

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED

05/16/25

09:56 AM

R2002008

Order Instituting Rulemaking
to Update the California Universal
Telephone Service (California LifeLine)
Program.

Rulemaking 20-02-008
(Filed May 16, 2025)

**Comments of the Advanced Communications Law & Policy Institute at
New York Law School to the Assigned Commissioner's Ruling Filed
April 16, 2025**

Michael J. Santorelli, Director
Alexander Karras, Senior Fellow
ACLP at New York Law School
185 W. Broadway
Tel: (212) 431-2100
E-mail: ACLP@nyls.edu

May 16, 2025

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I. Introduction

In accordance with Rule 6.2 of the California Public Utilities Commission (“Commission”) Rules of Practice and Procedure, the Advanced Communications Law & Policy Institute (ACLP) at New York Law School submits comments in Rulemaking 20-02-008 in response to the Assigned Commissioner’s Ruling Filed April 16, 2025 (“April 16 Ruling”).¹

II. Overview of Comments

The April 16 Ruling seeks comments on the Commission’s Home Broadband Adoption Report (“Report”), which, per the Ruling, “details the extent of the home

¹ *Order Instituting Rulemaking to Update the California Universal Telephone Service (California LifeLine) Program, Assigned Commissioner’s Ruling Requesting Comments on Strategies to Address the Home Broadband Adoption Gap, R.20.02.008 (filed April 16, 2025) (“Commissioner’s April 16 Ruling”).*

broadband affordability gap, describes past and present initiatives designed to bridge this gap, and highlights where these initiatives have fallen short.”² The Report’s findings appear to support the Commission’s proposal for a LifeLine “pilot program to enable affordable home broadband for low-income Californians.”³

In the Report, the Commission uses data from a variety of sources to make four related arguments:

1. Broadband service in California is too expensive.⁴
2. Broadband adoption is lagging in California because too many people cannot afford broadband.⁵
3. Home broadband networks that leverage terrestrial fixed wireline connections (e.g., cable, fiber) are the only connections that adequately address consumers’ data needs.⁶
4. The best way to address lagging broadband adoption is by offering subsidies via the state’s LifeLine program.

As discussed in these comments, none of these arguments is supported by compelling data. To the contrary, for each point, there is much more to the story than what is included in the Commission’s Report.

² *Id.* at Attachment A (“CPUC Adoption Report”).

³ *Commissioner’s April 16 Ruling* at p. 1.

⁴ *CPUC Adoption Report* at p. 8.

⁵ *See generally CPUC Adoption Report.*

⁶ *Id.* at p. 6.

The Report offers only a narrow interpretation of handpicked data sources to support an overarching – and seemingly predetermined⁷ – conclusion: that Commission action is needed to narrow broadband adoption gaps by making service more affordable. In reality, however, this simplistic calculus – that lower prices will, on their own, yield higher broadband take-rates – has failed to generate promised adoption gains because it overlooks the myriad non-price factors that influence whether individuals will choose to invest the time and resources needed to go online.

These comments draw on data from a variety of sources to tell a different story about broadband adoption, one that reflects real world trends.

Section III addresses the Commission’s flawed interpretation of the relationship between how much broadband costs, whether service is “affordable,” and how consumers decide whether to adopt a particular service offering.

Section IV responds to the Report’s implication that only a certain kind of high-speed internet connection – i.e., wireline access delivered to homes – counts for broadband adoption purposes and argues that, given clear consumer trends and marketplace developments, the Commission should embrace a broader view of broadband adoption, one that includes widespread use of and preference for competitive alternatives like fixed wireless and mobile broadband.

⁷ The very first line of the *Commissioner’s April 16 Ruling* tips the Commission’s hand: “The number of Californians who cannot afford quality broadband access for themselves and for their families is substantial and growing.”

Section V encourages the Commission to think more holistically about how it and other stakeholders in the public, private, and nonprofit sectors should address broadband adoption gaps.

III. What the Data Say About Broadband Prices, Broadband Affordability, and Broadband Adoption

The Commission's Home Broadband Adoption Report echoes a common observation made by those trying to justify government action to boost take-rates, namely: "Because many households cannot afford broadband service, California has a gap in broadband adoption."⁸ The Report reaches this conclusion by connecting two points: (1) "broadband prices are high" and (2) broadband adoption rates lag among low-income households.⁹ This implies that adoption rates will rise when broadband prices decrease. Data and recent history demonstrate that there is much more complexity involved than reflected in the Commission's Report.

