



COM/MP1/ms6 7/8/2014

FILED
7-08-14
09:28 PM

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Consider
Modifications to the California Advanced
Services Fund.

Rulemaking 12-10-012
(Filed October 25, 2012)

ASSIGNED COMMISSIONER'S RULING

This ruling provides notice and opportunity for parties to comment on the Commission's Communications Division (CD) Report titled *Staff Report Proposing Rules to Implement Program Changes to the California Advanced Services Fund Initiated by AB 1299* (Attachment A). Comments shall: 1) be organized by heading of each section of the report and recommendation number where applicable; and 2) include supporting documentation. Parties may also propose alternatives to CD's proposals - such proposals shall include supporting documentation.

Opening Comments may be filed and served on the service list by 20 days after the issuance of this ruling, and Reply Comments may be filed and served on the service list by 30 days after the issuance of this ruling.

IT IS RULED that:

1. Comments are solicited regarding the Commission's Communications Division's proposals in their Staff Report Proposing Rules to Implement Program Changes to the California Advanced Services Fund Initiated by AB 1299.

2. Opening Comments may be filed and served on the service list by 20 days after the issuance of this ruling, and Reply Comments may be filed and served on the service list by 30 days after the issuance of this ruling.

Dated July 8, 2014, at San Francisco, California.

/s/ MICHAEL R. PEEVEY
President Michael R. Peevey
Assigned Commissioner

Attachment A

Communications Division Staff Report Proposing Rules to Implement Program Changes to the California Advanced Services Fund Initiated by AB 1299

**STAFF REPORT PROPOSING RULES TO IMPLEMENT
PROGRAM CHANGES TO THE CALIFORNIA ADVANCED
SERVICES FUND INITIATED BY AB 1299**

July 2014



Communications Division
Broadband, Policy and Analysis Branch

Authors: Tom Glegola and Candace Choe
Supervisor: Zenaida Tapawan-Conway
Manager: Rob Wullenjohn

Table of Contents

1. Introduction	- 1 -
2. Summary of Findings and Recommendations	- 2 -
3. Program History	- 4 -
4. Goals	- 6 -
4.1. Staff Findings and Recommendations	- 9 -
5. Lessons Learned and Best Practices	- 10 -
5.1. Infrastructure Project Costs	- 11 -
5.2. Adoption Project Costs	- 18 -
5.3. Vendor Requirements	- 19 -
5.4. Staff Findings and Recommendations	- 19 -
6. Eligible Applicants	- 21 -
6.1. Discussion	- 21 -
6.1.1. Staff Findings and Recommendations	- 23 -
6.3. Documentation to Prove Eligibility	- 23 -
6.3.1. Staff Findings and Recommendations	- 24 -
6.4. Challenges Based on Access Denials or Existing Broadband Service	- 24 -
6.4.2. Staff Findings and Recommendations	- 26 -
6.5. Existing Access for Adoption Projects	- 28 -
6.5.2. Staff Findings and Recommendations	- 29 -
7. Regional Distribution	- 29 -
7.1. Discussion	- 29 -
7.1.1 Staff Findings and Recommendations	- 30 -
8. Infrastructure Projects	- 30 -
8.1. Overview and Goals	- 30 -
8.2. Grants and Loans	- 31 -
8.2.1. Discussion	- 31 -
8.2.2. Staff Findings and Recommendations	- 33 -
8.3. Reimbursable Costs	- 33 -
8.3.1. Discussion	- 33 -
8.3.2. Staff Findings and Recommendations	- 34 -
8.4. Evaluation Criteria	- 34 -
8.4.1. Discussion	- 35 -
8.4.2. Staff Findings and Recommendations	- 40 -
9. Adoption Projects	- 43 -
9.1. Overview and Goals	- 43 -
9.1.1 Staff Findings and Recommendations	- 43 -
9.2. Grants and Loans	- 43 -
9.2.1. Discussion	- 44 -

9.2.2. Staff Findings and Recommendations	- 44 -
9.3. Reimbursable Costs	- 45 -
9.3.1. Discussion	- 45 -
9.3.2. Staff Findings Recommendations	- 47 -
9.4. Evaluation Criteria	- 48 -
9.4.1. Discussion	- 49 -
9.4.2. Staff Findings and Recommendations	- 52 -
10. Application Instructions and Processes	- 55 -
10.1. Timelines	- 55 -
10.1.1. Staff Findings and Recommendations	- 55 -
10.2. Public Review of Applications	- 56 -
10.2.1. Staff Findings and Recommendations	- 57 -
10.3. Other Application Issues	- 57 -
10.3.1. Staff Findings and Recommendations	- 58 -
11. Payment Terms and Conditions	- 58 -
11.1. Staff Findings and Recommendations	- 59 -
12. Post Award Compliance, Reporting and Monitoring	- 59 -
12.1. Discussion	- 59 -
12.2. Staff Findings and Recommendations - Infrastructure Projects	- 61 -
12.3. Staff Findings and Recommendations - Adoption Projects	- 63 -
12.4. Penalties	- 63 -
12.4.1. Staff Findings and Recommendations	- 64 -

1. Introduction

This draft Staff Report, prepared by the California Public Utilities Commission's (Commission or CPUC) Communications Division Staff (CD Staff), proposes rules to implement AB 1299, which created the Broadband Public Housing Account.¹

Governor Jerry Brown signed AB 1299 into law on October 3, 2013, creating the Broadband Public Housing Account under the California Advanced Services Fund (CASF) and providing \$20 million to fund broadband Internet deployment project and \$5 million for adoption projects in publicly-supported housing communities (PSCs).²

Procedurally, this Staff Report is part of Rulemaking (R.) 12-10-012, which originally sought to expand the eligibility requirements of the CASF Infrastructure Grant and Revolving Loan Accounts through SB 740.³ In order to address the issues raised by SB 740 and AB 1299, in addition to eligibility, Commission President Michael Peevey, the Assigned Commissioner, issued a Revised Scoping Memo and Ruling (Revised Scoping Memo) on January 17, 2014 that expanded the proceeding to add two additional phases: one to implement the additional requirements of SB 740, one to implement AB 1299.⁴

The Revised Scoping Memo, served on all participants to R.12-10-012, and distributed to housing authorities and non-profit housing developers with assistance from the California Department of Housing and Community Development (HCD), contained 39 questions soliciting public comments regarding how to implement the new account.⁵ The Commission received comments from Mutual Housing, Yolo County Housing Authority (Yolo County HA), Kern County Housing Authority (Kern County HA), Innovative IT, the California Emerging Technology Fund (CETF), and the Office of Ratepayer Advocates (ORA). CD staff conducted four public workshops to discuss the 39 questions and comments received in greater detail. Attached to this Staff Report is a compilation of the discussion that occurred at these meetings. Additionally, CD Staff conducted independent research to learn more about public housing entities, broadband networks in multi-unit settings and adoption programs. This included independent meetings and discussion with various potential vendors, CETF, housing authorities, the California Tax Credit Allocation Committee (TCAC), HCD, Southeast Community Development Corporation (SCDC) and the Youth Policy Institute (YPI). CD staff also made site visits to various PSCs in areas near cities where public workshops were held.

¹ Although AB 1299 names the account the "Broadband Public Housing Account," as discussed further in Section 6, both public housing entities and non-profits may be eligible to receive funding under this new account.

² Cal. Pub. Util. Code §281 (f)(3), §281(f)(4)(A).

³ *Order Instituting Rulemaking to Consider Modifications to the California Advanced Services Fund* (2012) Cal. P.U.C. Rulemaking (R.) 12-10-012 at 23.

⁴ Assigned Commissioner's Revised Scoping Memo and Ruling (2014) Cal. P.U.C. Rulemaking (R.) 12-10-012 at 8 (Revised Scoping Memo).

⁵ *Id.* at Appendix 1.

2. Summary of Findings and Recommendations

Based on comments received and other research, CD staff in total made 33 findings and 53 recommendations to the Commission. CD staff estimates there are 300,000 to 400,000 PSC units in California, roughly 15 percent of which are in rural areas. PSCs are defined in statute as a publicly subsidized multifamily housing development that is wholly owned by either a public housing agency or a non-profit that has received public funding and limits eligibility for the CASF Housing Account to these entities.⁶ CD staff was unable to estimate with any degree of certainty the number of unconnected units, given the number of different government agencies that oversee public and non-profit housing, and the fact that estimates supplied did not include residents privately subscribing for internet service directly with a provider, either with or without assistance from programs such as Connect2Compete and Comcast's Internet Essentials. Regardless, CD staff notes that the Commission may only award up to \$20 million to connect these units. Based on cost estimates CD staff received, it seems reasonable for the Commission to set a goal of connecting 40,000 PSC units , a number that likely is far less than the number of unconnected PSC units in the State.

CD staff recommends the Commission award grants and loans to finance up to 100 percent of the installation costs, but not maintenance or operation costs. Additionally, CD staff recommends that the Commission require grantees to maintain and operate the network for five years after receiving Commission funding. CD staff recommends the Commission approve reimbursement for the following expenses:

- All networking equipment, both hardware and software, including wireless access points;
- Low voltage contracting, provided it does not include major rehabilitation, demolition or construction;
- Modems or routers, but not computers or human interface devices;
- Engineering & design;
- Hardware warranty;
- Installation labor from the MPOE to the individual unit; and
- Taxes, shipping, insurance.

Although the Commission should expect to receive applications ranging anywhere from 10 to 700 units, CD staff estimates that 75 percent will be for projects proposing to connect 100 units or less. Based on the cost estimates provided in the Lessons Learned and Best Practices section of this report, CD staff expects that 75 percent of applications likely will request \$75,000 or less. To assist in processing these applications in an expeditious manner that is consistent with the Legislature directing the Commission to return all unencumbered funds in the account to the CASF Infrastructure Grant Account, CD staff proposes that the Commission grant to CD staff authority to approve applications that meet each of the following criteria:

⁶ §281(f)(2).

- Applicant meets the eligibility requirements under P.U. Code §281 (f) (2).
- Applicant attests that broadband Internet is not available to all PSC units on the property seeking the grant (and provided that percentage in its application), if the applicant is applying in the first six months.
- Applicant declares that it has not denied an ISP access to its property and no ISP challenged this statement; if an ISP challenged an application alleging it was denied access to a PSC, CD staff determined the denial was reasonable.
- Applicant requests a grant of less than \$75,000 in CASF Housing Account infrastructure grant funds
- For projects connecting 50 PSC units and less, proposed project costs less \$600 per unit or less.
- For projects connecting 51-100 PSC units, proposed project costs \$500 per unit or less.
- For projects connecting 101 and more units, proposed project costs \$300 per unit or less.
- The buildings included in the application meet standards for acceptable basic living conditions as determined under HUD's Uniform Physical Condition Standards or similar guidelines provided by other housing funding agencies in the State.
- Existing property infrastructure requires no significant upgrades to install wiring, equipment and other electronics funded under this grant
- Applicant expects property to be in residential use for at least the next 10 years.
- Property qualifies for an exemption pursuant to CEQA Guidelines §15300.2.
- For wireless networking projects, equipment will at least meet the 802.11n standard.
- Applicant attests it will operate and maintain project equipment and technology for at least five years after completion and that it has sufficient funds and warranty to do so, including replacing equipment as needed (submit maintenance agreement and budget).
- Proposed project network is capable of offering residents Internet service speeds of at least 6mbps downstream/1.5mbps upstream.
- Applicant agrees to charge residents \$20 or less for Internet service.
- Applicant has signed an affidavit agreeing to abide by Commission rules of practice and procedure; §§2111 and 2108; and to quarterly/ monthly reports and submission of annual recertification/ audit documents.
- Applicant agrees to complete project within 12 months.
- Applicant has identified its bandwidth source, either at the MPOE or its wireless equivalent.
- Applicant agrees to secure project funded hardware.

CD staff proposes a similar process for adoption grants, in which the Commission delegates authority to CD staff to approve grants that meet the following criteria:

- Applicant requests a grant of \$50,000 or less
- Applicant agrees to perform education and outreach to inform residents of available services
- Applicant or partner organization possesses at least one year experience in digital literacy training or has previously carried out at least one digital literacy project
- Applicant or partner organization will use existing curriculum

- Applicant has identified onsite designated space for digital literacy training
- Applicant or partner organization will provide residents devices to be used as part of its digital literacy training. A Smartphone is not an eligible device. New or refurbished devices may be used, but if it is refurbished it must not be more than two years old.
- Technical support, either by phone or in person, must be able to respond within 48 hours. A refurbisher should provide a warranty of at least six months and seller of new products should provide a warranty of at least 30 days.
- Applicants must be ready to provide classes within nine months of being selected for a CASF grant and must submit a work plan with major milestones showing how they propose to meet this deadline
- Applicants must sustain the adoption project for 12 months or until 75 percent of residents are trained. The applicant must submit a work plan with major milestones showing how they propose to meet this deadline.

CD staff proposes that the Commission reimburse the following adoption activities:

- education and outreach efforts and materials;
- acceptable devices (does not include smartphones) and software;
- printers;
- routers;
- provision of technical support;
- desks and chairs to furnish a designated space for digital literacy;
- digital literacy curriculum; and
- digital literacy instructors.

In the case of both grants, CD staff proposes that the Commission establish a rural set aside of 15 percent to effectuate the Legislature's requirement that the Commission approve projects "in a manner that reflects the statewide distribution of publicly supported communities."

Finally, CD staff proposes that the Commission begin accepting applications from PSCs where less than all units are wired for broadband Internet service beginning on the first Monday of December 2014. Beginning on the first Monday of July 2015, the Commission also will accept applications from PSCs that are wired for broadband Internet service. The Commission will continue to take all applications on the first Monday of each month until the Commission awards all funds, or December 31, 2016, whichever comes sooner.

3. Program History

Assemblymember Steven Bradford introduced AB 1299 on February 22, 2013 and Governor Jerry Brown signed it into law on October 3, 2013. The legislation expands the CASF to add a fourth account, the CASF Broadband Public Housing Account, dedicated to increasing broadband access and adoption in PSCs. In expressing his support for the legislation, Mr. Bradford noted "As the 21st century economy moves online, our society is increasingly defined by those who have access to the technology and services that define modern life, and those who don't." He added, "The future of

our economy rests on broadband and other technology infrastructure,” therefore “We cannot let certain unserved and underserved communities fall behind the rest when it comes to this critical resource.”⁷

The new law provides \$20 million for grants and loans to finance projects connecting PSCs with broadband Internet, and \$5 million for adoption programs in these communities. Prior to the Legislature’s passage of AB 1299, the CASF program comprised three accounts: the Infrastructure Grant and Revolving Loan Accounts support projects that deploy broadband in unserved and underserved areas and the Rural and Urban Regional Broadband Consortia Account, which supports “broadband deployment activities other than the capital cost of facilities,” including activities such as identifying and supporting CASF applications and adoption services such as digital literacy classes. SB 740 established that the overall goal of CASF is “to approve funding for infrastructure projects that will provide broadband access to no less than 98 percent of California households” by December 31, 2015.⁸ Certain PSCs are in locations that would not otherwise be eligible for CASF funding because they are located in census block groups (CBGs) which are designated as “served,” as defined by the Commission, by a broadband Internet service provider (ISP) on the California Broadband Availability Map.⁹ As stated by AB 1299’s author, “a broadband Internet cable running to the street or curb does not bring broadband Internet access to public housing residents if the building’s individual units are not wired for broadband.”¹⁰

Prior to passing AB 1299, the Legislature held several informational hearings on broadband availability for California residents in PSCs. At an April 29, 2013 hearing of the Assembly Committee on Utilities and Commerce, representatives from PSCs situated primarily in urban areas testified that a majority, though not all, of their properties lack reliable broadband Internet connectivity. Panelists also testified that some of their properties have free computer learning centers which provide their residents with broadband Internet access and allow children who reside at these properties to utilize the computer learning center to complete homework or conduct research for other activities.¹¹

At a March 11, 2013 hearing of the Assembly Committee on Utilities and Commerce, panelists expressed concern that residents of PSCs lacked broadband Internet access. Ken Simmons, CEO of the Housing Authority of the City of Los Angeles (HACLA) stated, “We are increasingly alarmed that these children are being doomed to a continuing life of poverty because they are denied access to the education they need and tools such as computer literacy that will allow them to compete with the changing and complex skills required for well-paying jobs in the future.”¹²

⁷ Assemblymember Steven Bradford press release, “Governor Signs Bradford Bill to Close Digital Divide in California,” October 3, 2013

⁸ Senate Bill (SB) 740 (Padilla) Stats. 2013 Ch. 522, amending P.U. Code §281.

⁹ *Decision Implementing Broadband Grant and Revolving Loan Program Provisions*. (2012) Cal. P.U.C. Decision (D. 12-02-015); The California Broadband Availability can be found at <http://www.broadbandmap.ca.gov/v2.0/>.

