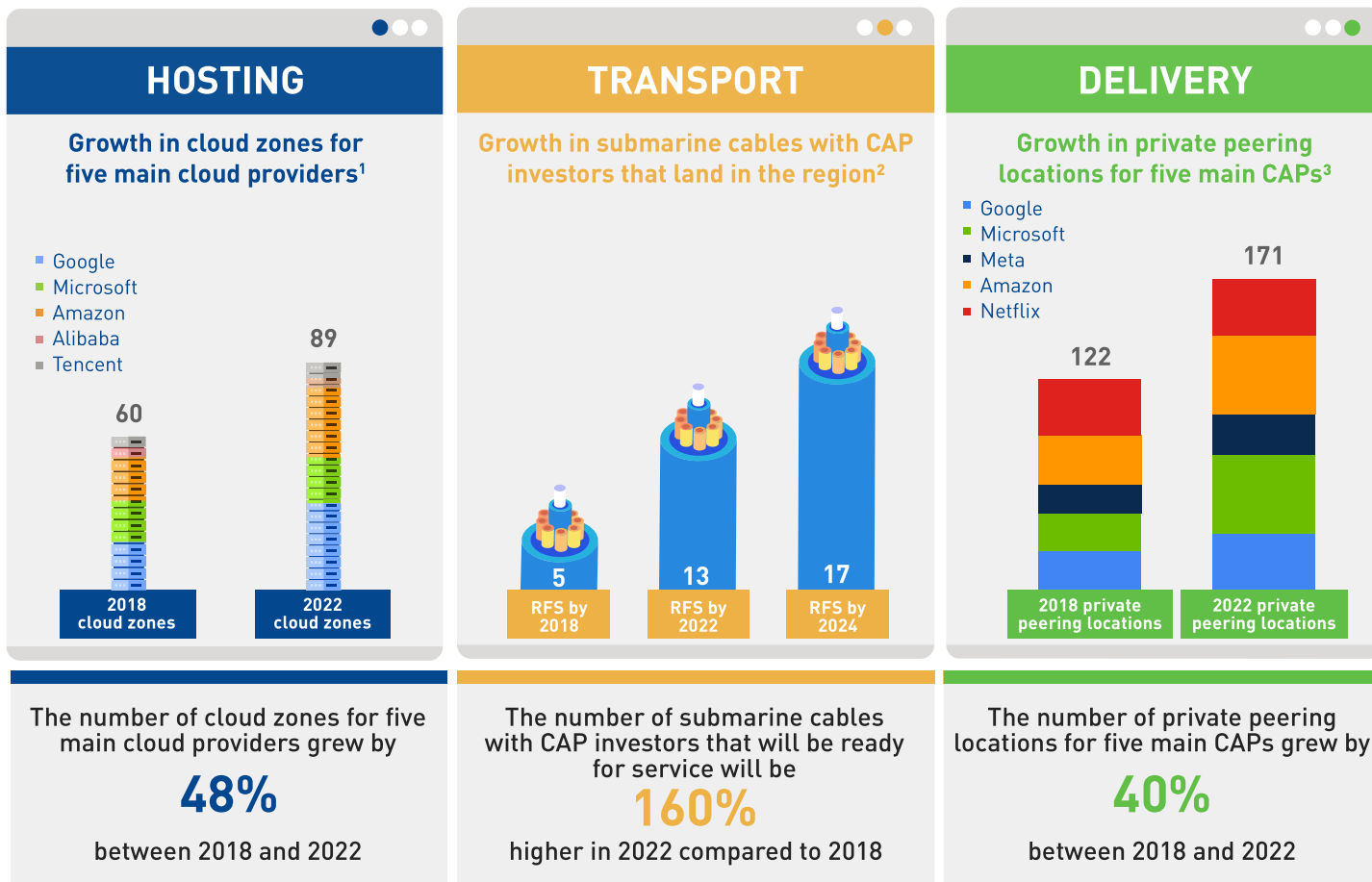
## Infrastructure investment report

Many large global CAPs are based in North America, and investment in the region continues to grow

Total spend by CAPs on internet infrastructure over various periods since 2011



Examples of investment drivers by cluster



ISPs can achieve cost savings as a result of investments that CAPs make to bring traffic closer to end users, in two main areas

CAP investments that enable ISPs to access content at domestic peering locations

CAP investments to cache content within ISP networks

An estimated **USD670 million** can be saved by fixed network ISPs in North America in 2022, as a result of investments made by CAPs

<sup>1</sup> Number of cloud availability zones. Sourced from cloud provider websites in mid-2018 and mid-2022.  
<sup>2</sup> Examples of submarine cables with direct CAP investors. Sourced from TeleGeography Submarine Cable Map in mid-2022. 'RFS' refers to 'ready for service'. Submarine cables frequently connect different regions, and adding the figures presented across regions can result in double counting.  
<sup>3</sup> Number of private peering locations. Sourced from PeeringDB in mid-2018 and mid-2022. Please note that the growth in traffic at private peering locations is significantly faster than the growth in number of private peering locations.





**US Forward** 



**Universal Service Fund**

FCC Must Reform USF Contributions Now:  
An Analysis of the Options  
September 2021



# USForward

WRITTEN BY  
**Carol Matthey,**  
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A REPORT IN CONJUNCTION WITH



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**TABLE 5. ASSUMED ASSESSABLE BROADBAND INTERNET ACCESS SERVICE REVENUES 2020 – 2024 (BILLIONS)**

	2020	2021	2022	2023	2024
<b>FIXED BROADBAND</b>	\$76.8	\$84.6	\$90.7	\$96.7	\$102.4
<b>BROADBAND</b>	\$134.0	\$140.0	\$148.1	\$153.3	\$158.2
<b>TOTAL</b>	\$210.8	\$225.6	\$238.8	\$250.0	\$260.6

Source: New Street projections for fixed broadband revenues; mobile broadband estimates derived from Raymond James 2020-2022 projections for mobile revenues; assumes 80% of reported mobile service revenues attributable to data (broadband); assumes mobile broadband grows 3.5% from 2022 to 2023, and 3.2% from 2023 to 2024.

Under these assumptions, if the FCC were to expand the contribution base to include broadband

internet access service revenues, the contribution factor over the next few years would remain under 4%.

**TABLE 6. CONTRIBUTION FACTOR UNDER EXPANDED REVENUES REFORM OPTION**

	2021	2022	2023	2024
<b>USF DEMAND (BILLIONS)</b>	\$9.7	\$9.6	\$8.9	\$9.6
<b>TOTAL REVENUE (BILLIONS)</b>	\$255.2	\$266.9	\$276.7	\$286.0
<b>TELECOM REVENUE</b>	\$29.6	\$28.1	\$26.7	\$25.4
<b>BROADBAND REVENUE</b>	\$225.6	\$238.8	\$250.0	\$260.6
<b>CONTRIBUTION FACTOR</b>	3.8%	3.6%	3.2%	3.4%

Source: FCC Ten-Year Forecast of program demand from Table 2; estimated telecom revenues from Figure 4; estimated broadband revenues from Table 5; assumes the full amount of end user retail broadband revenues would be assessable, and that broadband internet access service is a wholly interstate service, so that all retail revenues would be subject to federal USF.

## Key Takeaway



*Assessing broadband internet access service revenues would expand the current USF contribution base and stabilize the USF funding system, and the contribution factor would drop from levels projected to approach 40% (or even higher) to less than 4%.*