First, stating that "broadband prices are high" implies that the Commission is comparing current prices to past prices. This is not the case. Instead, the Commission merely asserts that prices are too high and attempts to justify its conclusion via a selective analysis of seemingly random data points about current broadband prices. These include citations to national surveys conducted by JD Power, Forbes, and CNET, the findings of which appear to be curated to support the Commission's argument about broadband prices being high.¹⁰ For example, the Commission omits from its summary of the JD Power survey

⁸ *CPUC Adoption Report* at p. 2.

⁹ *Id.* at p. 8.

¹⁰ *Id.*

the fact that “the average industry monthly price decreased to \$141 per month from \$156 in 2023.”¹¹ Instead, the Commission only cites the \$141/month figure.

Also omitted from the Report’s analysis are data points showing that broadband prices have decreased significantly over the last few years. For example, a pricing index maintained by U.S. Telecom shows that the real (i.e., inflation-adjusted) price of broadband offerings with download speeds between 100 Mbps and 999 Mbps has decreased by nearly 60% since 2015 and that the real price for gigabit offerings has decreased by 43% over the same period.¹² BroadbandNow has released data largely confirming this downward trend in broadband pricing over the last decade.¹³ The ACLP has also analyzed internet access pricing trends and found that, since 2018, the cost of “communications services,” which includes telephone (wireless and residential) and internet services, increased in price by less than 1% while the costs of electricity increased by 31%.¹⁴

Given this additional context, the Commission, through its Report, appears to have substituted its own judgment for what the data say about broadband prices. In reality, broadband prices are lower now than they have been in years.

¹¹ *Wireless Purchases Through Apps Increase, Leading to Increase of Value and Affordability Perceptions*, J.D. Power Finds, Feb. 14, 2024, JD Power, <https://www.jdpower.com/business/press-releases/2024-us-wireless-retail-experience-study-volume-1>.

¹² Arthur Menko, *2024 Broadband Pricing Index*, Dec. 2024, U.S. Telecom, <https://ustelecom.org/wp-content/uploads/2024/12/USTelecom-2024-Broadband-Pricing-Index.pdf>.

¹³ Tyler Cooper, *Internet Plan Prices Have Not Increased in Nearly a Decade*, Aug. 12, 2024, BroadbandNow, <https://broadbandnow.com/research/broadband-pricing-trends>.

¹⁴ Alex Karras, Phoebe Kamber & Michael Santorelli, *Broadband Prices in Context*, Sept. 19, 2024, Broadband Expanded, <https://broadbandexpanded.com/posts/pricegrowth>.

Second, the Report wrongly concludes that the affordability of broadband hinges solely on how much it costs. In reality, numerous factors influence whether someone views broadband as “affordable.”¹⁵

For some, cost is the sole determinant. But for many others, broadband is not important enough to justify an investment of resources at any price point. Indeed, surveys have consistently found that “relevance” – i.e., viewing broadband as essential or useful enough to one’s life to invest in it – remains the primary barrier to more robust broadband adoption among non-adopters and that, even when offered at a very low cost or for free, many of these digital holdouts will remain offline.¹⁶ In short, if someone does not view broadband as relevant, they will likely view it as unaffordable at almost any price.

Third, the Commission omits ample data and analysis finding that adoption rates appear to have been only minimally impacted by subsidies. As with many other aspects of the Report, the Commission’s analysis of the impacts of subsidies is incomplete.

