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**Comments filed with the Federal Communications Commission
in the Matter of Universal Service Contribution Methodology**

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Washington, D.C. 20554**

In the Matter of)
)
Universal Service Contribution) **WC Docket No. 06-122**
Methodology)
)

**The Universal Service Fund Needs a Budget:
Comments of Sarah Oh, J.D., Ph.D. * and Scott Wallsten, Ph.D. ****

Submitted July 29, 2019

The following comments are submitted in response to the Federal Communications Commission’s (“Commission”) Notice of Proposed Rulemaking¹ seeking comment on establishing a budget cap on the Universal Service Fund (“USF”) and recommendations to enable the Commission to evaluate the four USF programs to better achieve universal service principles directed by Congress.

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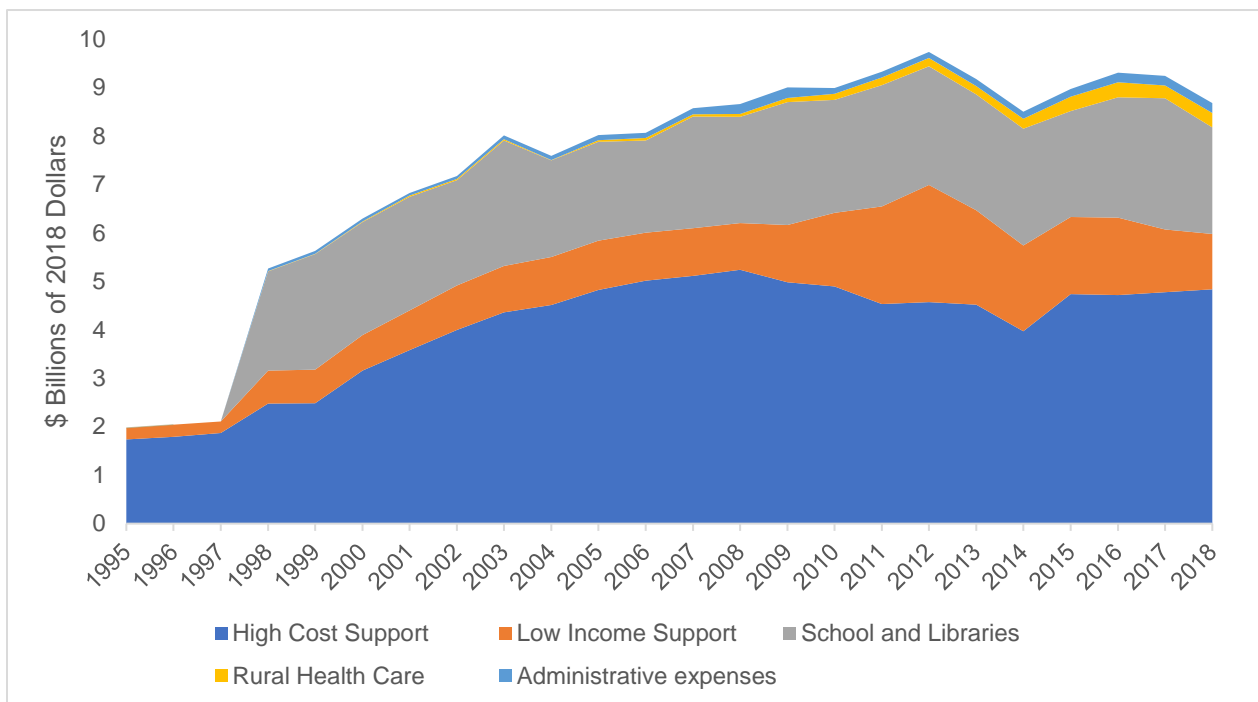
¹ *In the Matter of Universal Service Contribution Methodology*, WC Docket No. 06-122, Notice of Proposed Rulemaking, 84 FR 27570, 27570-76 (USF NPRM 2019), <https://docs.fcc.gov/public/attachments/FCC-19-46A1.pdf>.

Introduction

The Universal Service Fund (USF) has disbursed more than \$175 billion in today's dollars over the last 20 years through four programs: The Connect America (High-Cost) Fund, Lifeline, E-Rate program (Schools and Libraries), and Rural Health Care.