¹⁰ Legislative analysis prepared by California Senate Energy, Utilities and Communications Committee staff for a July 2, 2013 hearing

¹¹ *Id.*

¹² Ken Simmons, Chief Operating Officer, Housing Authority of the City of Los Angeles, presentation to the California Assembly Committee on Utilities and Commerce, March 11, 2013

Housing industry executives cite the cost of building or upgrading the infrastructure and maintaining the network and inside wiring as the primary barrier to installing broadband Internet service in PSCs. A March 2010 Federal Communication Commission (FCC) report also found that service providers in these areas cannot earn sufficient revenue to cover the costs of deploying and operating broadband networks, including expected returns on capital, thus there is no business case to offer broadband internet services in these areas.¹³ Residents also may have little incentive to subscribe to voice, cable or broadband Internet service because of the high cost of subscription. Additionally, some residents may not be convinced that digital literacy will benefit them.¹⁴

4. Goals

CD staff first sought to identify goals to develop proposed rules and guidelines for the new CASF Broadband Public Housing Account. To do so, CD staff questioned how many PSCs are in California? How many PSCs are not connected? This task proved more difficult than expected because of the considerable overlap among the various agencies that provide housing support to low-income individuals and families. The following analysis illustrates this point:

- Sunne McPeake, CEO of the CETF, presented at a March 2013 Assembly Utilities and Commerce Committee hearing that the TCAC in the Treasurer's Office, which administers both the federal and State low-income housing tax credit programs, estimates the current number of low-income multi-family units receiving low-income housing tax credits at 265,000, but that estimate does not include information gathered for the early years of these programs.¹⁵
- TCAC's 2013 Annual Report notes that "TCAC has assisted approximately 330,000 affordable units with tax credit awards since the program's inception."¹⁶ The report later contains tables listing the total units supported by each tax credit program as 403,536 since inception, suggesting some tax credit recipients may participate in multiple programs.¹⁷
- On its website, the U.S. Department of Housing and Urban Development (HUD) lists 38,739 low rent units in HUD chartered housing authorities, a number that appears to include some Section 8 housing units.¹⁸
- The California Association of Housing Authorities claims to represent over 65 housing authorities that "meet the needs of 395,000 households."¹⁹

¹³ Briefing paper prepared by California Assembly Committee on Utilities and Commerce Committee staff for Informational Hearing, "Bridging the Digital Divide in California: a Foundation for a Better Way of Life." March 11, 2013

¹⁴ Legislative analysis prepared by California Senate Energy, Utilities and Communications Committee staff for a July 2, 2013 hearing

¹⁵ California Emerging Technology Fund, Assembly Committee on Utilities and Commerce Hearing on March 11, 2013: Bridging the Digital Divide in California: A Foundation for a Better Way of Life at 4, http://autl.assembly.ca.gov/sites/autl.assembly.ca.gov/files/hearings/01_CETF_Testimony_for_March_11_2013.pdf.

¹⁶ California Tax Credit Allocation Committee, Affordable Housing for California, 2013 Annual Report at Page 31, <http://www.treasurer.ca.gov/ctcac/2013/annualreport/annualreport.pdf>

¹⁷ *Id.* at 42- 3.

¹⁸ More information is available at the following URL: <https://pic.hud.gov/pic/haprofiles/haprofilelist.asp> One will need to select California to view the State's public housing information.

¹⁹ Available on the California Association of Housing Authorities website at: <http://www.cahahousing.org/about-us/>.

- The HCD estimates that, “In California, there are approximately 149,000 units of privately-owned, federally-assisted multifamily rental housing plus additional tax credit and mortgage revenue bond properties, many with project-based rental assistance.”²⁰

During legislative development consultations in late 2012 and early 2013, CD staff, Legislative staff and CETF all agreed to use CETF’s estimate that there are at least 300,000 PSC housing units in California, of which about 200,000 to 250,000 lack broadband Internet connections. This figure, based on research CETF conducted in consultation with TCAC and HUD, and submitted as part of testimony at the April 29, 2013 Assembly Committee on Utilities and Commerce hearing, is summarized in Table 1.

Table 1. April 2013 CETF Estimate of PSC Housing Units in California

Regulating Agency	Number of Housing Units
Tax Credit Allocation Committee (TCAC)	265,877
HUD (not including Section 8 vouchers)	37,861
Total	303,738

The California Housing Partnership recently prepared another credible estimate for CD staff, with data indicating the following inventory of PSC housing units in California:

- 132,000 HUD subsidized units;
- 25,000 USDA units;
- Well over 300,000 units subsidized through tax credit development; and
- An unknown number of subsidized units built entirely with local sources of funding.

After removing properties receiving support from multiple agencies, the California Housing Partnership Corporation estimates that there are 400,000 total PSC housing units in the State. Based on the research submitted by these organizations, CD staff submits to the Commission that the best estimate is that there are 300,000-400,000 PSC units in California.

CD staff found determining the number of unconnected buildings in the state even more challenging than estimating the number of PSC units. The lone data CD staff is aware of is maintained by TCAC and a survey of non-profit developers conducted by CETF. CD staff also inspected several connected buildings that may not appear in these estimates. TCAC provided CETF with data indicating that over 13 percent of affordable housing units subsidized with TCAC tax credits in 2008-2011 have access to broadband Internet.²¹

²⁰ More information available at the following URL: <http://www.hcd.ca.gov/hpd/hrc/tech/presrv/>.

²¹ As noted on page 8, TCAC awards tax credits based on a scoring system. An applicant may receive additional points if it agrees to provide tenants broadband Internet service with speeds of 768kbps downstream for ten years at no cost.

Table 2. TCAC Housing Credit Awardees Providing Broadband to Residents Free of Charge

Year	Total Units Receiving Tax Credits	Units with Broadband²²	Percentage of Total Units with Broadband
2008	4,640	688	14.8%
2009	4,840	1,471	30.4%
2010	4,170	294	7.1%
2011	6,026	149	2.3%
Total	19,676	2,602	13.2%

Additionally, as summarized in Table 3, CETF surveyed affordable housing organizations to determine which organizations provide broadband Internet directly to residents. Seven entities responded, noting that combined, they provide free shared networks to less than eight percent of the units they manage.

Table 3. CETF Survey: Broadband Internet Access Provided by Seven Affordable Housing Managers

Organization	Total Units in Portfolio	Units with Broadband²³	Percentage of Total Units with Broadband
Abode Communities	2,409	449	16.6%
Eden Housing	5,000	278	5.6%
LINC Housing	5,254	187	3.6%
New Economics for Women	639	0	0%
Palo Alto Housing	700	35	5.0%
Skid Row Housing Trust	1,593	178	11.2%
Housing Authority of the City of Los Angeles	8,085	700	8.7%
Total	23,680	1,827	7.7%

²² Provided by housing management.

²³ Provided by housing management.

This data does not take into account the number of PSC residents subscribing to broadband Internet service, either through assistance from programs such as Connect2Compete or Comcast's Internet Essentials or other means. Further, this information excludes mobile broadband availability.

CD staff also conducted research to provide the Commission with an estimate on the number of applications the Commission likely will review, and a general range as to the amount that applicants will request for each project.

According to the Council of Large Public Housing Authorities, most public housing authorities in the nation have relatively few units. In 2000, the most recent data available on its website, the average public housing development had 90 units and the median was 50 units. Of the nearly 13,000 total large housing projects, fewer than 800 (6 percent) had 250 or more units. Only 68 projects had more than 1,000 units; 59 of these were in New York City. In total, 25 percent of developments had 25 or fewer units; 53 percent had 50 or fewer units; and 77 percent had 100 or fewer units.²⁴ Table 4 summarizes this information.

Table 4. Council of Large Public Housing Authorities: Number of Units in Average Public Housing Development

	Development Size						
	1-10 Units	11-25 Units	26-50 Units	51-100 Units	101-249 Units	250-500 Units	501+ Units
Number of Projects	872	2,349	3,608	3,125	2,127	576	219
Cumulative Number of Projects	872	3,221	6,829	9,954	12,081	12,657	12,876
Percentage of Projects	6.77%	18.24%	28.02%	24.27%	16.52%	4.47%	1.70%
Cumulative Percentage of Projects	6.77%	25.02%	53.04%	77.31%	93.83%	98.30%	100.00%
Total Units	6,014	44,333	141,802	241,236	33,652	194,855	205,080
Cumulative Number of Units	6,014	50,347	192,149	433,385	765,037	959,892	1,164,972
Percentage of All Units	0.52%	3.81%	12.17%	20.71%	28.47%	16.73%	17.60%
Cumulative Percentage of Units	0.52%	4.32%	16.49%	37.20%	65.67%	82.40%	100.00%

In Exhibit B of its February 7, 2014 submission to the Commission, CETF provided a study entitled "Affordable Housing Development Broadband Connectivity Costs," in which it analyzed 19 wireless and 24 wireline broadband infrastructure deployment projects installed at, or quoted for, PSCs in Northern and Southern California. These properties range in size from 20 to 700 units (See Table 5).

4.1. Staff Findings and Recommendations

Finding 1. CD staff believes estimates that there are 300,000-400,000 PSC units in California represent best available data.

²⁴ Available on the website of the Council of Large Public Housing Authorities: http://www.clpha.org/facts_about_public_housing.

Finding 2. CD staff found it could not provide a reasonable estimate of the number of unconnected PSC units, given available data. While CETF conservatively estimates 200,000-250,000 unconnected PSC units, this number appears to exclude residents that subscribe directly to an Internet Service Provider.

Finding 3. Although the Commission should expect to receive applications ranging anywhere from 10 to 700 units, CD staff estimates that 75 percent of applications will be for projects proposing to connect 100 units or less. Based on the cost estimates provided in the Staff Findings and Best Practices section of this report, CD staff expects that 75 percent of applications likely will request \$75,000 or less.

Finding 4. Based on cost estimates CD staff received from potential applicants, vendors and experts in installing broadband Internet services in multi-dwelling units (described in more detail in the Lessons Learned and Best Practices section), CD staff estimates that the Commission can aim to connect 30,000 to 40,000 units with the \$20 million in the CASF Housing Account, depending on the requirements the Commission imposes on grantees, a number that likely is far less than the number of unconnected units in the State.

Recommendation 1. Based on the above findings, in particular the estimated average project cost, CD staff recommends that the Commission adopt of goal of connecting 40,000 PSC units.

5. Lessons Learned and Best Practices

Since the Commission has not previously developed telecommunications public purpose programs intended to benefit PSCs, CD staff consulted with industry experts, inspected seven housing sites and reviewed other housing funding programs to learn best practices, in addition to conducting four public workshops throughout the State, to develop proposed rules for the new CASF Broadband Public Housing Account Program.

HUD offers several programs that finance broadband Internet deployment and adoption activities in PSCs, including Neighborhood Networks, which provides grants to Public Housing Authorities (PHAs) to establish, expand and/or update community technology centers. PHAs may use grant funds for items such as:

- Hiring of a project coordinator to manage and oversee center activities;
- Purchasing computer equipment;
- Internet connection;
- Physical improvements;
- Computer training;
- College preparatory classes;
- Job training; and
- Literacy training.²⁵

²⁵ More information available at:
http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/ross/aboutnn

The TCAC awards tax credits based on a scoring system and it awards additional points to an applicant's score if it provides free broadband Internet service for tenants. To receive the points, tax credit applicants must agree to provide residents broadband Internet with at least 768kbps downstream for ten years at no cost.

In addition, the FCC, broadband Internet service providers and nonprofit organizations have implemented broadband adoption programs that offer low-cost broadband Internet to low-income users, along with digital literacy activities, including Comcast Essentials and Connect2Compete. Also, HACLA, Kids Progress, Inc. (KPI) and the CETF partnered for a pilot project called Smarter Broadband to offer broadband Internet equipment and adoption services to residents at two HACLA properties.

CD staff also researched the Broadband Technology and Opportunities Program (BTOP) grant awarded to One Economy to launch 93 Digital Connector programs in 60 cities around the country, connecting more than 2,500 housing units across California, Portland, OR Chicago, IL and South Dakota. Aimed at high school and college students, the Digital Connector program encompasses more than 156 hours of training on a variety of topics including computer basics, financial literacy, leadership development, and software training. Graduating students are then expected to provide 56 hours of digital literacy training as part of their Community Service component to the program.

In its 2013 Annual Report to the National Telecommunications and Information Administration (NTIA), One Economy indicated that it connected over 1,600 housing units in California, providing residents with broadband Internet access and digital literacy training. In San Francisco, San Jose, and other nearby communities, over 500 residents attended digital literacy training sessions.²⁶ In its 2013 annual report, One Economy noted that it continued to experience the following two barriers to broadband adoption: 1) providing access to affordable hardware and 2) providing an accessible context for digital literacy training, both in terms of the location in which it is delivered and the specific issues the training addresses beyond basic computer and Internet skills.

One Economy secured a partnership with a national computer refurbisher that will offer a \$150 computer for households that have at least one student in the National Free School Lunch program and with a national retailer providing laptop donations and discounts to participants who complete digital literacy trainings.

5.1. Infrastructure Project Costs

As part of its research, CD staff sought to provide the Commission and potential applicants with several general costs estimates.

²⁶ Available at the following URL: http://www2.ntia.doc.gov/files/grantees/11-43-b10516_apr2013.pdf.

Brian Horton of Innovative IT submitted cost per unit averages from a cross sampling of his company's 70+ projects representing 4,000 + units deployed throughout California, including wired and wireless deployments, new construction and rehab projects.

- Cost per Unit averages:
 - 1-50 Units: \$596
 - 51-100 Units: \$447
 - 101+ Units: \$259

- Cost Inclusions
 - All networking equipment
 - Low voltage contracting
 - Any required resident equipment
 - Engineering & design
 - Hardware warranty
 - All installation labor
 - Taxes, shipping, insurance, etc.

Based on the above data, Innovative IT recommended the following cost per unit thresholds:

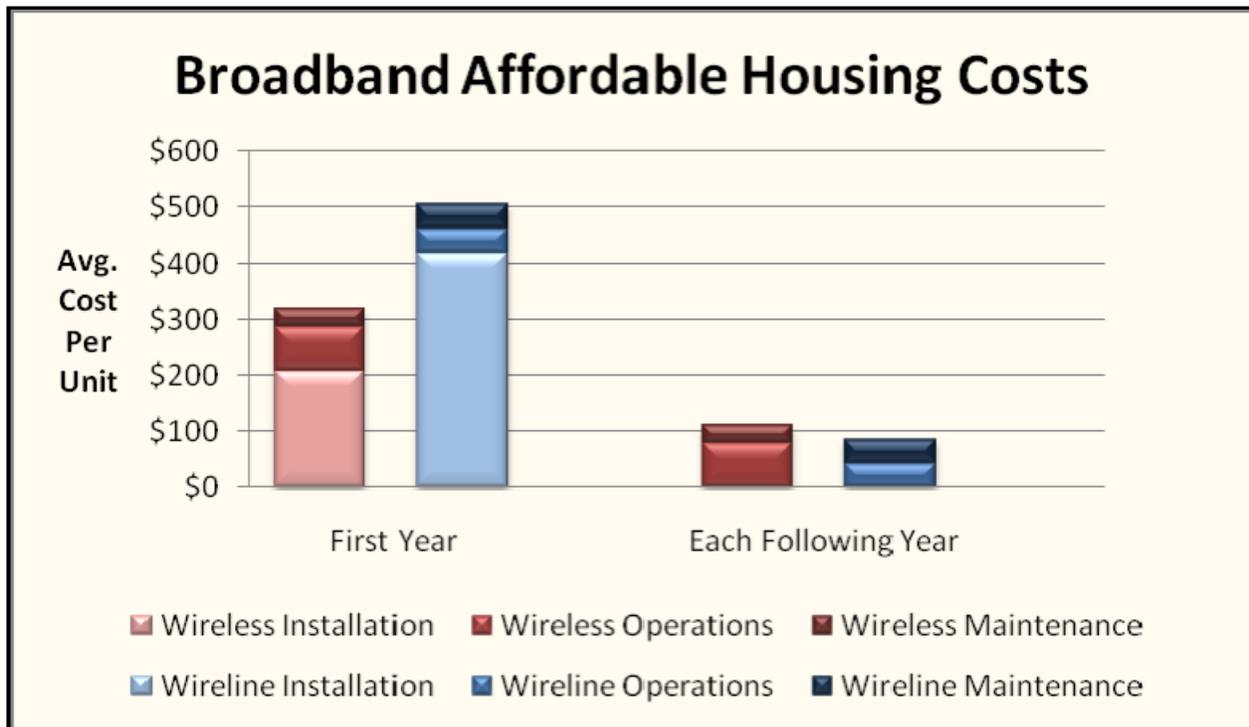
- 1-50 Units: \$400-\$600
- 51-100 Units: \$300-\$500
- 101+ Units: \$200-\$400

In its written comments submitted in response to the questions in the January 17th Revised Scoping Memo, Mutual Housing shared that in its experience, the cost of installing wireless broadband Internet at PSCs has ranged between \$25,000 -\$75,000, depending on the size of properties and layout of buildings. Once installed, Mutual Housing incurred operating and maintenance costs ranging between \$3,000-\$6,000 per year, depending on the size of the property and installed system.