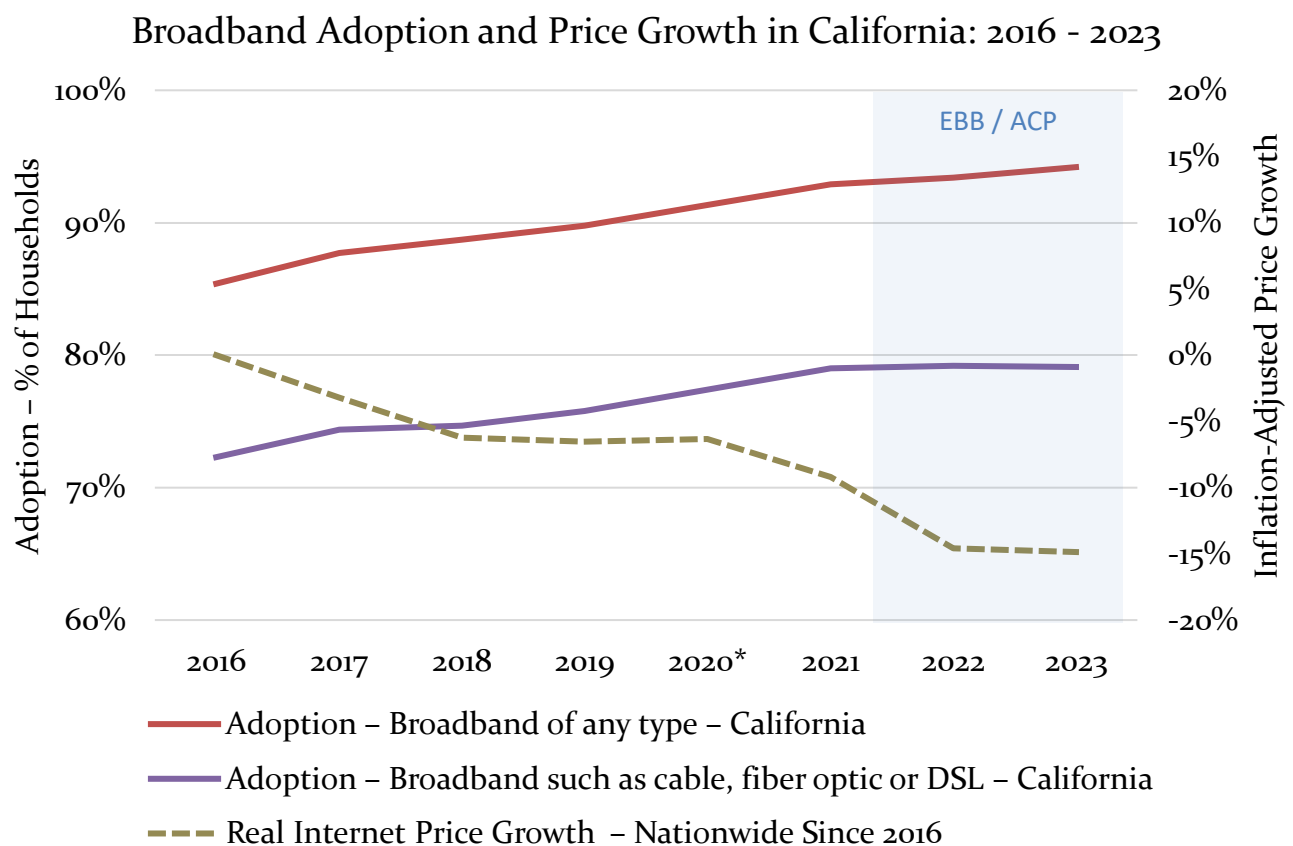
Per the Commission’s logic, adoption rates will increase when the cost of broadband decreases because lower costs make it more affordable, and thus more appealing, to non-adopters. Real world data show that this way of thinking about broadband adoption is too simplistic because, as discussed above, it omits any acknowledgement of the significant

¹⁵ Michael Santorelli, *Why It’s Time to Get Over the Broadband Affordability Fixation*, Sept. 26, 2024, Forbes, <https://www.forbes.com/sites/washingtonbytes/2024/09/26/why-its-time-to-get-over-the-broadband-affordability-fixation/> (“Affordability Fixation”).

¹⁶ See, e.g., George S. Ford, *Challenges to Universal Adoption: A Look at NTIA’s New Data*, June 9, 2022, Phoenix Center, <https://www.phoenix-center.org/perspectives/Perspective22-03Final.pdf> (commenting on recent broadband adoption surveys); Octavian Carare et al., *The Willingness to Pay for Broadband of Non-Adopters in the U.S.: Estimates from a Multi-State Survey*, Information Economics and Policy (Jan. 2015), https://www.researchgate.net/publication/271080509_The_willingness_to_pay_for_broadband_of_non-adopters_in_the_US_Estimates_from_a_multi-state_survey.

role that non-price factors like relevance and lack of digital literacy skills play in consumers' decision-making processes.

Consider the following chart.¹⁷ It leverages data from the Census Bureau and the Bureau of Labor Statistics to plot trends in (1) broadband adoption rates in California of any kind of non-dial-up broadband internet access service (including mobile and satellite); (2) broadband adoption rates in California of fixed wireline services like cable and fiber; and (3) real internet price growth nationally since 2016.



¹⁷ Data sources for the chart include ACS S2801 – Types of Computers and Internet Subscriptions, U.S. Census Bureau, <https://data.census.gov/table/ACSST1Y2023.S2801>; CPI-U CUUR0000SEEE03, U.S. Bureau of Labor Statistics, <https://data.bls.gov/timeseries/CUUR0000SEEE03>; and CPI-U CUUR0000SA0, U.S. Bureau of Labor Statistics, <https://data.bls.gov/timeseries/CUUR0000SA0>.