The Fund largely operates without a budget cap. Instead, the FCC estimates how much providers will “need” in order to provide services, and then sets the tax rate, which it calls a “contribution factor,” on certain consumer telecommunications services necessary to raise the required revenues.

Figure 1. Federal Spending on Universal Service (\$ Billions)



Sources: FCC, USAC.

The Universal Service Fund is meant to ensure a minimum level of connectivity for all residents. A spending cap on the USF is no more antithetical to achieving this goal than a budget on Defense spending is antithetical to protecting the country. Instead, budget recipients make a case for the size of budget they believe necessary to accomplish their mission. Once the budget is set, managers think carefully about how to obtain the best outcome given the available resources.

The lack of a hard budget creates perverse incentives, as it gives program managers and recipients little reason to ensure that money is spent efficiently. Worse, this inefficient spending is supported by a highly regressive fee imposed on certain telecommunications services regardless of the income of the consumer.

Before discussing the economic problems of the lack of a budget, it is worth noting how unusual it is for a program like the USF to have no budget.

Specifically, the lack of a budget means that USF is similar to entitlement programs, like Social Security and Medicare, which are generally based on how many people meet certain eligibility criteria rather than on set budgets. By contrast, discretionary spending, such as on Defense and other agencies, is determined by budgets set by Congress.²

Alone among USF programs, Lifeline is similar to other entitlements in the sense that it targets individuals whose eligibility is based on income. Lifeline, however, is less than 15 percent of total USF spending.

More than half of USF subsidies go directly to companies, about a quarter goes to schools and libraries, and less than five percent for rural health care. Programs outside of USF that provide direct subsidies to businesses virtually always have firm and constraining budgets. Even schools, libraries, and hospitals are subject to budgets and budget constraints outside of USF. It makes little sense for the FCC to provide unlimited funding and lax oversight in the USF when no other government program would operate that way.

The subsidy program itself is costly, particularly in the form of the opportunity cost of capital. Like any tax, the collection of this revenue imposes deadweight loss on the economy. Worse, the fees collected to provide the funding are regressive because everyone pays into the program, regardless of income. Funds are then redistributed to companies and organizations, regardless of income, who extend broadband goods and services to end users.³

USF collects money by levying fees on interstate, international, and VoIP services.⁴ Because long distance no longer has much meaning, the services with USF fees include not just long distance and calling cards, but also mobile service.⁵ The Commission sets the tax rate according to an algorithm indexed to projected subsidy disbursements and industry revenues. This contribution factor has varied from 16.7 percent to 24.4 percent in the last three years,⁶ growing from its humble beginnings of under 5.5 percent, as seen in Figure 2.

² <https://www.pgpf.org/finding-solutions/understanding-the-budget/spending>. Additional mandatory spending programs exist, like for transportation, but that spending is still typically constrained by a budget, albeit one that may last in perpetuity without Congressional reallocation.