At the April 10th public workshop in San Diego, HACOLA noted that the last broadband Internet installation in one of its properties (712 units) took less than six months from the Request for Proposal (RFP) to completion and cost less than \$100,000, including fiber optic installation. In this example, residents pay the provider directly a monthly rate of \$10 for Internet and \$20 for cable TV.

CETF's written comments included its research on this matter. CETF's study included 19 wireless and 24 wireline broadband infrastructure deployment projects installed at, or quoted for, affordable housing developments. The properties analyzed range in size from 20 to 700 units. The following table indicates the average costs.

Table 5. CETF Survey: Average Broadband Costs per PSC Housing Unit



Source: CETF Comments Submitted on February 7, 2014

In discussing cost, CETF and SCDC also raised the possibility of funding projects that allow Mobile Citizen to connect PSC units. Mobile Citizen is a WiMax provider that uses CLEAR’s 4G network to provide low cost broadband Internet to schools and non-profits. Often the cost to the user is \$10 per month. CD staff does not have cost estimate for how much this type of project would cost to install. Related to the issue of cost is whether residents of PSCs could pay a nominal fee to Mobile Citizen for access to broadband Internet, which could help defray the cost that the housing authority or non-profit would need to pay or obtain as a grant. As noted elsewhere in this report, housing authorities and non-profit developers are restricted in terms of collecting funds from residents beyond monthly rent, potentially making this type of arrangement a favorable solution for some applicants.

A typical wireless network will include either indoor or outdoor access points such as those made by Ubiquiti, Cisco or Meraki (Cisco now owns Meraki).²⁷ Figures 1-4 show examples of each company’s products. Depending on the equipment purchased, building configuration and characteristics, and the environment in which it is installed (for example, outdoor or indoor), an access point can serve as few as one to two units or as many as four to eight units. Access points cost between \$200 - \$3,000, depending on the model and specifications and should last four to six years, if not longer.

²⁷ Note this is not an exhaustive list, nor an endorsement of any product.



Figure 1 Ubiquiti Networks UniFi UAP-Pro Enterprise Wi-Fi System



Figure 2 Cisco Aironet 1140 Series Access Point



Figure 3 Ubiquiti Networks UniFi AC Enterprise WiFi System- UAP-AC



Figure 4 Cisco Meraki MR34 Indoor Cloud Managed Access Point

Projects will also require a concentrator/switch, such as those illustrated in Figures 5-6. Enterprise class access points are powered through the Ethernet cable that connects the access points to the concentrator/switch with powers the access points and aggregates them for connection at a single Internet connection.



Figure 5 Cisco Systems 8-Port Gigabit (SG100D-08P-NA)



Figure 6 Ubiquiti 8 Port TOUGH SWITCH POE PRO

Projects will also require either hardware or software to manage the network, as well as a router to provide a firewall and routing connection to the bandwidth source. Such equipment may include the items illustrated in Figures 7-8.



Figure 7 Cisco Air 2504 Wireless Local Area Network (LAN) Controller



Figure 8 Microtik RB/750UP Mini-Router

Ken Biba of Novarum provided the following three estimates. Novarum provides strategic consulting and analysis for the wireless broadband data industry, focusing on the key technologies of Wi-Fi, WiMAX and 3G cellular data.

Table 6. Low-end 802.11 a/b/g/n Ubiquiti system

	10 units	100 units
Access Points	\$2,000	\$20,000
Concentrator/switch	\$250	\$2,500
Installation (\$250/Access Point)	\$2,500	\$25,000
Maintenance (4 years)	\$900	\$9,000
Total	\$5,650	\$56,500

Table7. High-end 802.11ac Ubiquiti system

	10 units	100 units
--	----------	-----------

Access Points	\$3,000	\$30,000
Concentrator/switch	\$250	\$2,500
Installation (\$250/Access Point)	\$2,500	\$25,000
Maintenance (4 years)	\$1,300	\$13,000
Total	\$7,050	\$70,500

Table8. Low-end Cisco system

	10 units	100 units
Access Points	\$4,000	\$40,000
Concentrator/switch	\$1,150	\$15,000
Installation (\$250/Access Point)	\$2,500	\$25,000
Maintenance (4 years)	\$2,060	\$22,000
Total	\$9,710	\$102,000

5.2. Adoption Project Costs

In written comments, Yolo County HA recommended the Commission adopt a minimum total project costs threshold of \$5,000 and a maximum of \$25,000. Mutual Housing estimated a cost of about \$120,000 per year for their ideal adoption efforts. Finally, CETF believes there should be a reservation based on geography, taking into account variations in the cost of doing business. Adoption projects need to achieve sustainable adoption and include all of the essential program components, such as digital literacy training, technical support, coaching or mentoring, and affordable computing devices. CETF also believes it would probably be cost effective to design an overall evaluation component that is program wide and administered by the CPUC.

CD staff also gathered information on adoption program costs from PSCs that already engage in these activities. San Bernardino County Housing Authority's (San Bernardino HA) program, funded in part by BTOP, sought to serve 4,500 residents living in PSC or section 8 housing at an estimated total project cost of \$1,600,000, or \$355 per resident. This estimate does not include bringing bandwidth to the MPOE. San Bernardino County HA and its partner organization paid for almost 30 percent of total project costs.

HACLA, through its Smarter Broadband Partnership, implemented an adoption program at two sites. The program cost roughly \$270,000, not including bringing bandwidth to the minimum point of entry (MPOE), and sought to serve 900 people. The total cost for this project was approximately \$270,000, KPI funded 19 percent of the project and about 6 percent of the project costs were funded through revenue obtained from \$25 voluntary donations from residents in exchange for refurbished computers.

The San Buenaventura HA established several computer labs for adoption programs. One of those computer labs cost about \$9,000 and provided a PSC with six computers. We do not have an estimate regarding how many residents benefited from this project.

HACOLA estimates training costs at \$200-\$300 per resident. HACOLA previously sought donations of computers from So Cal Edison and One Economy for their adoption programs.

5.3. Vendor Requirements

After inspecting several PSC sites and having multiple conversations with potential vendors, CD staff determined that the Commission may also wish to provide applicants with guidance regarding vendor selection criteria. It is critical to the CASF Public Housing Program's success that PSC management consult with skilled professionals and receive competitive quotes.

Workshop participants seemed to share this assessment. At the March 19th workshop in Fresno, Innovative IT suggested that the Commission may wish to require vendors to submit as experience a summary of three completed projects of a similar nature, with contact information for the supervisor and a brief scope of work, as is done for E-Rate projects.²⁸ Innovative IT urged the Commission to adopt stringent vendor requirements to ensure applicants hire trusted contractors, though it also noted that many non-profit developers have already connected at least one property and likely will have contacts with trusted vendors. CETF encouraged requiring three years of affordable housing experience, but at a minimum, experience working in a multi-dwelling unit environment. The City of Madera suggested requiring certifications used in similar projects, while Novarum proposed a two hour design review built into the project applications.

At the same workshop, Novarum asserted that this class of technology is becoming easier to install, so much so that residents could potentially install it themselves. However, the Commission should require equipment with greater capacity, which Novarum believes will require expert installation. Novarum also cautioned that vendors with more experience may charge more due to that experience. Additionally, there is a risk that the vendor may have significant experience, but with obsolete technology.

While some potential applicants, especially housing authorities, may already have experience hiring qualified vendors and thus, have developed their own requirements and processes to hire those vendors, non-profit developers may not. In fact, CD staff met with potential applicants that do not have that experience. Therefore, CD staff wishes to provide general guidelines that entities which have not previously hired vendors may use to implement their grants. Although an applicant will not need to hire a vendor as part of its application, the application is a grant request and therefore an accurate cost estimate is critical to the application process.

5.4. Staff Findings and Recommendations

Finding 5. While it is difficult to estimate the number of unconnected PSC units in California, the \$20 million in funds the Commission may award under the infrastructure portion of the CASF Broadband Public Housing Account will only reach a limited number of units. If the average cost is

²⁸ The E-Rate program helps ensure that schools and libraries can obtain telecommunications and Internet access at affordable rates. <http://www.universalservice.org/sl/about/getting-started/default.aspx>

\$500 per unit, the Account will connect 40,000 units. Depending on the speeds the Commission requires, ideally the Account will connect 20,000-40,000 units.

Finding 6. Residents will only use the Internet if they believe it is relevant to their lives. Applicants will need to provide connections at sufficient speeds to support video applications, including those needed for K-12 curriculum, while also ensuring residents possess digital literacy skills and providing technical support when the equipment is not functioning as expected.

Finding 7. PSC residents will purchase broadband Internet connectivity only if it is affordable. Staff in general found that PSC residents believed paying less than \$10 per month was optimal, in line with the monthly prices under Comcast's Internet Essential Program, while paying above \$25 was generally not affordable.

Finding 8. Since the CASF Broadband Public Housing Account grants will not fund operational costs, applicants will need to determine their bandwidth source and the cost of that bandwidth. The most likely choices for bandwidth are telephone companies and other major ISPs, such as cable companies. CD staff noted that some cities, such as San Francisco, already possess municipally-owned fiber, dramatically reducing costs. CD staff inspected another property that secured a very favorable deal with an ISP and was paying \$170/month for bandwidth for a 48-unit property. CD staff inspected another property that paid roughly \$3,000 per month to provide bandwidth for 600 units.

Finding 9. Hiring a qualified vendor is critical, given the complexities of network installation and design.

Finding 10. Many potential grantees will be unable to charge residents for broadband Internet service as part of agreements with HUD and TCAC. These entities prohibit PSCs from charging anything over a predetermined amount as a condition of living at the PSC. Many PSCs are already charging that amount and do not have room to add to that. Applicants may want to follow the example of the Housing Authority of the County of Los Angeles (HACOLA), and negotiate with an ISP to provide low-cost broadband Internet service directly to residents, as discussed in the Project Costs subsection.

Finding 11. Providing PSC residents with Commission-defined served speeds may be beyond the financial wherewithal of some applicants, due to the cost of obtaining bandwidth that supports served speeds.

Recommendation 2. In considering potential vendors to install the equipment, applicants should ensure that the bidding vendor is a licensed CA contractor, thereby ensuring that the applicant is properly protected, the workers are insured and that the project is adhering to local laws and regulations. In particular, applicants may wish to consult vendors possessing either a C-7 Low Voltage Systems Contractor License²⁹ or a C-10 Electrical Contractor License.³⁰

²⁹ A communication and low voltage contractor installs, services and maintains all types of communication and low voltage systems which are energy limited and do not exceed 91 volts. These systems include, but are not limited to telephone systems, sound systems, cable television systems, closed-circuit video systems, satellite dish antennas,

Applicants should also ensure that the vendor is manufacturer certified on the equipment it proposes to install and has verifiable experience deploying the solution/product being proposed, including experience working in multi-dwelling units. Applicants should also ensure that the bidding vendor is capable of providing on-going support to the project for the duration of the support commitment, including technical support. The bidding vendor also should be capable of providing maintenance.

6. Eligible Applicants

As amended by AB1299, California Public Utilities Code §281 (f)(2) defines a “publicly supported community,” as “a publicly subsidized multifamily housing development that is wholly owned by either of the following³¹:

(i) A public housing agency that has been chartered by the state, or by any city or county in the state, and has been determined an eligible public housing agency by the United States Department of Housing and Urban Development.

(ii) An incorporated nonprofit organization as described in Section 501 (c)(3) of the Internal Revenue Code (26 U.S.C. Sec. 501(c)(3)) that is exempt from taxation under Section 501 (a) of that code (16 U.S.C. Sec. 501(a)), and that has received public funding to subsidize the construction or maintenance of housing occupied by residents whose annual income qualifies as ‘low’-or ‘very low’ income according to federal poverty guidelines.”

6.1. Discussion

In written comments and in discussions during the four public workshops and after, several entities expressed concerns to CD staff that clause (ii) may unintentionally restrict most non-profit housing developers from participating in the CASF Program under the Broadband Public Housing Account because most housing non-profits are engaged in limited partnerships with for-profit entities.

Innovative IT,³² Mutual Housing, Kern County HA, Yolo County HA and the CETF submitted written comments in response to the Revised Scoping Memo.³³ Each entity noted that non-profits

instrumentation and temperature controls, and low voltage landscape lighting. Low voltage fire alarm systems are specifically not included in this section. (California Code of Regulations, Title 16, Division 8, Article 3).

<http://www.cslb.ca.gov/generalinformation/library/licensingclassifications/C-7LowVoltageSystems.asp>

³⁰ An electrical contractor places, installs, erects or connects any electrical wires, fixtures, appliances, apparatus, raceways, conduits, solar photovoltaic cells or any part thereof, which generate, transmit, transform or utilize electrical energy in any form or for any purpose.

<http://www.cslb.ca.gov/GeneralInformation/Library/LicensingClassifications/C10Electrical.asp>

³¹ Unless otherwise noted, statutory references are to the Cal. Pub. Util. Code.

³² The following affordable housing developers publicly endorse Innovative IT’s comments: Self-Help Enterprises, Fresno Housing Authority, USA Properties Fund, Preservation Partners, Retirement Housing Foundation, Housing Authority of the County of Santa Barbara and Deep Green Housing.

entities manage a significant portion of the PSC inventory. Many of these non-profit entities have for-profit limited partners in order to take advantage of federal or state tax credits intended by the IRS to assist with affordability. This type of corporate partnership structure is a technical vehicle for producing affordable PSCs managed by non-profits. CETF further argued that the legislation's author intended for PSCs managed by these limited partnerships to be eligible for CASF AB 1299 funds so long as the applicant is the non-profit general partner. Although the Yolo County HA noted that a significant portion of PSC units are managed by non-profits, it argued that the Commission should prioritize public housing ahead of non-profits, as these properties in general, are older, serve a majority of households earning below 30 percent of median income and due to federal budget issues, have extremely limited resources to support broadband access for their residents.

At the March 10th Commission workshop in San Francisco, the Community Housing Opportunities Corporation (CHOC) also noted that many PSCs are funded by tax credits with for profit partner entities, expressing concern that rural housing projects may be excluded since many rural housing entities need to solicit investor or loan financing.

At the March 25th Commission workshop in Los Angeles, two participants urged the Commission to consider a more narrow interpretation of the statute. The Inland Empire Regional Broadband Consortium (Inland Empire RBC), a CASF Consortia Account grantee, recommended as narrow an interpretation of the definition of eligibility as possible, with housing authorities expressing their interest by area, arguing that housing authorities already have experience working with entities like the Commission. Once housing authorities have had the opportunity to participate, then the Commission could expand eligibility to more potential applicants with additional funds. San Buenaventura HA also supported a narrow definition to ensure funding to mostly housing authorities, arguing that the people who need it most are the low income populations served by public housing authorities. Further, the San Buenaventura HA asserted that PSCs funded by tax credits have more upfront funds for broadband access and newer properties, while housing authorities maintain older properties in need of rehabilitation. Thus, housing authorities could use these funds to install broadband Internet infrastructure while rehabilitating the buildings.

The Southern California Association of Non Profit Housing (SCANPH) countered that the intent of the statute is to permit low income populations to obtain access to broadband Internet so considering whether the housing is owned by a for-profit or non-profit entity is irrelevant. Rather, the Commission should merely ensure that low income populations are getting access. There are other agencies that have deemed for-profit entities which have non-profit partners eligible for funds, so this model could be replicated here. Cathy Creswell, a former HCD Director and consultant to CETF, added that non-profit housing entities are also in need of resources, as there is an overstock of housing that needs these resources the CASF Broadband Public Housing Account may offer.

During each workshop and other informal conversations, numerous participants posed questions regarding the eligibility of specific housing entities such as affordable senior housing, housing on

³³ CETF's comments also reflect the views of the following organizations: LINC Housing, Mission Economic Development Agency (MEDA), the Housing Authority of the City of Los Angeles (HACLA) and the Southern California Association of Non-Profit Housing (SCANPH).

tribal lands, Section 8 housing, homeless shelters and publicly supported single family homes in rural communities.

6.1.1. Staff Findings and Recommendations

Finding 12. In its research, CD staff found that the IRS considers an exempt organization's participation as a general partner in a limited partnership with for-profit limited partners as consistent with the organization's exempt status under Internal Revenue Code Section 501(c)(3).³⁴

Finding 13. The statute is clear that eligible grantees are either chartered public housing authorities or publicly funded non-profit housing developers seeking to connect multifamily housing developments. Applicants able to meet these criteria will receive consideration; applicants that cannot are ineligible, per the statute.

Recommendation 3. Many non-profit housing developers involved in limited partnerships with for-profit entities meet the requirements of the statute as written. Therefore, CD staff recommends that the Commission adopt CASF Broadband Public Housing Account regulations reflecting the statute as written, using current IRS policy.

6.3. Documentation to Prove Eligibility

The Revised Scoping Memo requested comments on the documentation the Commission should require from an applicant to prove eligibility. The Commission received written comments from five entities.

