
**SENATE COMMITTEE ON ENERGY, UTILITIES AND
COMMUNICATIONS**
Senator Ben Hueso, Chair
2019 - 2020 Regular

Bill No: SB 1130 **Hearing Date:** 5/26/2020
Author: Lena Gonzalez
Version: 4/1/2020 Amended
Urgency: No **Fiscal:** Yes
Consultant: Sarah Smith

SUBJECT: Telecommunications: California Advanced Services Fund

DIGEST: This bill makes various changes to the California Advanced Services Fund (CASF), including modifying the definition of an “unserved” area eligible for CASF broadband infrastructure funding, restricting projects to only those that build high-speed internet, limiting the use of CASF funds for line extensions on private property, and requiring any project receiving funding for “middle mile” broadband infrastructure to offer “open access” to multiple broadband re-sellers.

ANALYSIS:

Existing law:

- 1) Requires the California Public Utilities Commission (CPUC) to administer the CASF program to deploy high-quality, advanced communications services that will promote economic growth, job creation, and the substantial social benefits of advanced information and communications technologies. (Public Utilities Code §281(a))
- 2) Specifies that the goal of the CASF program is to approve funding no later than December 31, 2022, for infrastructure projects that will provide broadband access to no less than 98 percent of California households in each broadband consortia region in the state. The CPUC is responsible for achieving this goal. (Public Utilities Code §281(b)(1)(A))
- 3) Defines an “unserved household” for the purposes of the CASF as a household for which no facility-based broadband provider offers broadband service at speeds of at least six megabits per second (mbps) downstream and one mbps upstream. (Public Utilities Code §281(b)(1)(B))
- 4) Requires the CPUC to do the following when prioritizing CASF grants to eligible projects:

- a) Approve projects that provide last-mile broadband access to households that are unserved by an existing facilities-based broadband provider.
 - b) Give preference to projects in areas where Internet connectivity is only available through dial-up service, unserved by any form of wireline or wireless facilities-based broadband service or areas with no Internet connectivity.
 - c) After providing funding to supply broadband access to no less than 98 percent of households in each broadband consortia region, use a maximum of \$30 million remaining in the Broadband Infrastructure Grant Account for projects providing last mile broadband access to households where there is no provider offering speeds of at least 10 mbps downstream and one mbps upstream. (Public Utilities Code §281(b)(2))
- 5) Requires the CPUC to give an incumbent facilities-based broadband provider 180 days to demonstrate that it intends to install or upgrade infrastructure to expand access to an area proposed for CASF project funding. These incumbent providers may apply for CASF monies to fund broadband expansion projects. (Public Utilities Code §281(f)(4))
- 6) Establishes various accounts within the CASF to help fund specific broadband deployment and adoption goals, and authorizes the CPUC to collect a surcharge on consumers' telecommunications bill to fund the CASF. Under existing law, the CPUC may collect a total of \$330 million. Between January 1, 2018, and December 31, 2022, the CPUC may not collect more than \$66 million in surcharges annually unless it determines that doing so would not result in an increase in the total amount of surcharges collected that year. CASF monies will be available upon appropriation of the Legislature and may be used to fund the CPUC's administrative costs for the program. (Public Utilities Code §281(d-e))
- 7) Specifies the criteria a project must meet to obtain funds from the CASF's Broadband Infrastructure Grant Account, including the following requirements:
- a) The project deploys infrastructure capable of providing broadband speeds of a minimum of 10 mbps downstream and 1 mbps upstream to unserved households in census blocks where no provider offers access at speeds of at least six mbps downstream and 1 mbps upstream.
 - b) All or a significant portion of the project deploys last-mile infrastructure to provide service to unserved households. Projects that only deploy middle mile infrastructure are not eligible for grant funding. For a project that includes funding for middle-mile infrastructure, the commission shall verify that the proposed middle-mile infrastructure is indispensable for accessing the last-mile infrastructure.