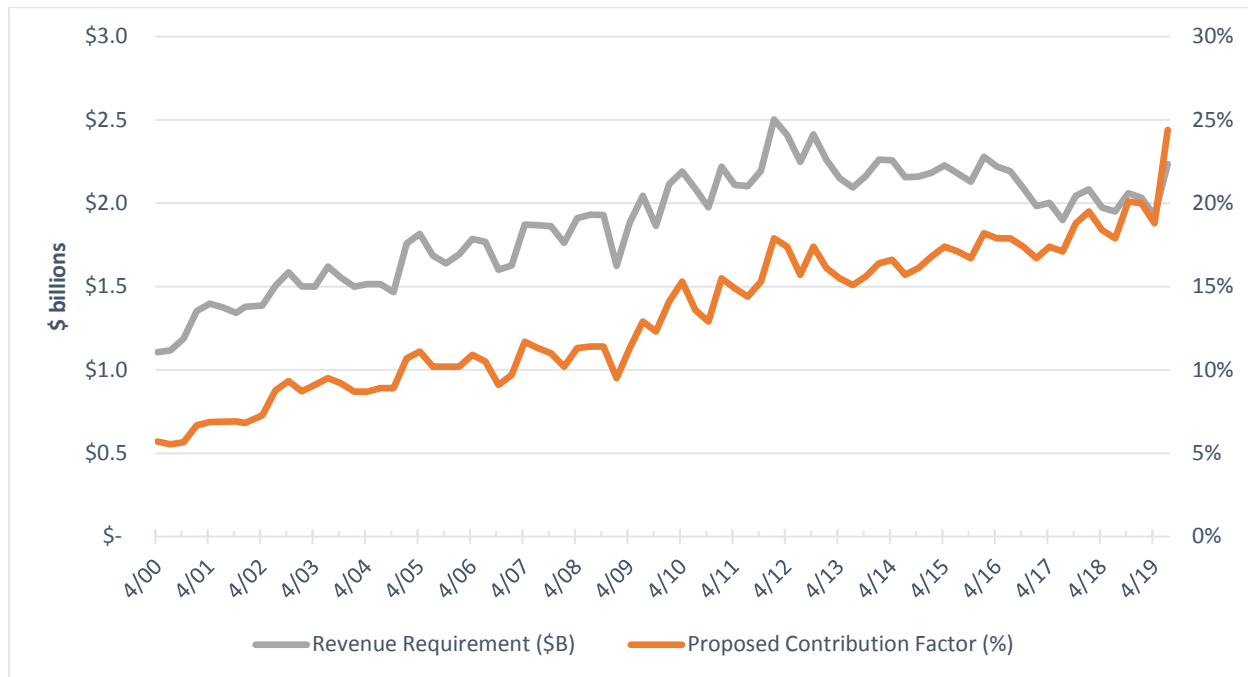
³ Except for the Lifeline program which has income-based eligibility requirements for subsidy recipients.

⁴ The cash is held in an interest-bearing account at the U.S. Treasury and administered by the Universal Services Administrative Company (USAC) in monthly payments to vendors and recipients.

⁵ <https://www.usac.org/res/documents/cont/pdf/forms/2019/2019-FCC-Form-499A-Form-Instructions.pdf>

⁶ Contribution Factor & Quarterly Filings - Universal Service Fund (USF) Management Support, <https://www.fcc.gov/general/contribution-factor-quarterly-filings-universal-service-fund-usf-management-support>; Contribution Factor, Universal Service Administrative Company, <https://www.usac.org/cont/tools/contribution-factors.aspx>.

Figure 2. Quarterly Subsidy Projected Expenditures (“Revenue Requirement”) and “Contribution Factor”



