



California Emerging Technology Fund
Policy Position on Modification of California Advanced Services Fund
Rulemaking 12-10-012

Comments for Phase I – Submitted on March 16, 2018

The California Emerging Technology Fund (CETF) was directed to be established by the California Public Utilities Commission (CPUC) as a public benefit from mergers in 2005 with the mission to close the Digital Divide in California. CETF set major goals to achieve in a decade by 2017: 98% deployment of broadband infrastructure and 80% adoption for use of high-speed Internet service at home. CETF is technology neutral and uses the term “broadband” to refer generically to high-speed Internet service including both wireline and wireless infrastructure. CETF has worked extensively and intensely throughout California in pursuing the mission assigned by the CPUC and has gained wide and deep experience that support these comments and recommendations on rulemaking 12-10-012.

California has more low-income households and disadvantaged residents than any other state. CETF developed and sponsors the Statewide Survey on Broadband Adoption to track high-speed Internet service at home. When the first Statewide Survey was conducted in 2008, only 55% of all households were online at home—the same as the national average. In the largest region, Los Angeles County, less than half (48%) were online at home. More than 1.9 million people with disabilities were unconnected. With focused strategies and intense efforts, California has made steady progress towards closing the Digital Divide with significant gains in broadband adoption among all segments of the population and in every region. But, there remain sobering challenges. The 2017 Statewide Survey conducted by the UC Berkeley Institute of Governmental Studies (IGS) found that 87% of all households report high-speed Internet access at home—a gain of 32 percentage points since 2008. More good news is: low-income household adoption is up 48 percentage points (from 33% to 81%); Latino household adoption is up 48 percentage points (from 34% to 82%); and adoption by people with disabilities is up 39 percentage points (from 36% to 75%).

However, more than 5 million residents remain offline at home. Further, 18% are connected at home by only a smartphone. While smartphones are marvelous devices that allow access to an amazing amount of information on the Internet, it is difficult for students to do their homework and adults to apply for jobs or acquire workforce skills using only a smartphone. Those who have high-speed Internet access at home with only a smartphone are becoming recognized as a distinct group referred to as “underconnected” because they have limited benefits from digital technology and are becoming another category of “have-nots”.

The vast majority of people who subscribe to high-speed Internet service have multiple devices to obtain optimal benefits from digital tools. In contrast, the most disadvantaged segments of the population remain unconnected at home and a higher percentage of these residents are underconnected having only a smartphone.

The Most Disadvantaged Residents Are Unconnected and Underconnected

Segment of the Population (2017 Statewide Survey)	Connected at Home	Smartphone Only	Not Connected at Home
Statewide	87%	18%	13%
Earning Less Than \$20,000 Annually	75%	27%	25%
Spanish-Speakers	70%	38%	30%
People with Disabilities	75%	15%	25%
Adults Age 65 or Older (Seniors)	69%	9%	31%
Non-High School Graduates	67%	28%	33%

These statistics are the reasons why CETF sponsored the Internet For All Now Act of 2017 (AB1665) which authorizes \$330 million in additional collections into the California Advanced Services Fund (CASF) over the next 5 years. The IFAN Act as proposed by CETF and supported by the IFAN Coalition of more than 100 organizations was fiercely opposed by major incumbent telecommunications industry providers which resulted in AB1665, as passed by the Legislature and signed into law by Governor Brown, containing several problematic provisions. For example, CETF proposed the new Adoption Account because it was clear that now it is possible to authorize additional collections into CASF that support both broadband deployment and adoption over the next decade without increasing telephone surcharges above the highest historical level, thus maintaining the consumer relief that was accomplished when the High-Cost B Fund for telephone subsidies was reformed to constitute CASF by the CPUC and Legislature in 2008. However, CETF proposed and justified analytically that the Adoption Account should be capitalized with \$100 million to achieve 90% adoption statewide by 2023, but AB1665 authorized only \$20 million. Incumbent carriers even opposed setting a goal for broadband adoption and diluted the focus on verified low-income subscriptions as the performance metric. The compromise was to direct the CPUC to “develop, by June 30, 2018, the criteria for awarding grants and a process and methodology for verifying outcomes” based on “digital inclusion metrics” determined by the commission. Thus, rulemaking for Adoption Account grants is vital to showing measurable impact leading to increases in broadband adoption which must be reported annually by the CPUC to the Legislature pursuant to AB1665.