As discussed in the Report, significant broadband subsidies via the FCC's EBB program and ACP, its successor, were available to consumers across California until recently.¹⁸ These are represented in the chart above by the shaded portion beginning in 2021. When combined with low-cost offerings from ISPs, many consumers were able to lower the cost of broadband to zero. At the same time, internet access prices across the board declined significantly (after adjusting for inflation), represented by the dashed line in the chart above. Taken together, these conditions seem ideal, at least according to the Report's view of how broadband adoption works, for boosting take-rates. In reality, though, broadband adoption rates have only increased by a few percentage points.

These data demonstrate that adoption rates do not respond as robustly to subsidies as the Commission seems to think. One recent study found that the ACP yielded a 3% overall increase in broadband adoption.¹⁹ Survey data collected by the FCC confirms this dynamic: Only about 20% of ACP enrollees used their subsidy to purchase their first internet connection; all other enrollees used their subsidies to purchase *additional* broadband services (*e.g.*, to upgrade a service offering, add another mobile broadband plan to their bill, etc.).²⁰

This is not to say that subsidies are wasteful or that they have no role to play in boosting adoption rates. To the contrary, targeted subsidies should be part of the

¹⁸ CPUC Adoption Report at p. 12-23.

¹⁹ Hernan Galperin et al., *A Preliminary Assessment of the ACP Program*, Aug. 2024, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4913528.

²⁰ *Measuring the Impact of ACP: Survey Results*, FCC, <https://www.fcc.gov/sites/default/files/ACP-Survey-Results.pdf>.

framework for closing adoption gaps.²¹ The Report, however, seems to indicate that the Commission is content stopping there. As discussed above, though, government subsidies provided by EBB and ACP only yielded minimal improvements to the overall broadband adoption rate. Moreover, their impact appears to have been greatly enhanced when combined with the low-cost offerings of ISPs, which have played significant roles in bringing more people online and keeping them there, especially when paired with programs that help make broadband more relevant to new users.²² The Report, though, glosses over the importance of these offerings, primarily because “the vast majority of subscriptions [purchased via these programs] do not qualify as “broadband,” as defined by the FCC.”²³ As discussed in the next section, this prescriptive view contradicts modern market dynamics and actual consumer demand for broadband services that meet their needs.

IV. What the Data Say About Consumer Demand for Broadband

The Commission’s Report fails to appreciate the competitive dynamics of the modern broadband marketplace and the myriad ways in which consumers benefit from them. Nor does the Commission appreciate that different consumers use broadband in different ways. Instead, the Report seems to discount all forms of broadband internet access – mobile, fixed wireless, satellite, etc. – that are not terrestrial fixed wireline in nature and concludes without compelling data that only “home broadband networks” are capable of meeting consumers’ “substantial data needs.”²⁴

²¹ See, e.g., *Affordability Fixation*.

²² See, e.g., Matt Kalmus et al., *A Human Approach to Closing the Digital Divide*, June 13, 2022, BCG, <https://www.bcg.com/publications/2022/how-to-close-digital-divide-with-human-approach>.

²³ CPUC Adoption Report at p. 30.

²⁴ CPUC Adoption Report at p. 6.

This view of the market and consumer demand for broadband services does not adequately account for three critical trends evident in the data.

First, the Report discounts the importance of consumers choosing the right speeds to fit their use case. It observes that “nearly half of Californians are subscribing to services that are not considered ‘broadband,’ even if the infrastructure is capable of providing service that exceeds the 100/20 Mbps standard.”²⁵ In other words, a large proportion of Californians do not see a need to purchase very high-speed broadband connections even though they could if they wanted to. This is a rational and expected outcome in a very diverse state where intermodal competition is robust, providing consumers with a variety of choices for going online at different speeds, at different price points, and on different devices. However, the Commission has locked in on a very specific kind of user experience that, in its view, appears to be what it expects all users to seek out. For example, the Commission seems to think that every household will consume upwards of 700 gigabytes per month of data because many might be using Zoom all day every day for work.²⁶ This aligns with the Report’s bias towards terrestrial fixed wireline networks and eschews the myriad benefits that consumers reap from other platforms, especially mobile broadband and, increasingly, fixed wireless.