- c) The project is not located in a census block for which an existing provider has accepted federal Connect America Fund (CAF) monies, unless certain conditions are met. (Public Utilities Code §281(f)(5))
- 8) Authorizes an aggregate of \$5 million for the deployment of line extensions to individual houses or properties where an owner cannot otherwise afford a line extension. Any infrastructure built to make a line extension to a facilities-based broadband provider's network shall become the property of the provider to which it is connected. (Public Utilities Code §281(f)(6))
- 9) Specifies that local governments are eligible for grants if the agency's project is for an unserved household or business, the CPUC has conducted an open application process, and no other eligible entity applied for the project. (Public Utilities Code §281(f)(9))
- 10) Specifies that the following are eligible uses of grant funds:
 - a) Costs directly related to deploying infrastructure.
 - b) Costs to lease access to property or for internet backhaul services for a maximum of five years.
 - c) Costs incurred by an existing facilities-based broadband provider to upgrade its existing facilities to provide broadband interconnection. (Public Utilities Code §281(f)(11))
- 11) Requires the CPUC to conduct interim and final audits of the CASF program to ensure that grants have been expended effectively under the program's requirements and the award agreements for each project. Under existing law, the CPUC must submit a report on the interim audit to the Legislature by April 1, 2020 and must submit a report on its final audit findings by April 1, 2023. (Public Utilities Code §912.2)
- 12) Establishes various deadlines for the CASF program, including, but not limited to, the following:
 - a) The CPUC must consult with various stakeholders regarding unserved areas and efforts to expand broadband held at least annually in public workshops held by April 30th each year until 2022.
 - b) The CPUC must submit a report by April 1st each year until April 1, 2023, which must contain specified information about the performance of the CASF program, including identification of the remaining unserved areas of the state. This reporting requirement is repealed as of January 1, 2024, unless it is extended by the Legislature prior to that date. (Public Utilities Code §§281 and 914.7)

This bill:

- 1) Modifies the goal of the CASF program to specify that the program is intended to approve funding for broadband infrastructure projects that will supply “high-capacity, future-proof” infrastructure to no less than 98 percent of households in each broadband consortia region based on current engineering and scientific information available at the time of a CASF application.
- 2) Modifies the definition of “unserved” for the purposes of determining areas that are eligible for CASF project funding. Under the bill, an “unserved area” is one in which 90 percent of the population has no facility-based broadband provider offering service at speeds of at least 25 mbps downstream and 25 mbps upstream, and a latency sufficiently low to allow real-time interactive applications.
- 3) Adds new definitions for the purpose of identifying areas and projects eligible for CASF grants, including the following definitions:
 - a) “Unserved high-poverty area” means a census tract with a poverty rate of at least 20 percent, as measured by the most recent five-year data series available from the American Community Survey of the United States Census Bureau.
 - b) “Future-proof infrastructure” means data networks that once built do not require new construction that involve significant public works in order to deliver higher speeds that mirror advancements in network equipment. Only infrastructure capable of delivering broadband speeds of 100 mbps downstream and 100 mbps upstream with a sufficiently low latency for interactive, real-time applications shall meet the definition of future-proof infrastructure.
 - c) “Open access project” means a wholesale network operation that supplies wholesale broadband access services to multiple service providers that resell broadband. An open access project is prohibited from selling its own broadband service.
- 4) Shortens the time frame from 180 days to 90 days during which an incumbent broadband provider has an opportunity to demonstrate that it intends to expand broadband access to an area proposed for CASF funding. These incumbent broadband providers would not be eligible for CASF funding for broadband expansions unless they demonstrate that they are financially incapable of self-financing necessary upgrades.
- 5) Requires the CPUC to only approve CASF projects that meet the following criteria:

- a) Projects that provide broadband access at speeds of at least 100 mbps downstream and 100 mbps upstream with a sufficiently low latency in unserved areas where no provider offers 25 mbps downstream and 25 mbps upstream with sufficiently low latency.
 - b) All or a significant part of a project deploys last-mile infrastructure to unserved and underserved high-poverty areas. Projects that deploy middle-mile infrastructure are only eligible for grants if they are open access projects. To grant CASF monies to projects that include middle-mile infrastructure, the CPUC must verify that the middle-mile infrastructure is indispensable for accessing the last mile infrastructure.
- 6) Deletes existing prohibitions on projects receiving both CASF and CAF funding.
 - 7) Deletes existing permissions enabling the CASF to fund line extensions on private property under certain conditions.
 - 8) Limits CASF grants for projects involving line extensions by deleting the existing \$5 million allocation for line extensions and restricting grants to households that do not require line extensions. This bill requires the CPUC, when approving projects, to consider limiting funding to households based on income and only provide grants to households that would not otherwise be able to afford privately-financed line extensions. This bill would also limit grants while requiring cost sharing by the property owner.
 - 9) Requires the CPUC to consider whether a provider must provide wholesale wireless or wireline services to other providers when determining whether wholesale services are necessary for providing affordable services under the CASF program.
 - 10) Specifies that local government agencies are only eligible for CASF grants if the project serves unserved or high-poverty unserved areas.
 - 11) Extends various deadlines and makes conforming changes for the purposes of this bill.

Background

Purpose of the CASF. The CPUC established the CASF program in 2006 through Decision 07-12-054. Under the CPUC's decision, CASF provided funding as an incentive to encourage broadband providers to deploy broadband infrastructure to unserved and underserved communities. CASF funding is collected through a

surcharge on end users' intrastate telecommunications bills. The CPUC established a priority of providing grants to areas completely unserved by broadband providers. Under the CPUC decision, any remaining funds would be provided to "underserved" communities where no broadband provider offered speeds of three mbps downstream and 1 mbps upstream. The Legislature codified the CPUC's decision establishing the CASF by passing SB 1193 (Padilla, Chapter 383, Statutes of 2008).

Since its establishment, the CASF has been modified by CPUC decisions and legislation multiple times. Legislation has modified the definition of an unserved household and also led to increases in the percentage of a project's cost covered by grant funding. Some recent projects have received CASF grants covering 100 percent of the project's cost. Despite the possibility of having project costs fully covered by the CASF, few large internet service providers (ISPs) participate in the program. Frontier and Charter Communications are the only two large competitive ISPs that have received grants in CASF's 2019 cycle. The small independent local exchange carriers (ILECs) are some of the most active telecommunications providers participating in the CASF.

Who is Unserved? This bill modifies the areas that would be considered "unserved" for the purpose of CASF grant eligibility. Under existing law, an unserved community is one in which no broadband exists or no broadband provider offers speeds of at least six mbps downstream and 1 mbps upstream. This bill would specify that communities without speeds of 25 mbps downstream and 25 mbps upstream are considered "unserved." This modification would significantly expand the number and types of communities that are considered unserved by broadband, including communities where households have internet service that meets the federal definition of broadband of 25 mbps downstream and 3 mbps upstream.

Generally, CASF funded broadband infrastructure in rural areas where the lack of economies of scale and challenging terrain makes expansion of broadband in private markets unprofitable. In these areas, broadband largely does not exist. Even in communities that have some form of internet service, the service is delivered over a network that does not have a sufficient amount of fiber to reach broadband internet speeds.

Modifying the definition of "unserved" would enable broadband providers to propose CASF projects that upgrade internet speeds for communities that have basic broadband services. To the extent that these communities are in urban and suburban areas, providers may have a greater incentive to propose projects that improve broadband in urban and suburban areas than propose new broadband

projects in rural areas because urban and suburban projects would likely capture more customers per mile of infrastructure than those in less densely populated regions. While rural, suburban, and urban communities each face obstacles to broadband access, rural Californians are disproportionately impacted by a lack of broadband infrastructure. While only five percent of Californians are unable to access broadband due to a lack of access to broadband infrastructure, most these Californians are in rural areas of the state. Urban communities' lack of access is less likely to be driven by an absence of infrastructure and more likely to be driven by a lack of internet service plan affordability. While 96.5 percent of urban San Diego County residents have access to broadband at speeds of 25 mbps downstream and three mbps upstream, only 42 percent of rural San Diego County residents had access to these speeds. According to the CPUC's annual CASF report, the digital divide between urban and rural households is worsening as more urban households gain access to higher speed internet while rural communities remain left behind. The CPUC's report shows that approximately 98 percent of urban households have access to speeds of at least 25 mbps downstream and three mbps upstream while only 67 percent of all rural households had access to those speeds.