CETF appreciates the diligence with which the CPUC has moved forward to prepare for making Adoption Account grants available by July 1, 2018 and commends the commission for scheduling several public meetings to obtain input. These comments submitted by CETF are based on 10 years of experience in awarding and managing \$44.89 million in grants to 100+ non-profit community-based organizations (CBOs) and government agencies to provide digital literacy training to more than 830,000 individuals and achieve adoptions by more than 270,000 low-income households. CETF also invested more than \$10 million to develop and manage a comprehensive initiative called School2Home to close both the Digital Divide and Achievement Gap at low-performing middle schools in low-income neighborhoods throughout California which includes parent engagement and education to provide digital literacy training to use school-issued devices at home. In the last decade School2Home has been implemented in 35 schools in 12 districts reaching more than 600 teachers and 14,000 students and their parents.

Research shows that a successful broadband adoption program for low-income households must address 3 barriers: (1) cost; (2) relevance; and (3) digital literacy. Through 3 open and competitive rounds of grantmaking between 2007 and 2017 (referred to as 1.0, 2.0, 3.0), CETF has evolved to focus on verified new subscriptions as the most compelling approach to addressing all 3 barriers and the most reliable metric to increase broadband adoption. While there are many well-meaning and laudable projects and programs that aim to increase digital literacy, without an intentional imperative to drive to new subscriptions, there is little evidence that those kinds of activities on their own increase adoption as a direct consequence in a reasonable and measurable timeframe. In addition, all research about the use of computing and broadband technologies in schools as well as the CETF experience with School2Home underscores the need to integrate instructional technology into a comprehensive school transformation initiative. Grants for technology alone will have limited impact and will not increase broadband adoption. And, it must be kept in mind that two-thirds of low-income households in California don't have kids in school, so other outreach strategies are required to reach those residents.

To be sure, access to devices at schools, libraries and community centers coupled with digital literacy training is helpful for those who participate in such programs and opportunities. However, these activities alone don't result in home adoption without additional intervention by "trusted messengers and honest brokers" to inform eligible residents about available affordable offers for high-speed Internet service and assist them through the process of understanding and comparing offers and signing up for a subscription. Further, recent surveys and focus groups with low-income residents conducted by CETF reveal that approximately 70% of eligible households are not aware of affordable offers and are weary of companies trying to up-sell them. Thus, the CPUC should support Adoption Account grants by urging major Internet Service Providers (ISPs) to increase media advertising about available affordable offers, partner with CBOs for outreach and digital literacy training, and regularly report their progress on low-income subscriptions in California. Attached is a Summary of Lessons Learned from CETF grantmaking. The following comments and recommendations address issues pertaining to the individual CASFT Accounts.

Adoption Account

- It is essential that both the Digital Literacy Project and Broadband Access Project grantees are accountable for results that contribute to broadband adoption. If the CPUC is going to award grants based on metrics other than verified new subscriptions by low-income households, then grantees should be required to delineate in their applications documented evidence or data as to why and how the proposed grant activities will lead to broadband adoption. For grants awarded on metrics other than verified subscriptions, grantees should be required to conduct surveys of every person served regarding their socio-economic demographic data and status of their home connectivity to establish a baseline of the population being served and to conduct a statistically-reliable survey of persons served after the grant to determine if it resulted in increased adoption. All grantees should be required to set forth in both their application and final report the overall cost per outcome for transparency, public accountability, and analysis of cost-effectiveness of various strategies for increasing adoption for future policymaking. This is the fairest approach to assessing success in closing the Digital Divide.
- Grantmaking based on reimbursement of expenses instead of outcomes is inefficient and will waste precious funds in the Adoption Account for administrative costs. The CPUC should seek the cooperation of the Controller to find a better approach to grant payments based on performance and/ or seek legislation to allow saner management.
- Broadband adoption is most effective when incorporated into an existing program managed by an organization (non-profit or government agency) that already interacts with large numbers of low-income households and disadvantaged populations. The CPUC should use caution in awarding grants to “start-ups” that have little experience in Digital Inclusion and accountability for outcomes. Unfortunately, the allowed costs for equipment and furniture invite applications that don’t focus on results. Further, purchase of devices should not be a major use of the Adoption Account because grantees should have a plan for sustainability of their program after the grant. There are legions of examples of devices being bought for computer labs and classrooms that were used until the grant was over or they wore out and then there was no sustained effort. Districts with schools in low-income neighborhoods can afford to buy devices by prioritizing existing funds and should be encouraged to do so to support appropriate technology education for their students. The Adoption Account should not be used for expenditures that any government institution will need to make on an ongoing basis to sustain a program. If the CPUC proceeds with allowing Adoption Account grants to purchase devices, equipment and furniture, then a plan should be required of the grantee to ensure that these purchased items will continue to be used to support Digital Inclusion after conclusion of the grant (and not mingled with their general inventory).
- It is laudable that expedited review is being proposed for smaller grants. However, \$50,000 is a very small amount to accomplish significant impact, particularly if there are