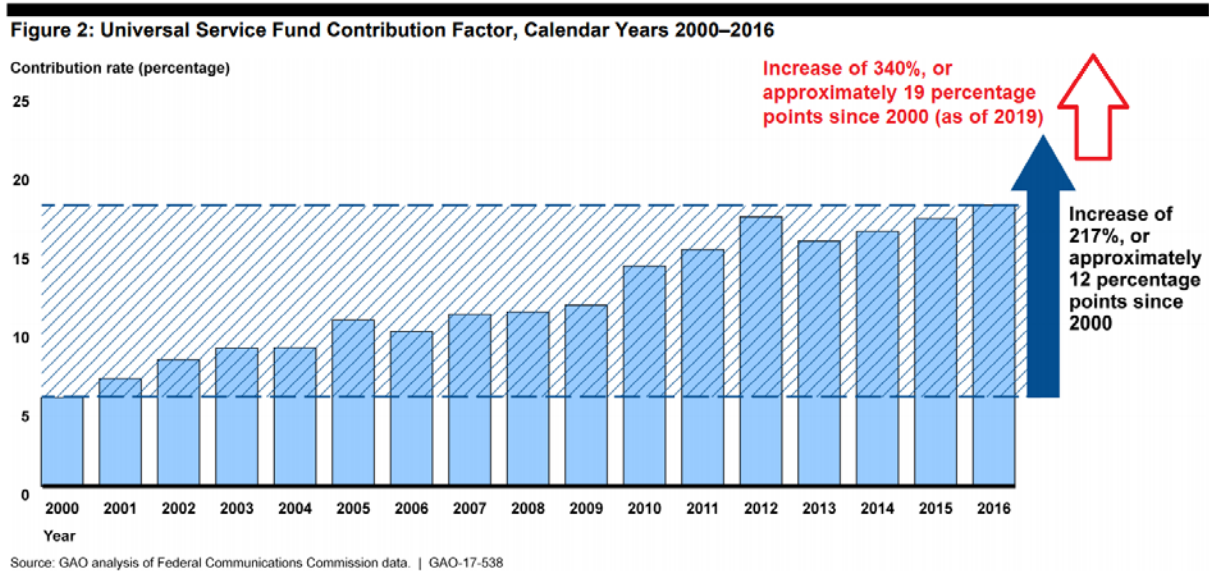
Source: FCC⁷

Since 2000, the contribution factor has grown 340 percent or 19 percentage points from 5.5 percent to 24.4 percent. Without a spending cap and rule changes to the USF program, the contribution factor will likely exceed 24.4 percent in the near future.

The Government Accountability Office (GAO) noted its concern about the growth of the contribution factor in a 2017 report. We update the GAO’s chart with data from 2019 in Figure 3.

⁷ <https://www.fcc.gov/general/contribution-factor-quarterly-filings-universal-service-fund-usf-management-support>.

Figure 3. GAO Chart with Authors' Annotations in Red



The lack of a budget cap invites fiscal waste. Without a budget constraint, recipients and program managers have little incentive to ensure efficient use of resources.

Collections Routinely Exceed Expenditures

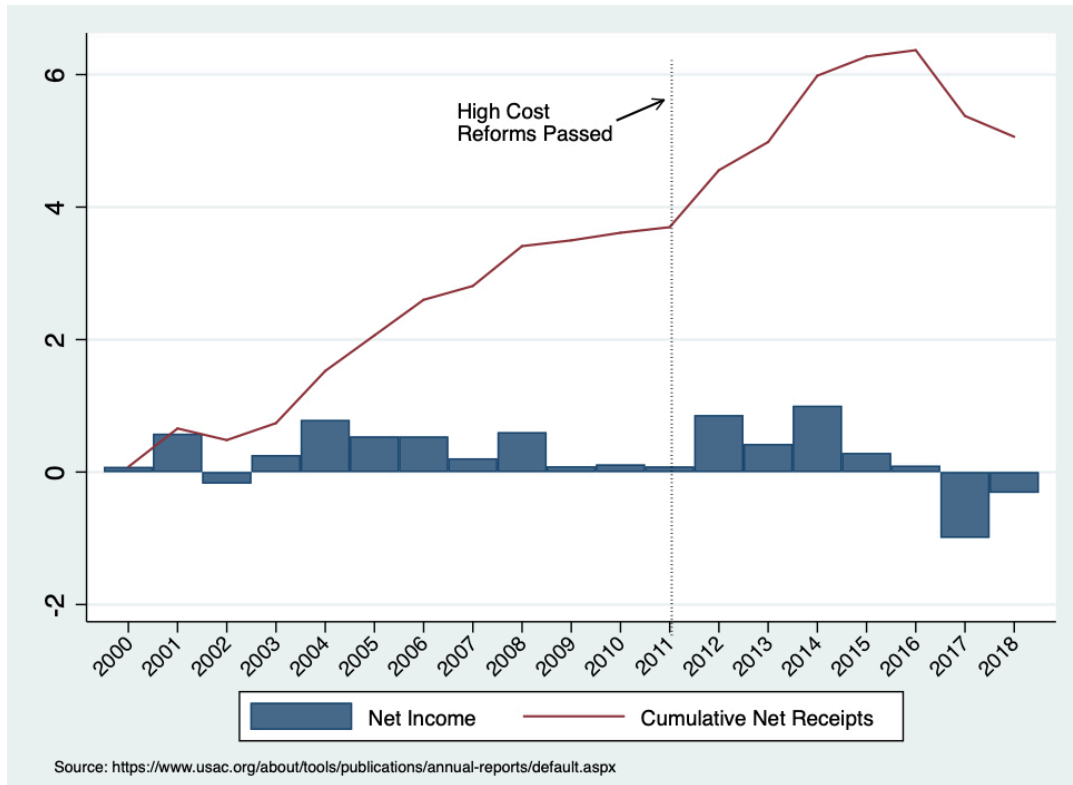
The USF NPRM asks for comment on whether there should be a spending cap on USF and at what level. A budget cap is necessary, and data suggest it should be well below current levels.