6.3.1. Discussion

Innovative IT and CETF proposed that the Commission require documentation showing that an entity is a government agency or an IRS letter approving its status as a 501(c)(3) non-profit entity incorporated for the purposes of providing affordable housing. Similarly, Kern County HA recommended that the Commission require a non-profit applicant to provide an IRS tax exemption letter and a certificate of limited partnership, in the case of limited partnerships.

³⁴ *Plumstead Theater Society v. Commissioner*, 74 T.C. 1324 (1980), aff'd, 675 F.2d 244 (9th Cir. 1982), as discussed in Exempt Organizations-Technical Instruction Program for FY 2003, available at <http://www.irs.gov/pub/irs-tege/eotopicg03.pdf>. The IRS modified its position in response to the *Plumstead* case, acknowledging that "a partnership arrangement could be structured so as to preclude a conflict between an exempt organization's exempt purpose and the fiduciary obligations of a general partner to its limited or co-general partners." The IRS adopted a two-part analysis to determine whether participation adversely affects exemption: 1) inquiring if the partnership serves its exempt purposes and 2) inquiring if the partnership arrangement permits the organization to act exclusively in furtherance of exempt purposes rather than for the benefit of for-profit partners.³⁴ Limited partnership organizations meeting the two-pronged criteria receive and maintain their 501(c)(3) status.

ORA submitted that since the statute states that HUD determines eligibility, an applicant should be able to provide this proof to the Commission. Likewise, an applicant should be able to provide tax forms to prove its non-profit status, as required by the statute.

Mutual Housing proposed requiring an applicant to provide a copy of its Organizational Clearance Certificate issued by the California Board of Equalization and that the managing general partner provide: 1) the limited partnership agreement, if any, and 2) a copy of the IRS determination letter for each general partner.

At the March 25th workshop in Los Angeles, the City of San Buenaventura HA noted that HUD provides chartered public housing agencies with an annual contribution contract, which the Commission could use as proof of a chartered housing authority's status.

6.3.1. Staff Findings and Recommendations

Recommendation 4. CD staff proposes that the Commission require a housing authority applying for CASF Broadband Public Housing Account funds submit its Annual HUD Contributions Contract. A housing authority applicant must include its HA Code in the application, allowing CD staff to verify its certification, along with its most recent HUD Public Housing Assessment System (PHAS) score.³⁵

Recommendation 5. CD staff recommends the Commission require non-profit applicants to submit an IRS letter approving the applicant's status as a 501(c)(3) entity incorporated for the purposes of providing affordable housing, which must include the applicant's Tax Identification Number, along with an award letter from an agency such as TCAC, proving its receipt of public funding for affordable housing purposes.

6.4. Challenges Based on Access Denials or Existing Broadband Service

At an April 29, 2013 hearing of the California Assembly Utilities & Commerce Committee, cable industry representatives claimed that in some cases PSC management denied their companies access

³⁵ PHAS reviews indicators such as the physical condition of an agency's housing stock, its financial condition, management performance, and capital spending. PHAs that score 90percent or better overall, and at least 60percent on all individual indicators (50percent on the capital fund indicator) are considered high performers. Standard performers receive an overall score of at least 60percent and score at least 60percent on all of the sub-indicators (50percent on the capital fund indicator). PHAs that score less than 60percent overall, or on two or more of the PHAS indicators, are considered "troubled." Once a PHA is designated as troubled, HUD must notify the PHA of its status. If a troubled PHA fails to make adequate progress, it may be found to be in substantial default of its Annual Contributions Contract. According to HUD data from May 2012, 48percent of PHAs were high performers, 26percent were standard performers, and 23percent were substandard, most frequently for management reasons. About 2percent of PHAs were considered troubled.

rights to install lines that would enable broadband Internet service to individual units.³⁶ In response to those concerns, AB 1299 included language that a PSC may be eligible for CASF Broadband Public Housing Account funds only if it can verify that it has not denied an ISP access to the property for which the grant or loan is sought.

To implement this provision, the Revised Scoping Memo asked for guidance on the following questions:

- What is the appropriate documentation the Commission should require to verify that a PSC has not denied access to any broadband provider?
- By what process may a broadband Internet provider submit documentation that a PSC denied it access?
- Should the Commission place limits on the time period in which access denials are valid? If yes, what should that time period be?
- Should the Commission consider affordability of broadband Internet service or other considerations when examining access denials?

6.4.1. Discussion

The Commission received five written comments in response to the above questions. CETF, Yolo County HA and Kern County HA all recommended requiring an applicant to self- certify that it did not deny an ISP access to its property.

To determine how an ISP may challenge a CASF Broadband Public Housing Account application, Yolo County HA suggested that the Commission develop a written dispute resolution process allowing the ISP to submit documentation outlining its challenge to a specific application. CETF recommended that prior to the application deadline, the Commission invite all ISPs to submit a list of PSCs that denied access. Kern County HA recommended requiring a letter from the ISP to the PSC owner offering to provide service and a denial letter from that PSC's owner. ORA contended that any ISP that was denied access to connect to a PSC will come forward in its own in the event a PSC applies for CASF funds.

At this time CD staff is aware of one instance where a PSC property owner denied an ISP access to its property. At the March 25th workshop in Los Angeles, HACLA discussed an instance when it denied a provider access to its property, alleging that the provider wanted exclusive access to the property in question, with HACLA paying for trenching costs and an agreement that an increasing number of units would subscribe overtime.

Given this limited data, it seems especially important for the Commission to seek more information before it denies an applicant's request for CASF Broadband Public Housing Account grant funds

³⁶ Legislative analysis prepared by California Senate Energy, Utilities and Communications Committee staff for a July 2, 2013 hearing

due to this reason. For example, when did the denial take place? Why did the property manager deny access? In written comments, ORA concurred, recommending that the Commission consider the circumstances that may have resulted in a denial. “The more important issue for the Commission to consider is why the PSC denied access, [including issues] such as unaffordability and exclusive contract rights.”

CETF recommended that the CPUC consider denials beyond the previous two to three years not valid, while Kern County HA recommended one year. At the March 25th workshop in Los Angeles, the City of San Buenaventura HA also agreed that the Commission should require that a provider challenging an application must provide written documentation that property management denied it access. City of San Buenaventura HA recommended that a denial should be valid for three years, since a public housing authority could have a different board or manager after that time. At the same workshop, the Inland Empire RBC also supported requiring documentation from challengers and suggested that an applicant self-certify in its application that it did not deny a provider access to its property.

Yolo County HA, Kern County HA, CETF, ORA and Mutual Housing all agreed that the Commission should consider affordability when examining an access denial. At the March 25th workshop in Los Angeles, CD staff asked participants to vote by a show of hands on what was an affordable rate. Five of the six participants raised their hands to indicate \$10 per month as an affordable rate. No workshop participant thought monthly broadband Internet service fees in excess of \$20 were affordable. CD staff also reviewed a survey provided by Yolo County HA (working with University of California, Davis) which surveyed residents from three Yolo County HA PSCs. Fifty percent of respondents indicated they would be willing to pay \$5-\$15 per month for broadband Internet service. Another 35 percent indicated they would be willing to pay \$15-\$25.

At the March 19th workshop in Fresno, the Kern County HA suggested determining affordability on a regional income basis. Similarly, at the March 25th workshop in Los Angeles, the Inland Empire RBC suggested using a percentage of median income for each county.

At the March 25th workshop in Los Angeles, Race Telecommunications argued that there could be other reasons beyond price for a housing property manager to deny an ISP access to its property. For example, the ISP may require all tenants subscribe. The City of San Buenaventura HA requested that the Commission also consider the impact to buildings as a reasonable cause for denial. For example, the City of San Buenaventura HA likely would not allow a satellite provider to install a satellite dish on a roof due to concerns that it might impact the warranty on the roof. Additionally, such installation could permit leaks and allow termites to enter the building. Sometimes tenants may place their satellite wire through air ducts, causing damage. SCANPH recommended the Commission not consider aesthetics as just cause.

6.4.2. Staff Findings and Recommendations

Finding 14. The CASF's priority has been funding broadband infrastructure in unserved areas, and secondly in underserved areas.³⁷ AB1299 adds a variation to the program to help connect PSC residents, which includes residents in CBGs that would not otherwise be eligible for CASF funding because they are shown as "served," as defined by the Commission, by a broadband Internet provider on the California Broadband Availability Map.³⁸ As stated by the law's author, "a broadband cable running to the street or curb does not bring Internet access to public housing residents if the building's individual units are not wired for broadband."³⁹

Finding 15. As written on the Commission's website, the current challenge process for the CASF program is as follows:

"Any party that challenges a CBG as being served or (for applications for unserved areas) underserved will have to provide documentation that the CBG is in fact already served (e.g., a copy of a customer bill). Commission Staff will then verify this information, along with the applicant's documentation supporting its assertion that the CBG is unserved. Once Staff makes a final determination, we will notify the applicant of our determination

If the challenged CBG is determined to be 'served' or (for applications for unserved areas) 'underserved,' the application will be rejected. The applicant, however, has the option to submit a modified application in subsequent rounds of proposals, either for the same area (provided that the parts of the CBG that are not 'unserved' are omitted from project cost and budget considerations) or for only those parts of the CBG that are unserved."

Recommendation 6. Based on Finding 14, staff recommends the Commission prioritize those PSCs which are not wired for broadband. Thus, as detailed further in Section 10.1 on Timelines, PSCs without wiring may begin to apply for funds before those PSCs which already have wiring. With this in mind, CD staff proposes that the Commission adopt a challenge process for the CASF Broadband Public Housing Account for applicants which are not already wired for broadband that is modified from the process used for the CASF Infrastructure Grant Account

Recommendation 7. Currently, entities challenging CASF Infrastructure Grant applications must submit maps of their service area(s) and addresses to enable CASF staff to verify that the area(s) is (are) already served and not underserved. Similarly, CD staff recommends that, if an ISP challenges a CASF Broadband Public Housing Account application on the grounds that it already provides access at the property in question, the Commission should require the ISP to provide documentation that its services are available to 100 percent of residents in this challenged property within three weeks of CD posting the application on its website. The ISP must submit the number

³⁷ D.12-02-015 at A1-2.

³⁸ *Id.* at 17-18.

³⁹ California Senate Energy Utilities and Communications Committee, AB 1299 Analysis, prepared for July 2, 2013 hearing

of customers living on the property that subscribe to its service, billing documents and speed tests to prove that it provides residents broadband Internet service at speeds equal to what the applicant proposes to provide. Challenges containing incomplete data will be denied. CD will investigate this challenge. The applicant will have the opportunity to rebut the challenge by showing with adequate documentation that services are not available to 100 percent of residents, or that although the units may have wiring to support broadband Internet service, residents do not subscribe to that service. As detailed in Section 10.1, PSCs with wiring to all units are eligible to apply beginning on the first Monday in July 2015.

Recommendation 8. If an ISP challenges a CASF Broadband Public Housing Account application on the grounds that a housing authority or non-profit developer denied the ISP access to its property within twelve months prior to submitting its CASF Broadband Public Housing Account application, CD staff recommends that the Commission require the ISP to provide written documentation that it offered to provide service to the property, including details such as price and key conditions, along with written documentation of the property manager denying the ISP access. The ISP must provide this documentation within three weeks of CD staff posting the application online. Incomplete challenges will be dismissed. Additionally, CD staff recommends that the Commission adopt rules allowing staff to deny a challenge on the grounds that property management's denial was reasonable. Specifically, if the ISP proposed to charge residents more than \$20 per month, CD staff shall deny the challenge. The Commission may entertain other reasons in determining a reasonable denial, including access denials due to bulk subscribership requirements and exclusive marketing agreements.

6.5. Existing Access for Adoption Projects

Under §281 (f)(4) (A), a PSC may be eligible for CASF Broadband Public Housing Account adoption funds only if the residential units have access to broadband Internet services or will have access at the time the funding for adoption is implemented. To assist in implementing this provision, the Revised Scoping Memo asked the following two questions:

- The Assigned Commissioner proposes to define “the time funding for adoption is implemented” as the time that the application is approved. Is this a reasonable interpretation?
- How should the Commission verify whether residential units in a property have or will have access to broadband services at the time the funding for an adoption project is implemented?

6.5.1. Discussion

The Commission received responses from Yolo County HA, Mutual Housing, CETF and Kern County HA.

In response to the Revised Scoping Memo, Yolo County HA, Kern County HA and Mutual Housing all agreed with the Assigned Commissioner's interpretation regarding the definition of “the time funding... is implemented.” CETF added that it envisions an applicant would be eligible for funding for both CASF Broadband Public Housing Account infrastructure and adoption funds at

the same time, but if an applicant requested funds for both activities, the Commission would not release funding for the adoption component until the connectivity component was completed. ORA also agreed with this interpretation, but recommended requiring confirmation that a PSC is connected before releasing the adoption funds.

In response to the how the Commission should verify access, Yolo County HA, Mutual Housing, CETF and Kern County HA all suggested providing documentation from the ISP.

6.5.2. Staff Findings and Recommendations

Recommendation 9. CD staff proposes that the Commission require applicants to provide documentation from the ISP that residents receive broadband Internet service. In the event an applicant requests funding for both infrastructure and adoption activities, CD staff recommends that the Commission award both grants concurrently, but that CD staff not release the funds until the grantee provides confirmation that residents are connected.

7. Regional Distribution

Section 281(h)(5) requires that “To the extent feasible, the Commission shall approve projects for funding from the Broadband Public Housing Account in a manner that reflects the statewide distribution of publicly supported communities.” Based on this statutory language, the Revised Scoping Memo asked “in what manner should the Commission determine this distribution method?” and “what data could be used to make this determination?”

7.1. Discussion

In written comments, Yolo County HA and CETF recommended that the CPUC use an existing method such as the regional formula utilized by TCAC to allocate its 9 percent tax credit program for affordable housing developers.⁴⁰ Yolo County HA argued that this would help protect the interests of rural and tribal communities in addition to underserved urban areas. CETF also suggested using the methodology used by HCD to distribute funds. Kern County HA suggested using a predetermined formula that would assign point values to each application or instead, awarding funds on a first come first served basis.

Public workshop participants raised several options for creating a regional distribution method. Several participants expressed concerns about using a first-come, first-served method, arguing that it would disadvantage entities with fewer resources. At the March 25th workshop in Los Angeles, Cathy Creswell advocated for a regional distribution divided by north, south, west and east regions and others suggest performing an analysis of need within those regions or counties. At the same workshop CD staff proposed using a rural set aside as a simpler method to effectuate the statutory language. None suggested a specific methodology or percentage to implement a rural set aside.

⁴⁰William J. Pavao, Geographic Apportionment Update, Aug. 31, 2012, http://www.treasurer.ca.gov/ctcac/apportionment/geographic/update_memo.pdf

In separate discussions CD staff spoke with TCAC staff to learn how it developed its rural set aside percentage.⁴¹ TCAC administers the federal Low-Income Housing Tax Credit Programs, one is referred to as the 9 percent program and the other is referred to as the 4 percent program. These terms refer to the approximate percentage of a project's "qualified basis" a taxpayer may deduct from their annual federal tax liability in each of ten years. Both programs were created to encourage private investment in affordable rental housing for households meeting certain income requirements. The 9 percent program puts aside 20 percent of funds for applicants in rural areas and also apportions a percentage of funds to different regions of the state. After the rural set aside is met, projects from the same geographic region compete against each other for the percentage of funds allocated for each region. TCAC established its 20 percent set aside in 1989 based on the proportion of the population living in rural areas at the time.

TCAC shared with CD staff the most recent methodology used to create their updated geographic allocations which staff used to determine that about 4 percent of California's population lives in rural areas. TCAC has not updated its rural set aside proportion. As noted in the Lessons Learned and Best Practices section, the California Housing Partnership Corporation estimated 400,000 PSC units in California and that roughly 15 percent of these units are located in rural areas.

7.1.1 Staff Findings and Recommendations

Finding 16. Although CD staff research found that currently 4 percent of the population of the State live in rural areas, CD staff finds that the California Housing Partnership Corporation's estimate of 15 percent is more applicable to PSCs.

Recommendation 10. CD staff proposes that the Commission establish a rural set aside of 15 percent to effectuate the language of §281(h)(5), meaning that the Commission will reserve 15 percent of total infrastructure and adoption funds for applicants in rural areas, as defined by §§50199.20 and 50199.21 of the Cal. Health and Safety Code.