This bill also creates a new designation within the definition of unserved areas for "unserved high-poverty areas." Under this bill, "unserved high-poverty areas" are census tracts that have a poverty rate of at least 20 percent based on data from the Census Bureau's American Community Survey. Although this bill separately defines an unserved high-poverty area, it does not require the CPUC to prioritize investments to unserved high-poverty communities over unserved communities that do not meet the high-poverty definition.

Speed limits on the digital highway. In addition to expanding the number and scope of communities to which the CASF applies, this bill also increases the standard for projects to obtain CASF grants. This bill requires the CPUC to only provide funds to CASF projects that provide broadband speeds of 100 mbps downstream and 100 mbps upstream. This requirement would likely require the installation of networks comprised solely of either coaxial or fiberoptic cable. Some wireless technologies such as WiMax and 4G/long-term evolution (LTE) can also meet these speed standards.

Differing types of internet-capable telecommunications deliver different speeds. While legacy copper networks can deliver data, they do so at slower speeds than coaxial and fiberoptic cables. As a result, telecommunications networks containing a higher density of fiber – especially those with significant fiber in the last mile of the network – can deliver higher speeds to customers because they are capable of transferring a greater amount of data simultaneously throughout the

network. However, most households in the United States and California do not have fiber-to-the-home capability. According to the Fiber Broadband Association, less than 40 percent of all households nationwide had fiber close enough to the home to have a fiber-to-the-home connection. Most households that have fixed broadband connections rely on hybrid telecommunications networks consisting of a mix of fiberoptic, coaxial, and copper lines.

Even without fiber passing directly by a home, households can obtain internet speeds that enable consumers to conduct most business over the internet. Most streaming video applications require a minimum speed of 25 Mbps downstream and three Mbps upstream. Downstream speeds measure the flow of data from the network to the customer's device while upstream speeds measure the rate of data sent from the customer's device back onto the network. Generally, residential internet users have lower upstream needs than those of commercial users. Higher upstream speeds are more critical for heavy data users, including those who upload data-intensive graphics, videos, and other files.

Open Access Middle Miles. Under existing law, the CPUC is required to focus CASF broadband infrastructure grants on "last mile" infrastructure, and it prohibits the use of CASF grants for projects that are solely "middle mile." Existing law permits the CPUC to fund projects that contain middle mile infrastructure only if the middle mile infrastructure is necessary to ensure access for the last mile infrastructure. While this bill retains existing requirements to ensure that CASF funds are targeted to last mile infrastructure, it also prohibits projects containing middle mile infrastructure from obtaining CASF monies unless the project is an "open access" project. This bill defines an open access project as one in which the provider only sells wholesale broadband services to over-the-top resellers and does not sell broadband to consumers as an ISP.

Last mile comprises the network lines that deliver services to a customer's address. Middle mile infrastructure is comprised of the lines linking an ISP backbone core network to the local offices from which last mile services are delivered. Middle mile infrastructure is typically the portion of the network where incumbent ISPs have the greatest opportunity to obtain revenue from potential competitors by selling access to the middle mile link between core networks and the last mile infrastructure. Generally, ISPs that do not own any infrastructure or own limited infrastructure can gain access to another ISP's core network and last mile at economical rates; however, middle mile access has generally been the most expensive part of a network for competitive over-the-top providers to buy from incumbent ISPs.

This bill would largely prevent ISPs from obtaining CASF grants for projects containing middle mile infrastructure because all ISPs – both incumbents and competitive providers – largely build networks to sell their broadband services to consumers. Under this bill, it is likely that projects containing middle-mile infrastructure would only receive CASF grants if communications infrastructure and real estate wholesalers like Crown Castle bid to complete these projects. While governments and cooperatives could also build middle-mile infrastructure, public agencies and cooperatives generally only build communications infrastructure to provide services directly to consumers. Under this bill, any local government or cooperative could only obtain a CASF grant to build a project containing middle-mile infrastructure if it did not sell broadband to its residents or members and instead sold access to the infrastructure to the competitive ISPs.