For example, while the FCC authorized disbursements of \$11.42 billion in 2018,⁸ trends in recent spending shows that on average, 80 percent of the funds were ultimately disbursed, amounting to approximately \$8.5 billion per year.⁹ Furthermore, the amount of cash collected through the USF has almost always exceeded the amount disbursed as seen in Figure 4.

⁸ USF NPRM 2019, ¶ 9, n.22 (“The sum of the authorized program levels in 2018 is \$11.42 billion (\$2.28 billion for Lifeline, \$4.5 billion for High-Cost, \$4.062 billion for E-Rate, and \$581 million for RHC).”). *Id.* at ¶ 11, n.29 (“For years 2014-2016, the Total Budget/Cap was calculated by adding the actual budgets/caps for High-Cost, E-Rate, and RHC, plus the annual disbursements for Lifeline.”).

⁹ USF NPRM 2019, ¶ 11.

Figure 4: USF Collections vs. Subsidies Disbursed



One reason for this excess collection stems back to the 2011 reforms, which renamed the High-Cost Program the “Connect America Fund (CAF).” At the time, the FCC announced that it was establishing, “for the first time, a firm and comprehensive budget for the high-cost programs within USF.”¹⁰

However, this budget was actually a floor on collections and not a cap on expenditures. The new rules mandated that the Universal Services Administrative Company (USAC) was not allowed to estimate CAF spending at less than \$4.5 billion per year. As the 2011 Order noted:

...beginning with the quarterly demand filing for the first quarter of 2012, USAC should forecast total high-cost universal service demand as no less than \$1.125 billion, i.e., one quarter of the annual high-cost budget.¹¹

Under the legacy High-Cost Fund, expenditures and, presumably, collections, could decrease if the various formulae resulted in smaller disbursements. Instead, today, the FCC can collect more than it spends. The response to smaller disbursements after the 2011 reforms is to lower the fee rate and reduce collections.

¹⁰ USF Reform Order, ¶ 18.

¹¹ *Id.* at ¶ 560.

Billions of dollars of accumulated surplus resided for many years in a non-interest bearing deposit account.¹² The mind boggles. Recently, the FCC specially disbursed \$480 million from cash in reserve for rural broadband due to excess contributions.¹³ An effective cap, therefore, must include not only a cap on spending, but rules preventing the FCC from collecting more than it spends.

A Budget Creates Incentives to Increase Efficiency

A budget cap is a crucial step in building an efficient, accountable, and transparent USF. Arguably, the lack of a hard budget has prevented the USF from responding to ongoing criticisms of its effectiveness.

GAO has published multiple reports on deficiencies including, “lack of performance goals and measures for the program and weak internal controls.” The Office of Management and Budget (OMB) has criticized the program for “inability to base funding decisions on measurable benefits.”¹⁴ GAO has raised alarms previously about the Lifeline program, and noted delayed responses by the FCC to address problems that it raised in earlier reports.¹⁵ The Congressional Research Service (CRS) has noted concerns about the administration of the USF as well.¹⁶

The Commission has reformed the USF several times in the last decade, and has made some important advances, such as using reverse auctions to allocate some subsidies, but has not addressed the fundamental critiques made by so many.¹⁷

In a 2013 report, for example, CRS asked the central question for USF, “How is Success Defined?”¹⁸ Aside from collecting and spending funds, are outcomes in broadband deployment and adoption properly measured and achieved? Regarding broadband deployment, how does the FCC set universal benchmarks for speed, capacity, and latency? Regarding broadband adoption and the digital divide, how does the FCC account for causal drivers of adoption such as cost, digital literacy, and lack of relevance?

¹² GAO 2017, *id.* at 2, (“Further, FCC maintains the Universal Service Fund (USF)—with net assets exceeding \$9 billion, as of September 2016—outside the Department of the Treasury in a private bank account.”). As late as May 2018, FCC began to direct wire payments to the U.S. Treasury (“Effective immediately, as of May 2018, USAC will accept payments to and distribute funds from the U.S. Treasury.”).