8. Infrastructure Projects

8.1. Overview and Goals

The goal of the CASF program is, no later than December 31, 2015, to approve funding for infrastructure projects that will provide broadband Internet access to no less than 98 percent of California households. AB 1299's author intends for the CASF Broadband Public Housing Account

⁴¹ Cal. Health and Safety Code §§ 50199.20 and 50199.21 define "rural" as meeting one of the following criteria: 1. it is in area that is eligible for federal program under the United States Department of Agriculture (USDA) Section 515 program; 2. the project is in a city with a population of 40,000 or less or in a non-urbanized area; 3. the project is in the unincorporated area of a county and is not in an urbanized area

to help close the Digital Divide in California by targeting residents living in PSCs.⁴² AB 1299's author also believed that a contributing factor to the Digital Divide in PSCs is "the costs associated with building or upgrading the infrastructure and maintaining the network" based on testimony received by housing representatives at a public hearing.⁴³ Therefore, § 281 (f)(3) authorizes \$20,000,000 for grants and loans to a PSC to finance projects that connect a broadband network to a PSC, with the requirement that funds in the CASF Public Housing Account be awarded by December 31, 2016. Unencumbered funds will be returned to the CASF Infrastructure Grant Account at that time.⁴⁴

8.2. Grants and Loans

Section 281 (f) (3) states that "not more than twenty million dollars (\$20,000,000) shall be available for grants and loans to a publicly supported community to finance a project to connect a broadband network to that publicly supported community." Based on this language, the Revised Scoping Memo asked if the Commission should offer both grants and loans and, if so, what percentage of the total project cost should be financed using either grants or loans and if the Commission should impose a maximum amount or percentage that it will fund, and what, if any matching funds should it require of applicants.⁴⁵ Finally, the Revised Scoping Memo asked whether the Commission should use the loan terms from the CASF Revolving Loan Account.⁴⁶

8.2.1. Discussion

Although several entities commented that the Commission should offer a combination of grants and loans, Innovative IT and CETF wrote that funding must be primarily, if not exclusively, grants with no match funding requirement because PSCs often lack operating margins to contribute to upfront infrastructure costs or to repay loans. Both entities proposed that the Commission allow applicants to use ongoing expenses such as network maintenance, the reoccurring cost of bandwidth, technical support, digital literacy training, or user fees as eligible matching funds. In its written comments, Mutual Housing requested that the Commission provide 100 percent grant funding for communities that house the greatest percentage of very low income residents. It argued that communities that house these residents charge the least amount in rent, meaning they have the least amount of cash flow available to support these kinds of projects. In addition, using their limited cash flow to cover ongoing operating costs further limits their ability to take on more debt.

At public workshops, many participants concurred that PSCs generally do not have a sufficient revenue stream to justify applying for a loan. SCANPH and City of San Buenaventura HA suggest that there might be some flexibility if the interest rate was lower than what the CPUC has offered

⁴² Assembly Utilities and Commerce Committee Analysis, Telecommunications: Universal Service Programs, California Advanced Services Fund at 2. April 29, 2013.

⁴³ *Id.*

⁴⁴ §281 (b)(1).

⁴⁵ Revised Scoping Memo at A- 2.

⁴⁶ *Id.*

under the CASF's Revolving Loan Account. In the alternative, Yolo County HA believes it could consider loans if the housing authority could act as a utility. But, if an entity did choose to apply for a loan, Mutual Housing believes that the equipment could be used as collateral, but the interest of any CPUC deed of trust would have to be subordinate to those of the senior or existing lenders. Lastly, ORA supports using the rules and guidelines implemented for the CASF Revolving Loan Account because they have already been approved by the Commission and are currently used by staff.

In written comments, CETF argued that a set maximum or minimum dollar amount fails to take into consideration the fact that the cost of installing and maintaining networks will vary depending on issues related to 1. Individual building configuration; 2. Multi-building complex design; 3. Existing cable infrastructure and quality; 4. Building material utilized in construction; 5. Number of units; and 6. Telecommunication services available. Rather, the CPUC should use an acceptable cost per unit range based on documented evidence from the workshop process and additional research by CD staff. Additionally, placing a maximum cap might result in discouraging applicants from requesting funding for multiple projects within their portfolio which can increase efficiency and accelerate the impact of AB 1299 funds. Yolo County HA recommended that there should be a range of \$30,000 to \$1,000,000 total per application depending on the type of work to be done.

CD staff asked in public workshops whether it should require matching funds. ORA supported requiring matching funds so that grant funds may be distributed among more projects. Both ORA and CETF asserted that requiring matching funds would incentivize grantees to develop sustainable projects. Almost every workshop participant, party that submitted comments and other entities CD staff met with raised concerns that many housing communities have few resources to provide matching funds. Furthermore, they are limited in terms of raising revenue through charging residents monthly fees for broadband Internet service because many PSCs cannot charge residents for broadband Internet service as part of other regulatory requirements. Numerous workshop participants requested that the Commission accept matching funds in any other form besides cash up front, including the use of in-kind contributions, and maintenance costs.

Cathy Creswell also noted that if an applicant opted to apply for other grants in order to be able to provide a cash match for the CASF Broadband Public Housing Account, applicants would need additional time to apply and obtain those grants. Lastly, CETF and HACOLA suggested using possession of match funding as a criterion to prioritize applications, but not as a strict requirement for all applications.

CD staff learned in a separate meeting with vendors that maintenance costs may comprise 15-20 percent of total project costs, though that cost could escalate to up to 30 to 40 percent of project costs if the network must be maintained for five years. Based on this, CD staff questioned whether a 15 percent match which includes maintenance costs over a five year period as a source of match funding would be acceptable to PSCs. CETF commented that at one of its project sites where it has implemented a local area network (LAN) in partnership with a local entity, total cost of maintenance on a monthly basis is about \$2,000 for 600 units. Based on this, it commented that using maintenance for match would be acceptable because if grantees were unable to sustain the network after building it, the project would be unsuccessful.

8.2.2. Staff Findings and Recommendations

Finding 17. Although many PSCs may be unable to take on additional debt, the statute states that “not more than twenty million dollars (\$20,000,000) shall be available for grants *and* loans” (Emphasis added).

Finding 18. Although CD staff understands that some vendors will package the cost of maintenance with the initial installation costs, CD staff finds that requiring applicants to cover the cost of maintenance and operations ensures that the Commission funds only sustainable projects.

Recommendation 11. CD staff recommends the Commission provide both grant and loans as options for PSCs. CD staff proposes using the same terms as those used for the CASF Revolving Loan Account.

Recommendation 12. CD staff recommends the Commission award grants to finance up to 100 percent of the installation costs, but not maintenance or operation costs. Grantees must have the ability to maintain and operate the network for five years independent of Commission funding.

8.3. Reimbursable Costs

Decision 07-12-054, which created the CASF Infrastructure Grant Account, limited grant awards to capital expenses, expressly prohibiting the use of CASF funds to finance operating or maintenance expenses.⁴⁷ The statute, as amended by AB 1299 is silent regarding what constitutes an eligible project cost. The Revised Scoping Memo asked for guidance on what constitutes an eligible cost.

8.3.1. Discussion

In general, workshop participants and other interested parties agreed that CASF Broadband Public Housing Account funds are intended for home connectivity, or from the MPOE to individual units. Participants suggested funding items such as towers, fiber optics, mesh networks, conduit access feeds, network and wireless equipment, low voltage costs, electrical costs, installation labor, end-user modems, among other items. Additionally, in written comments, CETF and Innovative IT suggested that the Commission determine reimbursable costs by instituting an acceptable per unit cost range and fund costs within that range. Lastly, both CETF and Innovative IT note that applicants in rural or remote areas may not have broadband Internet infrastructure near their property to bring bandwidth to the MPOE. In that situation both entities recommend that those applicants apply for CASF Infrastructure Grant funds.

⁴⁷ Interim Opinion Implementing California Advanced Services Fund (2007) Cal. P.U.C. Decision (D.) 07-12-054 at 57.

8.3.2. Staff Findings and Recommendations

Finding 19. CD staff finds reasonable participants' comments that the CASF Broadband Public Housing Account funds are intended to fund inside wiring and similar items that provide units with a connection from the MPOE to individual units. Legislative analysis supports this position.⁴⁸

Recommendation 13. Based on Finding 16, CD staff recommends the Commission approve reimbursement for the following expenses:

- All networking equipment, both hardware and software, including wireless access points;
- Low voltage contracting, provided it does not include major rehabilitation, demolition or construction;
- Modems or routers, but not computers or human interface devices;
- Engineering & design;
- Hardware warranty;
- Installation labor from the MPOE to the individual unit; and
- Taxes, shipping, insurance.

Recommendation 14. CD staff recommends the Commission continue to remain neutral on technology and does not recommend requiring installation of specific equipment. CD staff also recommends that the Commission decline to reimburse building rehabilitation costs. Additionally, since PSCs will generally pay a monthly fee to acquire bandwidth from the ISP, CD staff recommends the Commission require applicants to pay for these costs.

8.4. Evaluation Criteria

Section 281 governing the CASF Broadband Public Housing Account does not provide guidance with respect to the criteria the Commission should use to evaluate applications, except that it instructs the Commission to consider the availability of other funding sources for either adoption or infrastructure projects. Also, the Commission may require an applicant to provide match funding, but it may not deny funding solely because the applicant receives funding from another source.⁴⁹

As noted in the Revised Scoping Memo, the Commission will need to identify criteria for evaluating CASF Broadband Public Housing Account grants for infrastructure projects. In evaluating CASF Broadband Infrastructure Grant requests, CD staff currently assesses applications based on the following criteria:

⁴⁸ Assembly Utilities and Commerce Committee Analysis, Telecommunications: Universal Service Programs, California Advanced Services Fund at 4. April 29, 2013.

⁴⁹ §281 (f)(6).

- Funds Requested per Potential Customer;
- Speed;
- Financial Viability;
- Pricing;
- Total Number of Households in the Proposed Area;
- Timeliness of Completion of Project;
- Guaranteed Pricing Period
- Low-Income Areas; and
- Community Support⁵⁰

With that in mind, the Scoping Memo asked the following questions:

- Should the Commission use similar criteria used in reviewing CASF Infrastructure Grant applications when evaluating infrastructure grants for PSCs? What modifications should be made, if any?
- Should the Commission adopt additional criteria for infrastructure grants for publicly supported communities?
- Should the Commission evaluate a PSC's financial viability?⁵¹

8.4.1. Discussion

The Commission received six written responses to the above questions.

Yolo County HA recommended that the CPUC prioritize unserved and underserved entities serving resident with incomes far below median (30 percent or below) as well as PSCs with little infrastructure (remote communities with distant access to bandwidth). Yolo County HA also urged the CPUC to consider an income criterion. Yolo County HA also urged the Commission to ensure that the applicant already has access to bandwidth, recommending that the Commission inquire whether an applicant has access to bandwidth within 25-30 miles of the PSC.

Innovative IT recommended the following criteria, in order of priority:

- Cost-Effectiveness/Cost-Per-Unit;

⁵⁰ D.12-02-015. More detailed discussion of the criteria used can be found at http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/159265.PDF.

⁵¹ Revised Scoping Memo at A5-6.

- Recurring cost to the Resident;
- Guaranteed Pricing Period;
- Timeliness of Project Completion;
- Lowest Area Median Income (AMI) ;
- Experience with Similar Work Being Performed or Recently Completed;
- Financial Viability

Mutual Housing asserted that it seems appropriate to use similar criteria to those used by the CPUC in its existing CASF program, with the following additions: 1) prohibiting applicants from charging residents for any installation, service connection, or ongoing fees, since many PSCs cannot charge residents for broadband Internet service as part of other regulatory requirements, and 2) considering the total number of persons in all households served, rather than the number of customer accounts.

CETF suggested the following criteria:

- Focus area, population, current adoption rates
- Clarity of goals and objectives (with metrics)
- Quality and comprehensiveness of project design including,
 - Digital literacy classes
 - Access to low cost computing devices with at least a 90 day warranty and 1 year of technical support
- Technical support, with no less than 24 hour response time via email, phone, or in person requests
- Quality broadband speed per residential unit – CPUC should establish a minimum speed requisite
- Specificity and transparency of activities in a work plan
- Performance monitoring and evaluation plan
- Organizational capacity and experience to implement project
- Collaboration partners and roles
- Cost effectiveness
- Matching funding and leverage of other resources
- Sustainability plan
- Letter of commitment from partners, vendors and contractors
- Letters of support
- Financial viability
- Timeliness of completion of project
- Guaranteed pricing period
- Experience with similar work being performed or recently completed

ORA recommended including the criterion “guaranteed pricing period” and extending the pricing period beyond two years in order to maintain affordability, arguing if broadband

Internet service is unaffordable after two years when the pricing period expires, residents may disconnect. ORA also requested that the workshop include discussion on crafting an effective measurement of adoption and a method to bind the PSC and provider to the adoption plan promised in the application.

In terms of evaluating financial viability, CETF and Innovative IT proposed in written comments that the Commission develop a regulatory agreement as part of the grant award that stipulates repayment of any grant funds if promised services are not rendered. CETF also recommended that the CPUC require applicants to submit its most recent annual audit. Kern County HA suggested the Commission require applicants to submit financial statements for review. It also urged the CPUC to also include a criterion that considers potential for increased bandwidth.

The Revised Scoping Memo also proposes using a “checklist” to evaluate CASF Broadband Public Housing Account applications. If applicants meet the criteria in the checklist, staff would be able to approve the application without a Commission vote.⁵² In comments, ORA expressed opposition to the Commission delegating the ability to deny or grant approval to staff in lieu of using the resolution process.

The Revised Scoping Memo noted that if a checklist was used, the Commission would need to set a grant funding threshold, thereby allowing staff to approve grant applications less than that amount. It asked whether \$500,000 was an appropriate threshold.⁵³ In comments, Yolo County HA, Innovative IT, and Kern County HA all agreed that \$500,000 is an appropriate threshold. CETF recommended that the Commission not set a threshold if possible, but if one must be established, \$500,000 would be appropriate. CETF added that the Commission may need to approve applications where it is disputed whether property owners were justified in denying access to broadband service providers. The Commission would ultimately make the final decision.

The Revised Scoping Memo also asked if there should be a method by which the Commission assigns priority to certain projects.⁵⁴ The Commission received four written comments on this issue. Yolo County HA recommended that the Commission prioritize public housing projects where resident income is below 30 percent of the poverty level communities and nonprofits of underrepresented areas.

Mutual Housing proposed prioritizing PSCs that: 1) provide service to the greatest number of people; 2) provide the greatest percentage of units which are restricted for very low income households; and 3) have an inescapable regulatory agreement with affordability

⁵² Revised Scoping Memo at A- 5.

⁵³*Id.*

⁵⁴ *Id.* at A-6

restrictions recorded against the property. Mutual Housing added that the Commission should require an applicant to submit an operating budget and projections that show the ongoing costs of operating the broadband Internet service included as an operating expense. For applicants requesting a loan, the financial projections should also show enough cash flow to service the new debt. Mutual Housing also suggests a scoring method that prioritizes certain program goals rather than granting funds on a first-come, first-served basis.

CETF asserted that the CPUC should approve projects in a manner that reflects their statewide distribution (analyzed and tracked by properties and total units) Kern County HA disagreed with basing priority on the statewide distribution of PSCs. Instead, it argued that the Commission should grant funding on a first-come, first-served basis.

Based on these comments, CD staff focused the public workshop discussions on the specific categories summarized below.

Checklist

At the March 10th public workshop in San Francisco, ORA asked if a checklist rather than a point system, was used what would happen if an applicant requested an amount that exceeded available funding. Additionally, Innovative IT cautioned staff about creating such an onerous checklist that applicants are discouraged from applying. The San Diego Housing Federation (SDHF) also advocated for a scoring based system to give priority to those communities serving low income populations.

Cost to Residents

As noted in the Lessons Learned and Best Practices Section of this report, many potential grantees are unable to charge residents for broadband Internet service as part of their agreements with HUD, and TCAC. These entities prohibit PSCs from charging more than a predetermined amount as a condition of living at the PSC. While they cannot charge mandatory broadband Internet service fees, they could charge optional fees.

Additionally, as noted in the Section 6.4.1 of this report, PSC residents will purchase broadband Internet connectivity only if it is affordable. In general, staff found that PSC residents believed that paying less than \$10 per month was optimal, in line with the monthly prices under Comcast's Internet Essential Program, while paying above \$25 was generally not affordable.

Overall Costs and Cost per Unit

Subsection 5.1 on Project Costs summarizes cost estimates CD staff received. Participants informed CD staff that both overall cost and cost per unit will vary depending on the size of the installation and the composition of the buildings in which the network is installed. Small properties could require as little as \$5,000 to install a network, while the largest properties in the State will cost over \$100,000. Additionally, properties with a greater number of units will benefit from economies of scale. Depending on the size of the properties and the technology used, per unit costs could range between \$200 and \$600 per unit, but could cost up to \$1,000 per unit under certain circumstances.

Speed

In D.12-02-015, the Commission defined “served” speeds as 6 mbps downstream/ 1.5 mbps upstream (6mbps/ 1.5mbps).⁵⁵ Based on this previous decision, CD staff asked whether we should require served speeds. At certain properties Innovative IT obtained 50 mbps of bandwidth at a cost of \$150 - \$225 per month to serve roughly 50 units. Under this scenario, the property manager would pay between \$9,000 - \$15,000 for bandwidth over five years. In informal comments, Innovative IT noted that providing 6mbps/1.5mbps may be prohibitively expensive. In fact, even 3 mbps downstream could be expensive. CD staff also inspected a PSC managed by HACLA. HACLA estimates that it pays \$3,000 per month for bandwidth. In order to obtain greater speeds, for example, 6 mbps downstream, HACLA estimates that it would cost double the amount. At the April 10th workshop in San Diego, the San Diego Housing Federation noted that Comcast’s Internet Essentials package provides 5 mbps downstream.