metrics other than verifiable subscriptions. A more appropriate level for administrative approval of grants is \$100,000. Further, even for experienced CBOs, it takes time to ramp up activity to have an impact and 1 year often is too short a timeframe. Larger grants with up to 2 years for results will optimize return on investment.

- The CPUC should encourage partnerships between grantees and ISPs to promote existing affordable offers and sign up low-income households, although grantees must be required to provide information about all available offers to prospective customers. CETF proposed the provision in AB1665 that declares: “It is the policy of the state to encourage collaboration among stakeholders and to promote public-private partnerships to harness the expertise and strengths of all partners to serve the public interest.” The impact of the Adoption Account grants can be much greater if ISPs significantly increase their media advertising about affordable offers and coordinate activities of CBOs on outreach in-language and in-culture and jointly-convene community connect fairs to sign up eligible households.
- In the spirit of public-private collaboration, the CPUC should urge ISPs to regularly and publicly report their progress on signing up low-income households in California for their available offers. Today there is no way to determine what is working and where to promote affordable offers and to target grants from the Adoption Account. Public reporting of progress is critical for transparency and accountability.
- Broadband adoptions (measured by verified new subscriptions) can be achieved for \$250 per adoption if ISPs are sincere partners in advertising about affordable offers and collaborating on events. The \$250 per adoption figure was set forth by CPUC Administrative Law Judge Karl J. Bemserderfer in the Proposed Decision for Application 14-04-013 (Comcast acquisition of Time Warner Cable) based on testimony and cost analysis submitted by CETF and CBO partners. The \$250 is sufficient to cover outreach, digital literacy training, help to find an affordable device (purchased by the customer and not part of grant funding), and assistance with comparing offers and signing up for service. That figure is a good benchmark for allowed amounts per adoption in a grant. All grant applications that have lesser outcomes that are not as labor-intensive as adoption verified by new subscriptions—such as number the number of people using a computer lab or the people trained—should be allowed much less per outcome in a grant to better stretch the limited funds in the Adoption Account.
- It is a good practice to require a work plan and budget from applicants to evaluate the viability and practicality of the proposed strategies and activities to produce stated outcomes. However, the CPUC should fund grants based on performance (stated above) and find an arrangement with the Controller to accommodate a performance-based payments, even seeking legislative authority if necessary. A grantee with the discipline and capacity to develop specified outcomes for a set amount per deliverable usually also has the management skills to prepare a coherent work plan and logical budget.

- If grant payments re made based on documented outcomes, then the process can be much more efficient with greater transparency and accountability. One approach to performance-based grantmaking that also is sensitive to the cash-flow challenges for many CBOs is to provide the first quarterly payment at the time the grant agreement is signed, the second quarterly payment based on good-faith progress in implementing the work plan and meeting milestones, and quarterly payments thereafter pursuant to performance reconciled to funding per number of agreed-upon outcomes. It also is prudent to without a portion of the last payment until a final report is submitted and accepted by the CPUC.
- Requiring a match is a good way to assure real commitment by the applicant and 15% is rather modest, so that match amount should not be that big a hurdle for grantees. Grantees should be allowed to meet the 15% required match by dedicated personnel that are supported by other funds. CETF will provide the match (up to \$37.50 or 15% of \$250) per verified subscription adoption for CBOs interested in partnering. Pursuant to Memoranda of Understanding (MOUs) with Frontier Communications and Charter Communications, CETF currently manages grants in Frontier service areas for \$60 per adoption plus a new computing devices and has awarded grants in the Charter services areas for \$120 per adoption and will be working with those grantees to explore how they can leverage CETF funding as match for Adoption Account grants. The CPUC should reach out to other foundations to explore and invite a pool of matching funds.
- The CPUC should convene workshops for grantees as a “learning community” to sharing of best practices and solving of common problems, peer support and coaching, and mutual accountability for results. This practice and discipline by the CPUC will ensure better overall results and greater impact from the Adoption Account.