¹³ FCC, “FCC Provides Additional \$500 Million in Funding for Rural Broadband,” March 23, 2018, <https://www.fcc.gov/document/fcc-provides-additional-500-million-funding-rural-broadband>.

¹⁴ GAO, *FCC Has Reformed the High-Cost Program, But Oversight and Management Could be Improved*, (July 25, 2012), GAO-12-738, <https://www.gao.gov/assets/600/592957.pdf>.

¹⁵ GAO, *Additional Action Needed to Address Significant Risks in FCC’s Lifeline Program*, GAO-17-538 (May 30, 2017), <https://www.gao.gov/assets/690/684974.pdf>; GAO, *Telecommunications: Improved Management Can Enhance FCC Decision Making for the Universal Service Fund Low-Income Program*, GAO-11-11 (Oct. 28, 2010), <https://www.gao.gov/assets/320/312708.pdf>; GAO, *Telecommunications: FCC Should Evaluate the Efficiency and Effectiveness of the Lifeline Program*, GAO-15-335 (Mar. 24, 2015), <https://www.gao.gov/assets/670/669209.pdf>.

¹⁶ CRS Report, *Universal Service Fund: Background and Options for Reform*, RL33979, June 30, 2011, <https://fas.org/sgp/crs/misc/RL33979.pdf>; CRS Report, *Rural Broadband: The Roles of the Rural Utilities Service and the Universal Service Fund*, R42524, June 25, 2013, <https://crsreports.congress.gov/product/pdf/R/R42524>.

¹⁷ USF/ICC Transformation Order 2011; Lifeline Order 2012; Omnibus Order 2014; Lifeline Modernization Order 2016; 2017 Lifeline Order and NPRM; Rate-of-Return Reform Order 2018.

¹⁸ *Id.* at 16.

How are the programs and recipients within USF evaluated internally? The subsections of the USF program currently use different measures of program effectiveness.¹⁹ The High-Cost program measures penetration rates and numbers of community anchor institutions with new broadband deployment.²⁰ The Lifeline program depends on third-party evaluation to measure effectiveness of the program.²¹ The E-Rate program measures effectiveness based on prices of broadband according to bandwidth and the number of students and schools in the program.²²

A budget will create incentives for the FCC to search for ways to get a bigger bang for the buck, perhaps even including considering the most effective way to allocate funds across the USF's programs. A budget will also create incentives for subsidy recipients to operate more efficiently.

Index Expenditures to the Correct Measure of Inflation

The USF NPRM asks whether a spending cap should be indexed to inflation, noting that the Commission currently uses the Gross Domestic Product Chained Price Index to adjust spending on E-Rate and the Rural Health Care programs.²³ Once the budget is set, based on some rational method, it makes sense to adjust the budget to new realities over time. One of those is changes in real, rather than nominal, prices.

Subsidy recipients are likely to argue for using a general price index because overall inflation is almost always positive, so using a standard index is likely to yield ever-larger nominal subsidy dollars. Adjusting the budget in response to inflation, however, requires using the right inflation measure. The NPRM asks, "Should there be an index specific to each USF program and how should such program-specific indices apply to an overall USF cap?"

The short, but slightly more general answer to this question is that price adjustments should flow from indices based on the goods and services on which the budget is spent. That is, real price changes differ across goods and services, and keeping real prices constant means using a price index that most closely matches those goods or services.

Figure 5 shows real price changes for four broad categories. Notably, the producer price index for telecommunications networking equipment has moved steadily down over time, while consumer prices for certain other goods have increased. It would make little sense to use the Consumer Price Index to adjust the level of subsidies provided to companies that are supposed to use the funds to buy telecommunications equipment.

Instead, adjustments should be based on a more relevant indicator. The Bureau of Labor Statistics (BLS) creates price indices for a large number of goods and services, many of which might be useful for USF. Producer price indices for telecommunications networking equipment, for example, seem particularly useful for CAF, while consumer price indices for telecommunications services might be useful for consumer-focused subsidies.