In response to concerns related to paying for served speeds, CETF raised the point that residents will become frustrated and not adopt if the broadband Internet service speeds they receive are too slow to support their needs. CD staff inspected the Mar Vista Gardens site, managed by HACLA. During that inspection, HACLA informed CD staff that residents received up to 1.5 mbps downstream during peak hours and that the Mar Vista Gardens is currently applying to partner with USC’s telehealth program which requires minimum specifications and speeds. USC, reportedly, is satisfied with Mar Vista’s network.

CD staff asked if property managers could create a two-tiered system, where residents could pay to receive served speeds, but receive lower speeds at no cost. Thus, residents would have access to served speeds. While Innovative IT stated it was technically feasible, they believed that property managers would view collecting optional fees as a “management nightmare.”

Project Completion Schedule

Under the CASF Broadband Infrastructure Account, grant recipients are required to agree to finish their projects within two years.⁵⁶ At the March 25th workshop in Los Angeles, the City of San Buenaventura HA noted that a two year completion timeline is familiar since the CASF Infrastructure Grant Account requires that timeline, adding that it would be difficult to offer a precise recommendation without knowing whether the CPUC will grant funds for predevelopment work.

In a separate meeting with CD staff, Innovative IT noted it took the company three days to install a network with 11-12 access points at a 48 unit property, along with one month to plan.

⁵⁵ *Decision Implementing Broadband Grant and Revolving Loan Program Provisions* (2012) Cal. P.U.C. Decision (D.) 12-02-015 at 17. Note residents must have access to these speeds, they don’t need to subscribe to them.

⁵⁶ *Id.* at A1-23

At the April 10th workshop in San Diego, CD staff asked if twelve months would provide sufficient time for housing authorities to complete the requisite request for proposal (RFP) process and to complete the project. At previous workshops some housing authorities were hesitant about whether they could meet a shorter timeline because they are required to use an RFP process. Each housing authority has different rules, depending on the dollar amount of the project and whether construction is involved, that determine whether this is necessary. The timing may vary greatly depending on this process. HACOLA noted that its last project at a site with 712 units took less than six months from the RFP to completion. This included installing fiber optics so that residents could subscribe to an ISP if they chose to. The trenching and other work took about 60 days. Because the project was to cost less than \$100,000, it was able to utilize a more expedited process and only took two months for the RFP process. The HACOLA Board does not need to approve projects under \$100,000. CTEF noted that its pilot project at Mar Vista Gardens, a 600 unit property, took four months to connect each unit, but it also took a few months for the vendor to sign an agreement with the housing authority.

Maintenance, Warranties & Technical Support

The Revised Scoping Memo asks what post project completion compliance measures the CPUC should implement. CETF suggested that we require all applicants to maintain the project for at least five years and in order to do so applicants should hold a maintenance and technical support agreement with the vendor for that many years. Kalpesh Wireless, a wireless network solutions provider, opines that three years would be a better term because that is around the time that most equipment should be replaced. Additionally, buying maintenance in bulk is more efficient. Lastly, Kalpesh Wireless usually purchases fiber in three year contracts because every three years is an opportune time to determine whether fiber costs had gotten cheaper. Innovative IT also informs us that often these types of contracts for installation include a maintenance component. ORA recommends a maintenance requirement to ensure that the housing authority can sustain the project.

Innovative IT informed us that they normally offer three year warranties on equipment, but five years is also possible. Other vendors have stated that they normally provide some sort of technical support.

Security

At public workshops CD staff asked how LANs could be configured to ensure the security of the grant-funded hardware. All the vendors participating in the workshops agreed that there were simple measures that could be taken to ensure security. For example, hardware could be placed high and within metal boxes to prevent tampering. Additionally, at Mar Vista Gardens, the vendor placed wiring in conduit.

8.4.2. Staff Findings and Recommendations

Finding 20. Reiterating Finding 3, in implementing the CASF Broadband Public Housing Account, CD staff finds that the Commission should reasonably expect to receive hundreds

of applications requesting grant funding for less than \$100,000; 75 percent of proposed projects likely should cost less than \$75,000.

Finding 21. In determining an appropriate price grantees may charge residents, CD staff noted that programs such as Connect2Compete and Comcast's Internet Essentials charge low-income Internet service customers \$10 or less per month. CD staff also notes the surveys discussed in Section 6.4.1, where no workshop participant thought monthly broadband Internet service fees in excess of \$20 were affordable and 50 percent of PSC residents in a survey by Yolo County HA indicated they would be willing to pay \$5-\$15 per month for broadband Internet service, while another 35 percent indicated they would be willing to pay \$15-\$25.

Finding 22. CD staff recognizes that although the Commission has advocated for 6mbps/1.5mbps in the context of the CASF Infrastructure Grant Account, it risks discouraging a significant number of applications if potential applicants deem the standard as too onerous. Additionally, CD staff finds that providing a baseline of minimal access is an improvement over no access at all, and residents may wish to pursue increases in bandwidth and speeds as their Internet needs increase.

Recommendation 15. Based on the comments as noted in the Project Completion Schedule section above, CD staff recommends requiring a one-year project completion timeframe.

Recommendation 16. Based on the conversations with vendors, as well as inspections of several PSCs, CD staff recommends requiring applicants to operate and maintain the equipment and technology funded by the CASF Broadband Public Housing Account grants for at least five years, including accepting responsibility for the proper security of the equipment.

Recommendation 17. Given the limited staff resources to review those applications and the Legislature's interest in the Commission awarding these funds in an expeditious manner,⁵⁷ CD staff recommends that Commission approve the following evaluation criteria and requests the Commission to delegate authority to the Executive Director to approve all applications that meet such criteria.

Recommendation 18. To address ORA's concerns regarding the use of a proposed checklist to streamline the application approval process, CD staff proposes that the Commission cap the total grant request amount CD staff may approve (\$75,000), along with a dollar amount per unit (\$300-\$600 per unit, depending on size of building) and numerous other criteria laid out below. Applications not meeting the stringent criteria proposed below would require Commission approval via a resolution.

⁵⁷ Any moneys in the Broadband Public Housing Account that have not been awarded pursuant to this subdivision by December 31, 2016, shall be transferred back to the Broadband Infrastructure Grant Account and Broadband Infrastructure Revolving Loan Account in proportion to the amount transferred from the respective accounts. §281(h)(7)(A).

Recommendation 19. CD staff recommends the Commission require applicants commit to charging residents less than \$20 per month in order to receive expedited treatment under the CD staff proposed checklist process.

Recommendation 20. CD staff recommends the Commission require applicants to build networks capable of providing Commission-defined served speeds, but not insist on bandwidth requirements.

Recommendation 21. Based on the feedback outlined above in Finding 18, CD staff recommends the Commission require applicants to complete their proposed projects within 12 months.

Recommendation 22. Given the considerations outlined above, CD staff proposes that the Commission grant to CD staff authority to approve applications that meet each of the following criteria:

- Applicant meets the eligibility requirements under P.U. Code §281 (f) (2).
- Applicant attests that broadband Internet is not available to all PSC units on the property seeking the grant (and provided that percentage in its application), if the applicant is applying in the first six months.
- Applicant declares that it has not denied an ISP access to its property and no ISP challenged this statement; if an ISP challenged an application alleging it was denied access to a PSC, CD staff determined the denial was reasonable.
- Applicant requests less than \$75,000 in CASF Broadband Public Housing Account infrastructure grant funds.
- For projects connecting 50 PSC units and less, proposed project costs less \$600 per unit or less.
- For projects connecting 51-100 PSC units, proposed project costs \$500 per unit or less.
- For projects connecting 101 and more units, proposed project costs \$300 per unit or less.
- The buildings included in the application meet standards for acceptable basic living conditions as determined under HUD's Uniform Physical Condition Standards or similar guidelines provided by other housing funding agencies in the State.
- Existing property infrastructure requires no significant upgrades to install wiring, equipment and other electronics funded under this grant.
- Applicant expects property to be in residential use for at least the next 10 years.
- Property qualifies for an exemption pursuant to CEQA Guidelines §15300.2.
- For wireless networking projects, equipment will at least meet the 802.11n standard.
- Applicant attests it will operate and maintain project equipment and technology for at least five years after completion and that it has sufficient funds and warranty to do so, including replacing equipment as needed (submit maintenance agreement and budget).
- Proposed project network is capable of offering residents Internet service speeds of at least 6mbps downstream/1.5mbps upstream.
- Applicant agrees to charge residents \$20 or less for Internet service.
- Applicant has signed an affidavit agreeing to abide by Commission rules of practice and procedure; §§2111 and 2108; and to quarterly/ monthly reports and submission of annual recertification/ audit documents.

- Applicant agrees to complete project within 12 months.
- Applicant has identified its bandwidth source, either at the MPOE or its wireless equivalent.
- Applicant agrees to secure project funded hardware.

The Commission must approve applications not meeting the above criteria through the resolution process. Commissioners also may request a Commission vote on any applications that meet the above requirements.

9. Adoption Projects

9.1. Overview and Goals

As stated previously, AB 1299's author intends for the CASF Broadband Public Housing Account to help close the Digital Divide in California, especially by targeting residents living in PSCs.⁵⁸ AB 1299's author also stated that installing the infrastructure would be the first step, but "it does not offer a guarantee that disadvantaged residents will see the value in subscribing to the broadband service. A factor contributing to a disadvantaged residents' lack of enthusiasm to subscribe to voice, cable or Internet service is notably the costs associated with subscription. In addition, a [PSC] resident may have limited knowledge in understanding the benefits of digital literacy and the societal benefits of adopting broadband service."⁵⁹ Therefore, § 281 (f)(4) (A) transferred five million dollars for grants and loans to a PSC to "support programs designed to increase adoption rates for broadband services for residents of that publicly supported community."

9.1.1 Staff Findings and Recommendations

Recommendation 23. Current data indicates that 75 percent of California households have adopted the Internet. Based on this, CD staff recommends the Commission promote cost effective solutions, with the goal of funding adoption programs in PSCs which educate residents on the benefits of digital literacy and aim to provide digital literacy training to at least 75 percent of residents.

9.2. Grants and Loans

Section 281 (f) (4) (A) states that "five million dollars (\$5,000,000) shall be available for grants *and* loans to a publicly supported community to support programs designed to increase adoption rates for broadband services for residents of that publicly supported community." Based on this, CD staff asked whether it should offer both grants and loans and if so, what percentage of the total

⁵⁸ Assembly Utilities and Commerce Committee Analysis, Telecommunications: Universal Service Programs, California Advanced Services Fund at 4. April 25, 2013.

⁵⁹ *Id.*

project should be funded using either. Staff also asked if there should be a matching percentage and if so, what percentage of the total project costs should be funded by matching funds. Finally, CD staff also asked if the Commission should impose an award maximum.⁶⁰

9.2.1. Discussion

Commenters responded in the same way that they responded to the discussion on grants and loans for the infrastructure program, expressing that many organizations would have difficulties repaying a loan.

9.2.2. Staff Findings and Recommendations

Finding 23. CD Staff believe that requiring some kind of contribution from the grant recipient is important to demonstrate the applicant's commitment to the project's success. Furthermore, it appears from feedback received that many participants have been able to find partners and other funding for adoption programs. CD staff finds that the Commission may wish to provide some flexibility in the kind of contribution an applicant provides, but it must also be able to discern an actual market value for the contribution. This ensures that goods or services used to meet this requirement are not overvalued or inflated. As discussed in Section 5. Lessons Learned, our review of adoption program costs from PSCs that already engage in these activities showed that participants were often able to obtain match funds through partnering with another organization, by obtaining donated devices, or by cash donations from residents. The amount of match ranged from 6 percent to 30 percent. Since this proposed adoption program permits match funding through donated devices, CD staff finds it reasonable to require grantees fund 15 percent of their proposed adoption projects.

Recommendation 24. CD staff recommends that the Commission provide both grant and loans to fund broadband Internet adoption activities at PSCs. Although commenters stated that many PSCs are unable to take on additional debt, since the statute states that "not more than five million dollars (\$5,000,000) shall be available for grants *and* loans" (Emphasis added), we will continue to make loans available for those PSCs which might choose to take advantage of them. CD staff recommends using the same terms as those used under the CASF Revolving Loan Account.⁶¹

Recommendation 25. CD staff recommends the Commission fund up to 85 percent of the costs for an adoption program with applicants providing the remaining funds, which may include a non-cash match from the following sources:

⁶⁰ Revised Scoping Memo at 2.

⁶¹ D. 12-02-015 at 46.

- Donations from residents in exchange for devices
- Donations of devices or software from third participants;
- Volunteer personnel hours worked to train residents.

Recommendation 26. Staff recommends that the Commission limit the maximum dollar amount that a project may apply for. This means that projects with high cost because of the number of units and those that wish to bundle many properties together may do so. However, these projects may be subject to greater scrutiny and may not be eligible to be considered under the checklist process. We recommend the Commission set a \$50,000 cap and projects which cost more are not eligible for the expedited checklist process.

9.3. Reimbursable Costs

Decision 07-12-054, which created the CASF Infrastructure Grant Account, limited grant awards to capital expenses and expressly prohibited the use of CASF funds to finance operating or maintenance expenses.⁶² The statute, as amended by AB 1299, is silent regarding what constitutes an eligible project cost. The Revised Scoping Memo asked for guidance on what constitutes an eligible cost.

9.3.1. Discussion

The Commission received written comments from four participants. Yolo County HA believes the establishment and operation of onsite computer learning centers; computer literacy training serving youth, adults and seniors; online learning tools; Internet job resources and job search tools should all be eligible for reimbursement.

Mutual Housing asserts the Commission should reimburse for funds used to promote a broad spectrum of digital literacy projects, given the diversity of existing knowledge in this area. Very basic programs that teach people how to use computers and how to access the internet via computers should be included. Skills development beyond this should also be covered. For example, programs that teach how to use the Internet, email and social media tools to not only connect with friends and family, but also with community resources and community improvement efforts (civic engagement) are all vital. These should also be linked with computer based financial, educational and employment development programs that cover subjects such as accessing public benefits and mainstream financial services, financial aid for higher education, and business skills such as typing, Microsoft Office use and even basic computer programming. Lastly, Mutual Housing believes that instruction in cyber-

⁶² D. 07-12-054 at 57.

security is crucial as well. Partnerships that will help people in the adoption target area to acquire personal computers and or mobile devices at reduced costs will also bolster the above goals.

Based on CETF's case studies conducted by the Smart Housing Partnership formed by CETF and HACLA, CETF suggests the following components of an adoption program should be reimbursable.

Assessment

- Develop resident survey that tracks individual skill levels and adoption at home
- Conduct door to door survey with volunteer block captains
- Conduct resident meetings and focus groups to obtain information on resident technology needs
- Compile findings in a summarized report

Design

- Coordinate adoption roundtable with expert statewide organizations
- Partner with local organizations for digital literacy classes
- Develop adoption program goals and objectives
- Compile digital literacy curricula, project based learning activities
- Develop pre and post course participant evaluations
- Build resident online portal to accept online rent payments, process property management requests, share information on resident services
- Identify and secure partnership with refurbisher for equipment and technical support
- Develop work plan, budget
- Construct evaluation plan

Implementation

- Launch digital literacy classes for adult residents
- Train 450 adults at Jordan Downs and 500 at Mar Vista Gardens on basic digital literacy, internet navigation, applications and online safety
- Distribute refurbished computers to residents who complete digital literacy training (\$25 donation)
- Provide technical assistance via phone, internet and in person
- Coordinate monthly computer repair days
- Provide ongoing support to existing service providers to integrate technology into programs

Evaluation

- Conduct evaluation, measure impact of the program
- Report results to partner organizations and stakeholders
- Prepare joint report summarizing conclusions and projecting costs for broadband adoption in HACLA multifamily building portfolio.

- Exhibit D shows program costs for connecting a 600 unit complex, conducting digital literacy training to 950 adults and providing technical support and access to low cost refurbished computers to two HACLA properties

Lastly, Kern County HA believes the CASF should fund projects that are in the development stage and it should fund staffing, supplies, and overhead.

At public workshops, EAH Housing advocated for the Commission to fund the cost of providing residents with smartphones as part of an adoption programs. Innovative IT supported this. CHOC agreed that smartphones assist in providing some residents Internet access. CHOC also suggested that the Commission cover the cost to perform outreach in its communities as part of adoption. However, it also emphasized that in some rural areas, even smartphone access is difficult. In response, CETF argued that adoption is achieved when people can perform meaningful activities such as research for homework, healthcare and job searches, which are generally not possible using smartphones.

Some participants asked that the CPUC provide reimbursement to operate adoption programs within individual homes or at schools. In a separate discussion, the YPI informed CD staff that it funds projects that operate out of any property that is less than one mile away from the residence.