Public Housing Account

- CETF is a champion for getting online all residents in publicly-subsidized housing and strongly opposed the provision in AB1665 that made SB745 retroactive, thereby nullifying approximately \$10 million in infrastructure applications from CBOs for funding from the Public Housing Account. Assemblymember Eduardo Garcia (in cooperation with Senator Steve Bradford, author of AB1299 that established the Public Housing Account) agreed to convene a stakeholder process to address the problems in AB1665 and explore how to best meet the needs of the most economically-disadvantaged households in California. The CPUC should participate as a stakeholder in that process. The CPUC also should take a strong policy position in favor of getting all residents in publicly-subsidized multi-unit attached housing complexes online as a strategy to tackle poverty.
- The CPUC should retain all the applications that were submitted for Public Housing Account infrastructure grants before AB1665 became effective to see if the outcome of the stakeholder process.

- The CPUC should consider allowing some of the funds in the Public Housing Account for adoption to be used to determine the status of adoption in all the complexes that were the subject of the previously-submitted infrastructure grant applications to get a better understanding of the barriers to broadband adoption in publicly-subsidized housing. Data collected previously and analyzed by CETF indicate that only about 20-25% of residents in publicly-subsidized multi-unit attached housing subscribe to market-rate offers, most are not aware of available affordable offers, and many cannot afford even the \$10-\$15 per month discounted offers if they did know about them. Further, the ISPs are not actively marketing their affordable offer in these kinds of housing complexes.
- The CPUC should encourage ISPs to work in collaboration with affordable housing leaders to market their affordable offers. Attached are summaries of meetings between affordable housing organizations and ISPs to initiate the conversation.
- Applicants for funding from the Infrastructure Grant Account should be encouraged to determine if there are publicly-subsidized multi-unit housing complexes in the proposal grant area that could benefit from being included in the deployment plans. CETF has inventoried all publicly-subsidized multi-unit complexes by Legislative District and will make those available to the CPUC, stakeholders, and the public.

Revolving Loan Account

- The CPUC should be sensitive to the needs of the recipients of the existing loans and learn from them the limitations on the viability of the Revolving Loan Account.
- The CPUC should request assistance from the Regional Consortia to identify community development financial agencies and economic development corporations in their regions so that the CPUC can consult and inform them about the Revolving Loan Account.

Comments for Phase II – Submitted on April 16, 2018

Infrastructure Grants Account

- The CPUC must be proactive in achieving 98% deployment by region per AB1665 by coordinating with Regional Consortia to convene all stakeholders in the key regions to develop preferred scenarios for achieving the goal. This is in contrast to managing passively a grants program as in the past for the Infrastructure Grants Account which has tended to result in proposals for incremental extensions of service areas and/or cherry-picking of communities for grant applications. Instead, the CPUC and Regional Consortia must work together to facilitate consensus and stakeholders and encourage infrastructure deployment projects at scale that will reach unserved and underserved households with the most cost-effective construction builds.