This bill restricts incumbent ISP advantages in the CASF program. In addition to adding “open access” requirements for projects containing middle-mile infrastructure, this bill contains several other provisions aimed at limiting the ability of incumbent ISPs to obtain grants from and influence the CASF program. This bill shortens the time-frame for an incumbent ISP to demonstrate that it intends to expand its service to an area targeted for CASF grants. This bill would shorten this time-frame from the existing 180 day period to a 90 day period. This restricted time-frame would decrease the likelihood that an incumbent ISP could block an infrastructure grant unless it could readily demonstrate that it has plans serve the same area as a proposed CASF project. This bill also restricts the use of CASF infrastructure grants for incumbent ISP network upgrades to only those circumstances when an ISP can demonstrate that it cannot financially make the upgrades without a CASF grant. These restrictions decrease the likelihood that an incumbent ISP would apply to the CASF to use the program to expand its network.

Need for amendments. As currently drafted, the open access provisions of this bill would limit the degree to which cooperatives, local governments, and tribal governments could use the CASF program to expand broadband access to their residents and members through projects that contain middle-mile infrastructure. This bill also deletes outdated language prohibiting projects from double-dipping between the federal CAF program and the state CASF program for the same infrastructure without adding new language to ensure that state and federal funds are maximized in the future. This bill also deletes existing language authorizing grants for line extensions on private property while also retaining language requiring cost-sharing from consumers receiving a line extension. Due to deletions, as written, the bill could potentially require infrastructure cost sharing from any household served by a CASF-funded project. This does not appear to be the author’s intent. **As a result, the committee and the author may wish to amend this bill to specify that CASF infrastructure awardees cannot obtain state broadband**

infrastructure grants for the same infrastructure for which the awardee has also received a federal grant. The author and committee may also wish to amend this bill to clarify that the open access requirements of the bill do not apply to grants received by public agencies, tribal governments, and nonprofit cooperatives. Further, the author and committee may wish to amend this bill to clarify that line extensions may be eligible for grant funding to the extent that property owners are unable to fund an extension on their own and ensure that the cost-sharing provisions only apply to line extension grants. This bill also expands types of communities that are eligible for CASF infrastructure grants to include communities that already have broadband infrastructure and does not ensure that the most unserved communities receive prioritization. Additionally, the speed restrictions for grants and line extension limitations decrease the likelihood that ISPs and private infrastructure wholesalers will propose projects in rural communities. *To the extent that the committee wishes to ensure that the CASF prioritizes projects that provide broadband to communities without any broadband and incentivizes providers to install infrastructure meeting broadband standards in rural areas, the author and the committee may wish to amend this bill to do the following:*

- *Retain the definition of “unserved” and “unserved high-poverty” areas while requiring the CPUC to prioritize grants to unserved communities for which no internet access exist or no provider offers service of speeds of at least 6 mbps downstream and 1mbps upstream, especially those areas within this unserved group that meet the definition high-poverty areas.*
- *Retain 100 mbps downstream and 100 mbps upstream as speed goals for CASF projects while providing the CPUC with more discretion to offer grants to projects that may not meet those speeds but provide service at a minimum speed of at least 25 mbps downstream and 3 mbps upstream and are necessary to expand broadband access to unserved areas.*

Prior/Related Legislation

SB 1058 (Hueso, 2020) requires internet service providers to file emergency operations plans with the CPUC annually. These plans must identify how these providers will ensure reliable and accessible communications during disasters and emergencies, including the provision of an affordable internet plan for individuals sheltering in place or displaced by an emergency or disaster. These plans must also identify how each company’s capital expenditure plan for expanding broadband in the state. The bill is currently pending in the Senate.

AB 1665 (E. Garcia, Chapter 851, Statutes of 2017) made various changes to the CASF program, including requiring regional goals instead of a state goal for broadband adoption to target funding for broadband access to largely rural areas.

The bill also established an adoption account to improve broadband adoption and set audit requirements for the program.

SB 745 (Hueso, Chapter 710, Statutes of 2016) extended from December 31, 2016, to December 31, 2020, the date that remaining funds from the Public Housing Account are transferred back to other accounts, it and limited eligibility to unserved public housing developments. The bill made additional changes, including modifying information required in the CPUC's annual CASF report to the Legislature.