At the March 25th workshop in Los Angeles, the Inland Empire RBC raised the need for technical support and offered an example from Smart Riverside where six hours of technical support were provided with the adoption program. CETF added that it considers technical support to be an essential component of a successful adoption program.

9.3.2. Staff Findings Recommendations

Finding 24. Most examples of adoption programs include the following components: 1) devices with proper software; 2) technical support; 3) a dedicated space for digital literacy training; 4) materials for digital literacy training and staff to teach it; and/or 5) outreach to encourage residents to attend training sessions.

Recommendation 27. Guided by Finding 24, CD staff proposes that the following costs are reimbursable:

- education and outreach efforts and materials;
- acceptable devices (does not include smartphones) and software;
- printers;
- routers;
- provision of technical support;
- desks and chairs to furnish a designated space for digital literacy;
- digital literacy curriculum; and
- digital literacy instructors

Recommendation 28. CD staff does not recommend that the Commission fund the cost of purchasing bandwidth from an ISP since the statute requires that the property already have broadband access.⁶³ Additionally, we do not anticipate that the Commission will cover any construction costs, for example, to build a new computer lab.

9.4. Evaluation Criteria

Section 281 governing the CASF Housing Account does not provide guidance with respect to the criteria the Commission should use to evaluate applications, except for instructing the Commission to consider the availability of other funding sources. The Commission may require an applicant to provide match funding but it may not deny funding because the applicant receives funding from another source.⁶⁴

As noted in the Scoping Memo, the Commission will need to identify criteria for evaluating CASF Broadband Public Housing Account grants for infrastructure. In evaluating CASF Broadband Infrastructure Grant requests, CD staff currently assesses applications based on the following criteria:

- Funds Requested per Potential Customer;
- Speed;
- Financial Viability;
- Pricing;
- Total Number of Households in the Proposed Area;
- Timeliness of Completion of Project;
- Guaranteed Pricing Period
- Low-Income Areas; and
- Community Support⁶⁵

With that in mind, the Scoping Memo asks the following questions:

- What types of adoption projects should be funded by the program? What project costs should be eligible for funding?
- Should the PSC applying for the grant be responsible to the Commission for carrying out the project? Should the entity or entities the community contracts with also be responsible to the Commission?

⁶³ §281 (h)(4)(A).

⁶⁴ §281 (h)(6).

⁶⁵ D.12-02-015. More detailed discussion of the criteria used can be found at http://docs.puc.ca.gov/WORD_PDF/FINAL_DECISION/159265.PDF.

9.4.1. Discussion

The Commission received five written responses to the above questions. Yolo County HA responded that the CPUC should particularly consider those communities with limited access to adoption programs and resources. Other considerations suggested were unemployment rates, low high school graduation rates and low literacy rates, and third grade reading levels.

Mutual Housing suggested that the Commission consider the following criteria in evaluating applications:

- The number of households or individuals served;
- Cultural and linguistic diversity of the target population;
- Economic status;
- Previous successful efforts in this area;
- Demonstrated need;
- Availability of technology and properties for adoption programs, staff capacity or external partners with capacity, clarity of intended outcomes.

CETF offered similar criteria, including:

- The characteristics of the population
- Quality and comprehensiveness of the project design, which should include classes, access to low cost devices with at least a 90 day warranty and technical support;
- Previous experience and capacity to implement project;
- Cost effectiveness, including obtaining matching funding or leveraging other resources;
- Letters of support from the community and of commitment from partners;
- Timeliness of the project with a guaranteed pricing period;
- Agreeing to performance monitoring and evaluations;
- Plan to keep the project sustainable after the funds are disbursed, if necessary.

CETF also added that it may be cost effective for the CPUC to design and administer a program-wide evaluation component.⁶⁶

Kern County HA suggested that the applicants also have current information technology experience and past experience in capital funding type grants.

Yolo County HA stated that the project lead should be the responsible party, not contractors. Mutual Housing and CETF agreed with this stating that when an applicant partners with another, the applicant should enter into a subcontract with that agency, but should retain responsibility for

⁶⁶ CETF provided an example which is Exhibit C of its comments.

carrying out the project. In the event an applicant is dissatisfied with the performance of its partner, it can terminate its contract and enter into a new agreement with a preferred provider. However, Kern County HA and ORA believed that both participants should be responsible to the Commission.

The Revised Scoping Memo also proposes using a “checklist” to evaluate CASF Broadband Public Housing Account Applications. If an applicant meets the criteria on the checklist, staff would be able to approve the application without a Commission vote. In comments, ORA expressed opposition to delegating approval of grant applications to CD staff in lieu of using the resolution process. The Revised Scoping Memo noted that the Commission would need to set a grant funding threshold as part of this checklist, thereby allowing staff to approve grant applications less than that amount. The Revised Scoping Memo asked whether \$500,000 is an appropriate amount.

Yolo County HA suggests that the Commission use a scoring method to process applications which request over \$500,000. The CETF recommends that the Commission approve projects for publicly subsidized multiunit properties in a manner that reflects the statewide distribution by number of complexes and units. Additionally, the Commission should establish a learning community and require quarterly in person one- day meetings with grantees to share progress reports, lessons learned, best practices and public policy conclusions to inform policymakers, stakeholders, and partners. Lastly, the Kern County HA urged the Commission to develop a prioritization method that is not based on the statewide distribution of PSCs. Ideally, the Commission should award funding on a first come, first served basis.

Based on these comments, CD staff focused the public workshop discussions on the specific categories summarized below.

Overall Costs and Costs per Resident Trained

The subsection 5.2 on Project Costs in the Staff Findings section summarizes cost estimates CD staff received. Projects will vary in size from a \$9,000 computer lab set up by the City of San Buenaventura to much larger projects such as HACLA’s work at both Mar Vista Gardens and Jordan Downs and the San Bernardino HA’s project, which cost \$1.6 million served over 5,000 residents HACOLA estimates that digital literacy training courses usually cost about \$200-\$300 per student.

Outreach

In various workshops, Comcast, the Los Angeles County RBC, the City San Buenaventura HA, CETF, SCDC and the YPI all agreed that outreach is an important facet of adoption programs.

Training

Many participants agreed that some kind of digital literacy training is the core of any adoption program. Related to this is whether the vendor providing the digital literacy training possesses prior experience. Workshop participants in general agree that prior experience is valuable; some suggested that the Commission require this of applicants.

CD staff also asked whether the Commission should require that the applicant already have a digital literacy curriculum prepared. The Los Angeles RBC replied that it would be fairly simple to develop

a curriculum that taught the basics. CETF also stated starting from scratch is probably not a good investment, given the prevalence of existing curricula.

At one meeting CD staff was asked whether adoption projects must include a computer lab, noting older communities may not have a dedicated space for labs, and their adoption programs focus on individual units. YPI informed CD staff that it requires a lab or a center to be located less than a mile away for projects they have funded. CETF reiterates that training is an important component of adoption programs.

At a separate meeting with HACLA and CETF, we learned that although there is no computer lab at Mar Vista Gardens, they were able to partner with SCDC which operates a mobile computer lab, in order to provide onsite training.

Devices

Several workshop participants argued that these grants must fund affordable and adequate computer devices in order to ensure successful adoption projects. Some participants advocated for the use of smartphones as a device that could be used in digital literacy training for the purposes of this program.

Eden Housing stated that they are having difficulty finding refurbished products and continued to use outdated products instead. Therefore, many people do not adopt because their frustration with the equipment was becoming a barrier to do so. CD staff asked if Chromebooks could be used to combat the problem of outdated software since these devices keep software in the cloud where they are managed and updated.

HACLA representatives later suggested that this was not an appropriate solution for PSCs because stationary desktops are much more prevalent and therefore residents, particularly adults, would have greater familiarity.

At a separate meeting with CETF and HACLA, CD staff learned that HACLA's refurbisher does not have a minimum age of device that it adheres to, but rather it uses minimum specifications. However, it did state that in general, computers that are about two-to three years-old are still usable.

Technical Support and Warranties

When CD staff conducted a site visit at Mar Vista Gardens, a HACLA-managed property, HACLA and its Smarter Broadband partners, informed CD staff that Reliatech provides refurbished devices with technical support for its pilot project at Mar Vista Gardens and Jordan Downs. Reliatech generally responds within 24 hours of receiving a call, typically over the phone. There is also a part time resident technician at Jordan Downs who is able to respond in one to two days, if phone support does not solve the problem. Reliatech also provides a warranty of six months on its products, which may be extended to a year for \$10. Many of the sites CD staff inspected provided residents with some sort of technical support.

Timeline

CD staff asked workshop participants what would be the length of time necessary to plan and gather the materials for an adoption program. The Los Angeles RBC estimated that it could implement an

adoption program within a couple of weeks. At a separate meeting with CD staff, HACLA and its Smarter Broadband Partners estimated that they needed one to three months for outreach at Mar Vista Gardens and Jordan Downs. Outreach cannot be done too far in advance or else people will lose interest. Additionally they estimated that most organizations would need about six months to plan. However, they noted that SCDC, which partnered with HACLA to implement the adoption program, only needed one to two weeks because of its extensive experience with adoption programs. Additionally, refurbishing computers required two to three weeks.

Based on this information, CD Staff asked workshop participant whether nine months would be an appropriate timeframe in which to expect PSCs to develop and implement an adoption program. CETF also asked whether the Commission would set a timeframe in which a set number of residents must have been trained or become Internet users (or those who have “adopted” broadband Internet). As part of the pilot project at Mar Vista Gardens and Jordan Downs, CETF set a goal of 80 percent adoption within six months.

9.4.2. Staff Findings and Recommendations

Finding 25. Similar to Finding 3 and 20, CD staff notes that the Commission should reasonably expect to receive hundreds of applications requesting grant funding for less than \$50,000.

Finding 26. CD staff believes technical support and warranties are important facets of any adoption program because it ensures that users are not discouraged by technical difficulties in the early stages of adoption when they are getting familiar with the computer and the programs.

Finding 27. Analysis of AB 1299 prepared by Assembly Utilities and Commerce Committee staff noted that in March 2013, an informational hearing considered whether the digital divide had been closed. In that hearing, it was estimated, based on data as of June 2011 that about 74.6 percent of Californians with access to broadband subscribe to it or adopt it.⁶⁷ At the hearing, the bill’s author sought to examine whether affordable housing residents adopted the Internet at the same rate as the general public. He found this was not the case. Based on data as of December 2012, 75.4 percent of Californians in urban areas have adopted broadband.

Finding 28. CD staff agrees with CETF’s argument that adoption is achieved when people can perform meaningful activities. This is supported by studies on smartphone usage which show that smartphone are often used in conjunction with a laptop or desktop and generally do not replace those devices.

Finding 29. CD staff agrees with several participants regarding the need to ensure that any equipment provided to residents using grant funds, including computers, is not obsolete. Further, CD staff notes that through partnerships with Internet providers and device refurbishers, EveryoneOn, through the Connect2Compete program, offers \$150 computers for low-income individuals and families that qualify for the National School Lunch Program.

⁶⁷ Assembly Utilities and Commerce Committee Analysis, Telecommunications: Universal Service Programs, California Advanced Services Fund at 4. April 29, 2013.

Recommendation 29. Given the limited staff resources available to review those applications and the Legislature's interest in the Commission awarding these funds in an expeditious manner, CD staff recommends that the Commission approve the following evaluation criteria and requests the Commission delegate authority to the Executive Director to approve all applications that meet such criteria.

Recommendation 30. To address ORA's concerns regarding the use of a proposed checklist to streamline the application approval process, CD staff proposes that the Commission cap the total dollar amount and the dollar amount per unit and apply other criteria for projects that are approved through the checklist process. Applications not meeting the stringent criteria proposed below would require Commission approval via a resolution.

Recommendation 31. Based on information received from participants, CD staff recommends the Commission fund adoption projects costing \$50,000 or less, and digital literacy projects that cost less than \$400 per resident trained, including equipment. Similar to the CASF Broadband Public Housing Account grants for Infrastructure, applicants may still submit proposals in excess of these limits. The Commission will need to approve those applications via the resolution process.

Recommendation 32. CD staff recommends that the Commission include education and outreach activities as a reimbursable adoption program expense.

Recommendation 33. In recognition of the importance of a training component, CD staff recommends that the applicant provide at least eight hours of digital literacy training. In doing so, we encourage PSCs to partner with other agencies or nonprofits which have successfully implemented adoption programs previously. Whether the PSC or its partner carries out the adoption program, that entity must have either one year of experience teaching digital literacy or carried out at least one other project which included a digital literacy component. It is also recommended, but not required that any partner selected have experience working with populations living in PSCs. Staff also proposes that whichever entity responsible for the digital literacy program use preexisting curricula, including curricula the PSC its partner previously developed. This will ensure that an already tested and implemented curriculum is used rather than expending funds to create brand new curricula.⁶⁸

Recommendation 34. Based on the comments, CD staff proposes that some sort of onsite training area must be available. We are aware that there are some constraints, particularly in older buildings, which were not built with a computer lab in mind. However, it does not appear that there are practical ways to have an efficient and effective training program without a designated space where teachers and students can gather. This could also be accomplished through a mobile lab or other creative options.

⁶⁸ And in fact there are many resources for free digital literacy curricula online, some of which can be found here: http://www2.ntia.doc.gov/files/toolkit_042913.pdf in the NTIA's Broadband Adoption Toolkit.

Recommendation 35. CD staff recommends that the Commission allow adoption grantees to provide computing devices as a part of their programs. As noted previously, CD staff recommends that the Commission not reimburse for smartphones.

Recommendation 36. CD staff also recommends that if applicants purchases laptops or desktops, the Commission specify that refurbished computers must not be older than two years. Additionally, we recommend requiring that each device come with basic software already installed.

Recommendation 37. Noting Finding 26, CD staff recommends that applicants must provide for technical support for the duration of the project either by phone or in person. A technical support staff person must be able to respond either by phone or in person within 48 hours of contact. Additionally, we recommend the Commission require a warranty for a minimum of six months on refurbished devices and 30 days on new devices.

Recommendation 38. CD staff proposes that the Commission require applicants begin offering digital literacy classes within nine months of the Commission approving the grant. We believe that this is an appropriate amount of time since we require applicants to choose experienced vendors that use existing curriculum. The applicant will submit a work plan with major milestones showing how they propose to meet this deadline.

Recommendation 39. Based on the information contained in Finding 27, CD staff recommends requiring applicants sustain an adoption project for twelve months or until 75 percent of the residents have been trained, whichever is sooner.⁶⁹ The applicant will submit a work plan with major milestones showing how they propose to meet this deadline.

Recommendation 40. In summary, the proposed criteria are as follows:

- Applicant requests a grant of \$50,000 or less
- Applicant agrees to perform education and outreach to inform residents of available services
- Applicant or partner organization possesses at least one year experience in digital literacy training or has previously carried out at least one digital literacy project
- Applicant or partner organization will use existing curriculum
- Applicant has identified onsite designated space for digital literacy training
- Applicant or partner organization will provide residents devices to be used as part of its digital literacy training. A Smartphone is not an eligible devices. New or refurbished devices may be used, but if it is refurbished it must not be more than two years old. Devices must come with basic software.
- Technical support, either by phone or in person, must be able to respond within 48 hours. A refurbisher should provide a warranty of at least six months and seller of new products should provide a warranty of at least 30 days.

⁶⁹ E-mail from Warren Jensen, Associate Director, Center for Economic Development, CSU Chico, to Owen Rochte, Regulatory Analyst, CPUC (May 15, 2014).

- Applicants must be ready to provide classes within nine months of being selected for a CASF grant and must submit a work plan with major milestones showing how they propose to meet this deadline
- Applicants must sustain the adoption project for 12 months or until 75 percent of residents are trained. The applicant must submit a work plan with major milestones showing how they propose to meet this deadline.

10. Application Instructions and Processes

As with any grant program under its jurisdiction, the Commission must determine the processes by which an applicant may submit its applications, including when the Commission will accept it and what information will be available for public review, among other issues. In considering when the Commission should begin accepting applications, CD staff weighed several alternatives, such as accepting applications on a rolling basis after a Commission determined date, or at specified deadlines or intervals.

10.1. Timelines

In written comments submitted in response to the questions contained in the Revised Scoping Memo, CETF, Innovative IT and Mutual Housing all urged the Commission to provide potential applicants at least 90 days' notice ahead of an application deadline to provide sufficient time to plan. At the March 10th workshop in San Francisco, Race Telecommunications urged the Commission to set a specific application deadline date, rather than accepting applications on a rolling basis. CHOC agreed, asserting in particular, that rural entities may have fewer resources than their urban counterparts to devote to developing and monitoring applications, and therefore risk being left out of the grant program if they do not have sufficient opportunity to apply. Comcast suggested applications could be due the first Monday of every quarter.