- The CPUC must require transparency from incumbent ISPs regarding their construction plans under the Connect America Fund (CAF) 2 or in MOUs pursuant to public benefit obligations in the approval of corporate consolidations. Charter Communications is to be commended for providing a significant amount of deployment information to the CPUC. However, there needs to be more specificity, transparency and accountability by all incumbents to achieve the Legislature's goal and fulfill CPUC obligation for 98% deployment in each region.
- The CPUC should require as a condition of receiving CASF Infrastructure Grants that applicants provide detailed plans for any other builds in California, including CAF2 and public benefit obligations. These detailed plans can be protected for proprietary purposes in a variety of ways, but there must be greater accountability and transparency. Major ISPs also should be required to regularly publicly report progress on signing up low-income households in California if they are receiving any CASF funds.
- The CPUC should encourage ISPs using CAF2 or meeting MOU obligations to consider larger projects using CASF funds to drive to the 98% deployment goal because this kind of leveraging of resources is in the public interest. Applicants should be required to describe the process they used to evaluate how they might be able to go beyond their specific application area and project to help achieve the 98% deployment and why they concluded it was not feasible to achieve a greater impact.
- The CPUC must identify with certainty and reliability unserved areas that are available for CASF grant requests that can't be blocked subsequently through incumbent protests. The authors of AB1665 state that it wasn't their intent to ensure rolling protectionism for incumbents that locks in old technology for rural communities while blocking smaller innovative companies from being able to participate in CASF. However, that is certainly the perception and possible interpretation of the provisions of AB1665 that were demanded by the big telecommunications companies. Thus, the CPUC rulemaking process is pivotal on whether or not that is the effect by default. The CPUC must not use the annual "right of first refusal" to thwart opportunity, innovation and competition.
- The CPUC should request that Regional Consortia inventory all public assets that can be used by ISPs on an open, competitive basis to prepare CASF applications. The CPUC can assist this process by requesting statewide dedicated networks (such as CENIC, First Net, K-12 High-Speed Network, California Telehealth Network) to inventory and publish such assets along with the requirements for collaboration.
- The CPUC should engage experts for regional infrastructure scenario planning and establish peer review panels for Infrastructure Grant Account applications from research institutions, higher education, technology enterprises and organizations such as CENIC to gather the best thinking and deepest experience in achieving the 98% deployment goal.

- If an incumbent ISP releases a CAF2 area and then immediately files for a CASF Infrastructure Grant for the same area, there should be a sufficient time-period, such as 90 days, for other providers to submit competing applications for the same area. The CPUC also should require an explanation by the ISP that previously accepted CAF2 funds to provide a public explanation for their actions given that AB1665 provided such extraordinary protection for CAF2 recipients and blocked opportunities for other applicants for an extended time period. There must be a level playing field and fairness in innovation instead of incumbent-protectionism and gamesmanship.
- The CPUC must streamline the process for compliance with the California Environmental Quality Act (CEQA) and reduce the exorbitant charges from the CPUC Energy Division for internal reviews of CEQA documents. Streamlining does not need to and should not result in any diminution of environmental or cultural protection. The key to reducing huge time delays is for the CPUC to work with the Regional Consortia, applicants and other stakeholders to convene in one meeting at the beginning of a project all the environmental reviewing and permitting agencies to identify environmental and cultural issues and work out a schedule for reviews and permitting. This approach ensures transparency and accountability for all parties.

Line Extensions (\$5M Infrastructure Account)

- The CPUC should require applicants for line extensions to demonstrate that there is no better alternative and this is the last resort to obtain service. The CPUC must prevent the AB1665 provisions for line extensions being used to circumvent other requirements of CASF and to avoid public scrutiny, transparency and accountability.
- The CPUC should determine that there is no larger project in the foreseeable future that can reach the households and/or businesses requesting a line extension before approving large amounts of funds for the purpose.
- There must be a fair sharing of costs for line extensions by the applicants and some kind of repayment by the incumbents that assume ownership of the facilities.

Regional Consortia Account

- The CPUC must engage the Regional Consortia as partners to achieve the goal of 98% deployment by region. Regional Consortia should be encouraged and funded to organize and convene stakeholder to inventory all public assets and develop preferred scenarios.
- The CPUC should encourage, recognize and fund aggregation of demand as a fundamental public asset to drive deployment.

- The CPUC should encourage strongly Regional Consortia to engage local government elected officials in their governance and activities, including assisting local governments in developing and adopting policies, ordinances, and provisions in their General Plans to encourage broadband deployment and adoption.
- The CPUC should allow and encourage broadband adoption activities by Regional Consortia to drive deployment. However, the Regional Consortia seeking funds for adoption need to be able to delineate a specific strategy and coherent work plan that links adoption to deployment. Also, promotion of affordable offers by the Regional Consortia should be an allowable and funded part of the work plan.
- The CPUC should provide performance-based grants to Regional Consortia and abandon the inefficient, time-consuming, bureaucratic process of reimbursement payments. The CPUC should seek approval from the Controller and/or legislative authority to change the payment mechanism for Regional Consortia.