AB 1262 (Wood, Chapter 242, Statutes of 2015) reallocated \$5 million from the CASF Loan Account to the Consortia Account.

AB 1299 (Bradford, Chapter 507, Statutes of 2013) required the CPUC to provide grants for broadband deployment and adoption in certain low-income publicly subsidized multifamily housing communities using the Public Housing Account established within the CASF.

SB 1040 (Padilla, Chapter 317, Statutes of 2010) extended the operation of the CASF indefinitely and established three different accounts within the CASF: the Broadband Infrastructure Grant Account, the Rural and Urban Regional Broadband Consortia Account, and the Broadband Infrastructure Loan Account.

SB 1193 (Padilla, Chapter 393, Statutes of 2008) codified the CASF program by requiring the CPUC to develop, implement, and administer the program to encourage the deployment of high-quality advanced communications services to all Californians as specified in the CPUC's Decision 07-12-054.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: No

SUPPORT:

Access Humboldt

Access Now

ADT Security Services

Aspiration Tech

California Broadband Cooperative, if amended

California Center for Rural Policy

California County Superintendents Educational Services Association

California IT in Education

Central Coast Broadband Consortium

City of Long Beach

Common Networks
Common Sense
Communications Workers of America, District 9
Contextly
CreaTV San Jose
DragonFly Group
Electronic Frontier Foundation
Engine Advocacy
HiGeorge
Indivisible Sacramento
Initialized
Institute for Local Self-Reliance
Kubera Venture Capital
Laytonville Area Municipal Advisory Council
League of California Cities
Long Beach Community College District
Long Beach Gray Panthers
Long Beach Unified School District
Los Angeles County Office of Education
Lynwood Unified School District
Manchester Community Technologies
Media Alliance, if amended
Media Justice
MinOps
Monkeybrains
National Association of Social Workers, California Chapter
Onfleet
Pitch Deck
Press Friendly
ProtocolLabs
Public Knowledge
Reddit
Rural County Representatives of California
SiFi Networks
Small School Districts' Association
TechEquity Collaborative
The Education Trust-West
The Greenlining Institute
The Utility Reform Network, if amended
Tom Wheeler, former chair of the FCC
Tostie Productions, LLC
Tucows

Ubuntu Ventures
Unwired
Writers Guild of American West

OPPOSITION:

California Cable and Telecommunications Association
Charter Communications, unless amended
Frontier Communications
San Gabriel Valley Economic Partnership

ARGUMENTS IN SUPPORT: According to the author:

I am authoring SB 1130 because we must urgently close the digital divide in California. One of the first steps to closing the digital divide is by fostering high-speed broadband internet for all Californians. We will be able to deploy infrastructure for 21st Century Ready Communications by reforming the way the California Advanced Service Fund operates. This legislation is meant to build off of previous legislative efforts related to the CASF. Currently, the CASF has roughly \$300 million available and it is not being accessed by the communities that need it the most or accessed at all. SB 1130 will make it easier for local governments and internet service providers of all sizes to access this fund to carry out high-speed broadband projects in the state unserved and unserved high-poverty areas. I truly believe that SB 1130 will be the next step towards Broadband for all Californians.

ARGUMENTS IN OPPOSITION: Opponents argue that this bill would reverse the CASF's goal of serving unserved households by diverting program funds away from communities that have no broadband infrastructure to upgrade and extend existing infrastructure in communities that already have broadband. Opponents also claim that the bill will increase CASF program costs and lead to higher surcharges to pay for the CASF program. In opposition, the California Cable and Telecommunications Association (CCTA) states the following:

SB 1130 would completely upend the Legislature's direction that the CASF program fund infrastructure in areas that still lack any Internet connectivity, which is almost entirely in remote rural California. It would change the definition of "unserved" to allow CASF grants for upgrading networks that already provide service at speeds up to 25/25 Mbps, even though parts of rural California still have no service.

Oddly, it would allow CASF grants to fund networks that do not serve any households and would even prohibit a grant recipient from providing service to households.

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