The Report’s downplaying of the importance and popularity of mobile broadband to consumers is the second critical trend omitted from the analysis. There is substantial data – from California and nationally – highlighting how important mobile broadband is to

²⁵ *CPUC Adoption Report* at p. 12.

²⁶ *Id.* at p. 6.

consumers of all ilk. Most consumers used their ACP subsidy for mobile broadband.²⁷ There are more mobile broadband connections in California than any other kind.²⁸ As noted above, mobile broadband prices have decreased in recent years, reflecting an intensely competitive environment. At the same time, mobile broadband speeds have continued to increase, putting them on par with fixed connections in many instances. Consequently, a consistent portion of the population – 15% according to the Pew Research Center – has chosen to rely solely on their mobile broadband connections for internet access.²⁹

It is unclear why the Commission downplays the popularity of, and important role played by, mobile broadband in California.

The third trend omitted by the authors of the Report is the meteoric rise and substantial competitive impacts of fixed wireless service. Indeed, fixed wireless is only mentioned in passing in the Report, with the authors noting that “new fixed wireless and satellite technologies are increasing the ability of these networks to provide broadband speeds.”³⁰ Beyond that, the Report fails to grapple with just how disruptive this platform has been to the broadband market.

For example, it is widely acknowledged that broadband subscriber losses by wireline ISPs, especially cable providers, have been driven largely by the rapid rise of in-home 5G

²⁷ *Id.* at p. 24.

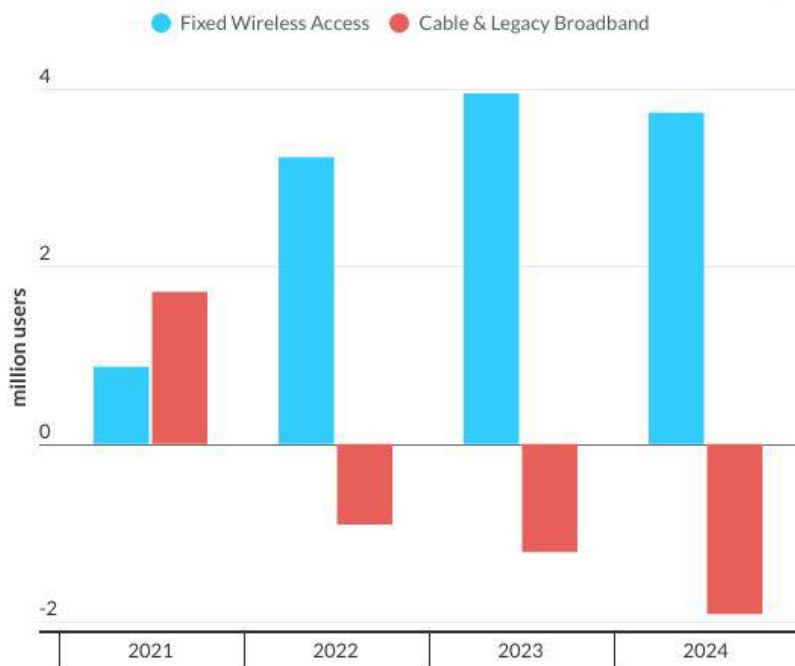
²⁸ *Id.* at p. 14.

²⁹ *Internet, Broadband Fact Sheet*, Nov. 13, 2024, Pew Research Center, <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>.

³⁰ *CPUC Adoption Report* at p. 12.

fixed wireless offerings.³¹ Indeed, the following chart from Fitch Ratings captures just how stark this trend has been over the last few years.³²

U.S. Subscriber Net Adds/(Losses)



Notes:

- The data represents the sum of subscribers reported by major public companies.
- Fixed wireless access data includes Verizon, AT&T, T-Mobile, and TDS/US Cellular.
- Cable & legacy broadband data includes Comcast, Charter, Altice USA, AT&T (non-fiber), and Verizon (non-fiber).

Source: Fitch Ratings, Company Data

FitchRatings

The Report, on the other hand, attributes many customer losses by cable and legacy broadband ISPs to the end of the ACP subsidy program. Indeed, the Report appears to reason that, once consumers gave up their subsidized cable or fiber connection, they went

³¹ See, e.g., Jeff Baumgartner, *Cable Broadband Subscriber Growth Rate Sinks to All Time Low in Q4*, April 7, 2025, Light Reading, <https://www.lightreading.com/cable-technology/cable-broadband-subscriber-growth-rate-sinks-to-all-time-low-in-q4>.