¹⁹ USF NPRM 2019, ¶ 22, n.38.

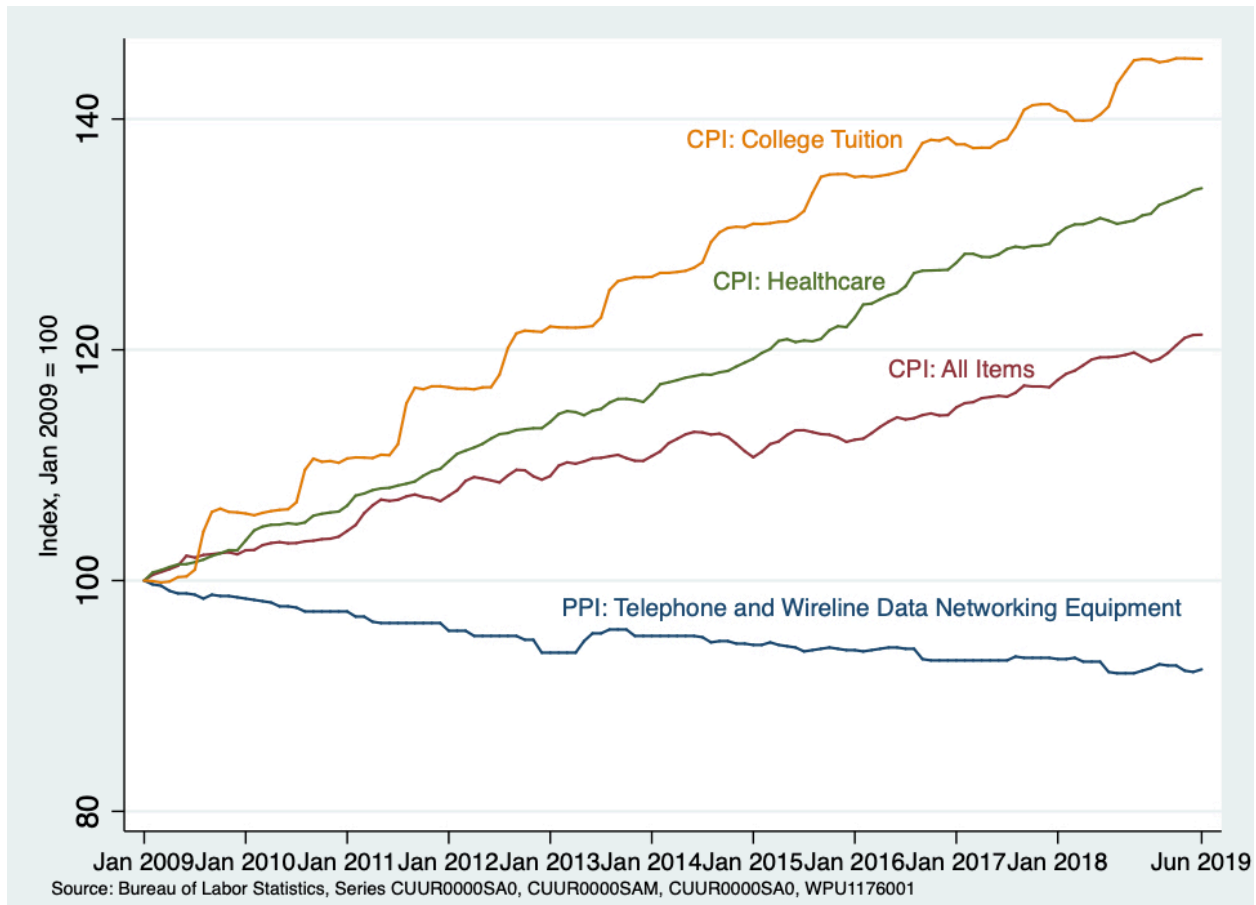
²⁰ *Id.*

²¹ *Id.*

²² *Id.*

²³ USF NPRM 2019, ¶ 10.