³² *Fixed Wireless Access Growth Disrupts U.S. Telecom Market*, March 26, 2025, Fitch Ratings, <https://www.fitchratings.com/research/corporate-finance/fixed-wireless-access-growth-disrupts-us-telecom-market-26-03-2025>.

offline completely.³³ In other words, the Report does not appear to appreciate that many consumers have likely left legacy wireline connections for newer fixed wireless ones. This flawed interpretation of market dynamics further underscores the highly curated, outcome-oriented nature of the Report's analysis.

A better approach would be for the Commission to embrace fixed wireless and mobile broadband as enthusiastically as consumers and view these platforms as viable competitive alternatives to terrestrial fixed wireline offerings. This is what the data is telling the Commission. Responding to the data in this manner would fundamentally alter the Report's analysis and make clear that, contrary to what the Report currently says, the broadband marketplace in California is responsive to consumer demand.

V. What the Data Say About the Likely Impacts of the Commission's Proposed Approach to Addressing Lagging Broadband Adoption

The Report raises an important question: will the Commission's proposed LifeLine Pilot increase broadband adoption rates? The authors seem to think so, but in view of the preceding analysis, it is likely that the proposed program will have only minimal impacts on broadband adoption rates in California. The era of EBB/ACP served as a natural experiment in determining the efficacy of subsidies vis-à-vis boosting broadband adoption rates. As discussed above, those programs only increased take-rates by a few percentage points, and their efficacy was greatly enhanced by low-cost offerings by ISPs, which the Commission does not appear to view favorably.

³³ See, e.g., *CPUC Adoption Report* at p. 27.

Accordingly, if the Commission elects to move forward with a pilot or some other subsidy program, it should do so deliberately and focus on incorporating best practices from the ACP program, which did succeed in bringing many digital holdouts online for the first time. The Commission must also expand its narrow view of what counts for broadband adoption and appreciate the myriad ways in which consumers of all kinds use their connections. Survey after survey, including surveys reflected in the Report, show that many consumers do not want or need a wireline connection that delivers very high speeds, and many do not consume hundreds of gigs of data each month. Instead, the data clearly show that many consumers satisfy their data needs with speeds that might not exceed the FCC benchmark via connections that the Commission does not appear to view as true competitive alternatives.

The Commission, though, should not stop at a subsidy program and arguably should focus instead on supporting programs and policies that help increase the value proposition to non-adopters who do not see broadband as relevant. This kind of holistic approach, one that works at the grassroots level to deliver tailored, hands-on training to non-adopters, has proven effective, especially when deployed by expert organizations in trusted environments. The state has already recognized the value of this approach in its Digital Equity Plan, which highlighted the importance of investing in the development and deployment of digital readiness programs and resources at the hyperlocal level across the

state.³⁴ This is resource intensive and difficult work, but it can yield significant, lasting gains in broadband adoption among those who remain reluctant to subscribe.

Ensuring that the state has a robust focus on these long-overlooked issues, as well as sufficient funding to invest in addressing them, is more critical than ever given the proposed rescission of digital equity grant funding by President Trump.³⁵ It remains to be seen whether the President's cancellation of these grants is legal; settling that question could take years. Rather than wait on the courts, the Commission could seize the opportunity now to rally stakeholders around the importance of addressing non-price barriers to broadband adoption.

VI. Conclusion

The ACLP at New York Law School appreciates the opportunity to offer its perspective on the issues implicated by the Assigned Commissioner's Ruling Filed April 16, 2025. It is respectfully submitted that the Commission's vision for enhancing broadband adoption, while well intentioned, is incomplete. Lasting adoption gains will only come from concerted action to address non-price barriers like relevance and enhancing digital readiness.

³⁴ *California Digital Equity Plan*, California Department of Technology (April 2024), <https://broadbandforall.cdt.ca.gov/wp-content/uploads/sites/19/2024/04/California-State-Digital-Equity-Plan-04.04.2024-Remediated-Version.pdf>.

³⁵ See, e.g., Jake Nennan, *Trump Administration Cancels Digital Equity Grants*, May 9, 2025, Broadband Breakfast, <https://broadbandbreakfast.com/trump-administration-cancels-digital-equity-grants/>.

Dated: May 16, 2025

Respectfully submitted,

/s/ Michael J. Santorelli

Michael J. Santorelli

Director

ACLP at New York Law School

Tel: (212) 431-2100

E-Mail: ACLP@nyls.edu

/s/ Alexander Karras

Alexander Karras

Senior Fellow

ACLP at New York Law School

Tel: (212) 431-2100

E-Mail: ACLP@nyls.edu