Figure 5. Price Changes in Telecommunications and Other Goods and Services



Choosing the correct price index is important not simply because it is necessary for ensuring that the real subsidy level remains constant—if that is the goal—but because the subsidies redistribute money collected from consumers. That is, each dollar collected by USF is a dollar taken from a consumer and, for at least the 85 percent of USF that is not Lifeline, given to a company or organization ostensibly to pay for broadband. If the real prices of broadband equipment are decreasing while the prices of other goods, like childcare, healthcare, and education, are increasing, then the program makes it relatively more difficult for consumers to pay for the more expensive goods and services like healthcare or education.

Begin Rigorous Evaluations of USF

As discussed earlier, the FCC has historically faced significant criticism from the government over its management of USF, while academic studies have found that, at best, the program is not cost-effective.²⁴ To the FCC’s credit, it has begun distributing subsidies using mechanisms like

²⁴ Thomas Hazlett, Ben Schwall, and Scott Wallsten, “The Educational Impact of Broadband Subsidies for Schools Under E-Rate,” *Economics of Innovation and New Technology* 28:483-497 (2018); Scott Wallsten, “Learning from the FCC’s Lifeline Broadband Pilot Projects,” *TPRC44: The 44th Research Conference on Communication*,

reverse auctions that build in incentives for recipients to reduce costs.²⁵ The FCC should begin applying this kind of thinking to the entire program.²⁶

We recommend that the FCC prioritize a research agenda within its Office of Economics and Analytics to fully evaluate USF. The research agenda should include two major components. First, it should work with USAC to design experiments to evaluate USF outcomes and recommend changes based on the results of those experiments.²⁷ Second, it should determine a coherent method of allocating resources across USF programs. A coherent allocation could flow from the overall evaluation, which would help the determine the effectiveness of a dollar spent in one program relative to the effectiveness of a dollar spent in another.

To our knowledge, the FCC currently has no mechanism to allocate funds across programs in a way that maximizes effectiveness.

Conclusion

The USF today is largely an entitlement program for rural telecommunications providers, supported by a regressive and increasing fee, with precious little evidence of effectiveness. The only part of USF that directly subsidizes individuals, like other entitlement programs do, is Lifeline, which represents less than 15 percent of expenditures. A budget cap will create incentives for the entire USF community to assess the program, experiment with new methods of distributing funds such as reverse auctions, and find ways to get more bang for the subsidy buck.

One commissioner wrote in response to the NPRM, “How can we cap the amount of money needed to support broadband when we don't even know the number and locations of the Americans that still need to be connected?”²⁸ In light of the evidence, the question should be, “How can we *not* cap the amount of money when we don't even know the number and location of the Americans that still need to be connected?”

USF spending and collections should be capped immediately. With a budget constraint, managers and recipients will face stronger incentives to treat funds as the scarce resources they are and look for more efficient spending and operating methods. The FCC's Office of Economics and Analytics should then undertake a rigorous analysis of FCC collections and distributions to improve the efficiency and effectiveness of the program.

Information and Internet Policy (2016); Gregory Rosston and Scott Wallsten, “The Path to Universal Broadband: Why We Should Grant Low-Income Subsidies and Use Experiments and Auctions to Determine the Specifics,” *The Economists' Voice*, 8(1) (2011).

²⁵ Scott Wallsten, “Two Cheers for the FCC's Mobility Fund Reverse Auction,” *The Journal of Telecommunications and High Technology Law*, 11(2) (2013); Scott Wallsten, “Reverse Auctions and Universal Telecommunications Service: Lessons from Global Experience,” *Federal Communications Law Journal*, 61(2) (2009).

²⁶ Scott Wallsten, “How to Create a More Efficient Broadband Universal Service Program by Incorporating Demand and Cost-Effectiveness Analysis,” Technology Policy Institute Working Paper (2011), <https://techpolicyinstitute.org/wp-content/uploads/2011/09/how-to-create-a-more-efficient-2007543.pdf>.

²⁷ Rosston and Wallsten, *The Economists' Voice*, *id.*

²⁸ Statement of Commissioner Geoffrey Starks, Dissenting, Re: Universal Service Contribution Methodology, WC Docket No. 06-122, May 31, 2019, <https://docs.fcc.gov/public/attachments/FCC-19-46A4.pdf>.