At the March 25th workshop in Los Angeles, the Inland Empire RBC argued against accepting applications on a first-come, first-served basis, suggesting many applicants may submit their applications before they are ready due to concerns that funds may be exhausted by the time the application is truly ready. The Inland Empire RBC also asserted that this process would be more burdensome on Commission staff. If the Commission provided potential applicants with sufficient time to prepare their applications, it might mitigate some of these concerns. The San Bernardino HA recommended four application deadlines per year because RFP processes can finish at different times during the year and having four application deadlines would give an applicant a greater chance to apply no matter when its RFP process ended. ORA disagreed, arguing that accepting applications on a first-come, first-served basis, with no promises for future rounds, makes sense. Under the CASF Broadband Infrastructure Account, grants were not awarded as quickly as expected. Deadlines incent applicants to develop applications.

10.1.1. Staff Findings and Recommendations

Recommendation 41. As noted previously CD staff recommends that the Commission prioritize applications from PSCs which are not wired for broadband. Under the staff proposal, the

Commission would begin accepting applications from PSCs that do not have wiring for 100 percent of units on December 1, 2014 and, subsequently, on the first Monday of each month thereafter, until funds are expended, or December 31, 2016, whichever comes sooner. Beginning on the first Monday of July 2015, the Commission would accept applications, from PSCs that are both wired and not wired. As noted in Recommendation 10, staff recommends the Commission set aside \$3 million, or 15 percent of the total \$20 million, for rural network projects and \$750,000 for rural adoption projects. These proposed set asides are guaranteed minimums for rural areas; even after those funds are expended, the Commission may still choose to fund projects in rural areas.

10.2. Public Review of Applications

Currently, the CPUC posts application information so that interested participants may review, and perhaps, challenge an application for CASF grant funding. As part of the CASF Infrastructure Grant Account, CD discloses the following information on the CASF webpage:

- Applicant's name;
- Contact person;
- Project title;
- Proposed project and Location (Community/County);
- Project Type (Last Mile or Middle-Mile);
- CASF Funding requested (Amount of Grant/Amount of Loan);
- Description of the Project;
- Map of the Proposed Project;
- List of Census Block Groups; and
- List of ZIP codes.

An applicant also must submit a project summary with its application and mail that summary to the CASF Distribution List. CD staff posts the project summary on the CASF webpage. The Commission expects the applicant to communicate with impacted communities. Finally, an applicant must mail hard copies of its application to CASF staff and ORA.⁷⁰

The Revised Scoping Memo included a question regarding to what extent the Commission should provide for public review of CASF Broadband Public Housing Account applications. ORA, Innovative IT, CETF, Mutual Housing and the Kern County HA all support public review of applications. Mutual Housing recommended that the Commission post applications on its website. ORA added that applicants should also provide notice to residents in the PSC the applicant intends to serve. Kern County HA recommended also emailing the applications to public housing authorities. Innovative IT and CETF recommended posting a summary of all applications that include the following information:

⁷⁰ Decision 12-02-015

- Name of the housing property;
- Location;
- Proposed project description (number of buildings and units in the case of infrastructure, number of households reached, in the case of adoption projects);
- The amount of funds requested; and
- The number of units with existing broadband availability from any ISP.

Innovative IT and CETF also urged that this information be compiled and posted within a short period of time (no more than 48 hours) after submission and that all applications be made available publicly at some undetermined date.

At the March 19th workshop in Fresno, Cathy Creswell noted that since no individual household information will be disclosed in applications, it may be appropriate to post the entire application online. At the same workshop Novarum asserted that it would be informative to see how projects get implemented and to determine how the money is spent.

At the March 25th workshop in Los Angeles, Women Organizing Resources Knowledge and Services (WORKS) noted that the application likely will include financial statements and asked the Commission to keep that information confidential. At both the March 25th workshop in Los Angeles and at the April 10th workshop in San Diego, Race Telecommunications suggested following the practice used under the CASF Broadband Infrastructure Grant Account, where simple template is used to provide the public with summary of the proposed project. Race Telecommunications asserted this is a great approach because then the CPUC provides all applicants with the same information that is publicly available and there are no concerns about revealing proprietary information.

10.2.1. Staff Findings and Recommendations

Recommendation 42. CD staff intends to draft an application template and proposes that CD staff disclose the full document (but not the information attached with it) within two weeks of receiving applications.

10.3. Other Application Issues

Participants at the April 10th workshop in San Diego raised two other issues for the Commission to consider. Chelsea Investments suggested prioritizing applicants such that those denied funds in one round due to the Commission receiving applications for more funds than it may award receive priority status for the subsequent round. HACLA recommended that the Commission cap how many projects and total amount of funds it provides to one applicant.

Several participants raised the issue of applicants submitting multiple applications. In particular, Innovative IT noted that most developers would prefer submitting one grant application for their entire portfolio. Innovative IT expressed concern this might be complicated if there is a cap on the amount of money that can be granted through the checklist process. There is an average of 2,500 units per any single developer with networking projects costing about \$350 per unit, which is about \$800,000-900,000 total.

10.3.1. Staff Findings and Recommendations

Recommendation 43. CD staff recommends that the Commission adopt both proposals and seeks public comment on what would be an appropriate cap. Applicants may bundle multiple properties together into one application, but if their grant request exceeds the proposed maximum amount contained in the CD staff proposed checklist, their grant request must be approved by the Commission via the resolution process. In some instances, this may make sense for the applicant from a management perspective.

11. Payment Terms and Conditions

Decision 12-02-15 outlines payment conditions used in the CASF Infrastructure Grant Account as follows:

“Payment to the CASF recipient will be on a progress billing basis with the first 25 percent to be made upon the proponent’s submission to the Commission staff of a progress report showing that 25 percent of the total project has been completed. Subsequent payments shall be made on 25 percent increments showing completion at 50 percent, 75 percent, and 100 percent. The CASF recipient must submit a project completion report before full payment. Progress reports shall use both the schedule for deployment; major construction milestones and costs submitted in the proposals and indicate the actual date of completion of each task/milestone as well as problems/issues encountered, and the actions taken to resolve these issues/problems during project implementation and construction. Recipients shall also include test results on the download speed and upload speed...in the final completion report. Recipients must certify that each progress report is true and correct under penalty of perjury.

CASF recipients shall notify the Commission as soon as they become aware that they may not be able to meet the 24-month timeline. In the event that the recipient fails to notify Communications Division of any delays in the project completion and the project fails to meet the approved completion date, the Commission may impose penalties to be adopted in a Commission resolution.

Payment will be based upon receipt and approval of invoices/other supporting documents showing the expenditures incurred for the project in accordance with the CASF funding submitted by the CASF recipient in their application.

Grantees shall submit final requests for payment 90 days after completion of the project. Payment will be made in accordance with, and within the time specified in California

Government Code Section 927 et seq.

The Commission has the right to conduct any necessary audit, verification, and discovery during project implementation/construction to ensure that CASF funds are spent in accordance with Commission approval.”⁷¹

11.1. Staff Findings and Recommendations

Recommendation 44. CD staff recommends the Commission continue using this process for the CASF Broadband Public Housing Account, except that recipients under this Account shall notify the Commission as soon as they become aware that they may not be able to meet project deadlines.

12. Post Award Compliance, Reporting and Monitoring

Currently under the CASF Broadband Infrastructure Grant Account, grant recipients must submit quarterly progress reports as an attachment to their invoices submitted at 25 percent, 50 percent, and 75 percent completion as discussed above.⁷² Based on this, we asked whether we should similarly require quarterly reports attached to invoices.

Additionally, in D. 14-02-018, which authorized non-regulated entities to participate in the CASF program pursuant to SB 740, the Commission concluded that it would obtain post project compliance from entities it does not traditionally have regulatory power over by imposing penalties under §§2111 and 2108.⁷³ Therefore, the Revised Scoping Memo asked whether these penalty provisions are applicable in this situation as well, or if there are other methods to ensure progress.

12.1. Discussion

In written comments Yolo County HA and Kern County HA respond that quarterly reporting would be sufficient. Yolo County HA suggests that we permit applicants to set their own project milestones and then the Commission can monitor their progress, similar to what occurs currently under the CASF Broadband Infrastructure Account. Additionally, actual access by the community should be monitored to determine whether residents are using the network.

Mutual Housing suggests requiring reports for projects from the time of construction until completion, with annual reports for the first three years of operation. It recommends that grantees report on the number of residents who are receiving broadband Internet service. For adoption projects, Mutual Housing suggests biannual reporting. Grantees should provide quantitative results based on the outcomes outlined in the application along with anecdotal success stories. But Mutual Housing requests that any planned data requests should be disclosed early in the process so that it can plan and budget for data collection activities accordingly.

⁷¹ D.12-02-015 at A1-25.

⁷² *Id.*

⁷³ D.14-02-018 at 38.

CETF recommends weekly or bi-weekly calls with grantees as well as monthly or bi monthly site visits. However, it notes that this may be infeasible due to staffing constraints. CETF also suggests quarterly progress reports which include 1. Narrative summary of progress deliverables and outcomes achieved; 2. Documentation of participants served; 3. Expense report.

Additionally, both Innovative IT and CETF recommend the CPUC request proof of broadband service for a period of at least five years after completion of the project, with tracking of broadband adoption and use data for a similar period of time. Kern County HA also agrees that some sort of tracking should be used to determine how many residents are utilizing the network under both the infrastructure and adoption projects. Innovative IT and CETF also recommend that the Commission should require the project to hold a current technical support/maintenance agreement. Lastly, CETF argues the Commission should consider setting continuity of service thresholds (i.e., project cannot be off-line for more than 30 days due to a maintenance issue, etc.).

ORA recommends using the CASF's current construction schedule where project costs are reimbursed in 25 percent increment payments with verification via invoice submission. ORA also recommends audits as described in ORA's recent comments to D. 14-02-018, which implemented SB 740.

At workshops, CD staff proposed creating a standard report that can be used to highlight issues and risks. Where a quarterly milestone was missed, the report would highlight that and staff could make more frequent contact to ensure the future compliance. Staff also considered the possibility of making monthly calls in addition to quarterly reports.

Yolo County HA noted that reporting requirements that are too onerous could also overburden participants and increase costs. It also noted that HUD has an internal grading system which is used to highlight those communities that are at risk of falling out of compliance.

CETF noted that another method to ensure compliance would be to have the grantee report the percentage of time that the network is up and running. The Los Angeles County RBC noted that the industry standard for uptime is 98 percent annually and Novarum confirmed that this is acceptable.

Several vendors suggested that an automated reporting system could be built into the network and could even automatically email the report of the data. However, they warned that this should be disclosed early on so that the vendor can ensure this is built into the software and select hardware which can support automated reporting. Innovative IT noted that gathering and submitting information still requires labor and this will drive up the cost of projects.

San Buenaventura HA supported an automated reporting system, but would prefer annual reporting because of staffing constraints. Inland Empire RBC also supports an annual reporting requirement.

Los Angeles County RBC suggested that another method for reporting could be a grid that Staff creates which grantees fill out to show what metrics it has met. This chart should also include what cures must be performed if the metric is not met.

At a separate meeting, Innovative IT suggested another method for ensuring compliance would be to establish an 800 number in the CPUC's Consumer Affairs Bureau (CAB) which would take

complaints from PSC residents. If a PSC received an overwhelming number of calls, that might indicate a need for an audit.

At a separate meeting with TCAC staff, CD staff learned that TCAC requires an annual reporting requirement for the first 15 years that a PSC is in existence. These requirements include any updates to management, the financial health of the project, vacancies, cash flow and highlights any problems. Additionally, TCAC performs a site visit every three years which consists of an interview and an onsite visit which may also include questioning tenants about the property, for example, whether the fire alarm works. Staff asked if this could be an opportunity to ask tenants about their broadband Internet connectivity. However, TCAC believes that it is difficult to determine from tenants' answers whether a problem is with the network, the device, or even user error.

Solutions for Change asked whether the grant would reimburse for reporting. CD staff responded that the total project cost does include the cost of complying with progress reporting requirements, a common practice used when reimbursing CASF Infrastructure Grant Account and CASF Consortia Grant Account grantees.

As for penalties, CETF argued that quarterly monitoring of performance and early detection of challenges or problems is more effective than penalties. Grant payments should be suspended for non-performance and the applicants should be legally liable for returning all funds not expended or not properly expended. Kern County HA argues that penalties are not applicable and no other compliance methods should be used. ORA recommends penalties for non-compliance.

12.2. Staff Findings and Recommendations - Infrastructure Projects

Finding 30. Although the Commission received feedback that many PSCs are overburdened with already existing reporting requirements, CD staff heard from various vendors that if they are aware of the reporting requirements ahead of time, then they will be able to build into the network an automated reporting mechanism to assist PSCs with these requirements. CD staff hopes this alleviates the burden on PSCs.

Finding 31. Previously in this proceeding, the Commission issued Decision 14-02-018, which implemented new eligibility rules for non-telephone corporations pursuant to SB 740. In conjunction with these eligibility provisions, the Commission also passed safeguards since the Commission does not have the same tools at its disposal to secure compliance from unregulated entities as it does with regulated entities.⁷⁴ In that proceeding the Commission determined that non-regulated entities would be required to post a performance bond and meet a liquidity requirement. The performance bond was to cover the construction period and would be equal to 25 percent of the total award.⁷⁵ The liquidity requirement was to be met by those non-regulated entities which had

⁷⁴ Decision 14-02-018.

⁷⁵ *Id.*

not been providing broadband service for at least 12 months.⁷⁶ These entities were required to show liquidity of 10 percent capped at a total of \$100,000.⁷⁷

Finding 32. Although PSCs are not regulated by the Commission, the length of construction will be so short a performance bond during construction is neither necessary nor practical, since the ratepayer funds will be at minimal risk to waste, fraud, abuse and even poor management. Much of the work will involve installing routers, access points and, perhaps, low voltage electrical work⁷⁸. Additionally, if the Commission adopts rules as proposed by CD staff, this program will contain two cost metrics, as well as other qualitative metrics designed to reduce the Commission's risk of funding poorly designed projects. Furthermore, almost all of these projects likely will cost considerably less than almost every CASF Broadband Infrastructure Grant project. Finally, under CD staff's proposal, projects greater than \$75,000 will undergo further scrutiny through the resolution process.

Finding 33. The liquidity requirement is intended to ensure that non-regulated entities have the funds to cover their startup costs. However, in this context, it is very unlikely that any applicants will be new PSCs with startup costs.

Recommendation 45. CD staff recommends that the Commission require grantees to commit to sustain projects and broadband Internet service for at least five years. Also, applicants must show that the housing property will continue to be used for residential uses for at least ten years.

Recommendation 46. For infrastructure projects, CD staff recommends the Commission require applicants to provide quarterly progress reports at the same time that they submit invoices for reimbursement, based on milestones set by the applicant, similar to the CASF Infrastructure Grant Account. These progress reports will state whether they are meeting their schedule for deployment, major construction milestones and costs submitted in their proposals and they will indicate the actual date they completed each task or milestone and whether they are encountering any issues or problems. If there are any issues or problems, they will state what actions they are taking to resolve these matters.

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ Work performed by a licensed C7 - Low Voltage Systems Contractor. Under the California Code of Regulations Title 16, Division 8, Article 3 "A communication and low voltage contractor installs, services and maintains all types of communication and low voltage systems which are energy limited and do not exceed 91 volts. These systems include, but are not limited to telephone systems, sound systems, cable television systems, closed-circuit video systems, satellite dish antennas, instrumentation and temperature controls, and low voltage landscape lighting. Low voltage fire alarm systems are specifically not included in this section." More information available at the following URL:

<http://www.cslb.ca.gov/GeneralInformation/Library/LicensingClassifications/C-7LOWVOLTAGESYSTEMS.ASP>

Recommendation 47. As noted in Recommendation 17, many proposed projects likely will be completed in a matter of weeks. In that case, CD staff recommends the Commission permit applicants to come for reimbursement at the end of the installation, in one lump sum. Regardless of when grantees request reimbursement, all grantees must submit a project completion report describing the total project costs, including engineering, planning, material cost, and an assessment of the speed the network is delivering to residents.

Recommendation 48. In Recommendation 45, CD staff recommends the Commission require applicants to agree to sustain the broadband network for five years after it has been installed. Based on that, CD staff recommends the Commission also rely on quarterly reporting after project completion in order to ensure that applicants follow through with this requirement. Quarterly reports will document the percentage of up time, the number of unique log-ons and the amount of data used.

Recommendation 49. Based on discussion at public workshops, an annual network uptime of 98 percent is an acceptable industry standard. CD staff recommends the Commission require it.

Recommendation 50. CD staff recommends the Commission require that grantees keep files, invoices and other related documentation for up to three years after the Commission makes its last reimbursement in order to comply with any audit request the Commission might make during that time.

12.3. Staff Findings and Recommendations - Adoption Projects

Recommendation 51. For adoption projects, CD proposes setting quarterly milestones for projects with the first quarter representing the ramp up time before any training begins or the first nine months. Then the next milestone will represent when the applicant is able to train 25 percent of residents, the next milestone for 50 percent of residents and the last for 75 percent of residents.

If a grantee is unable to show the requisite amount of residents trained, it will not receive reimbursement. Once it has met the requirement the grantee must show documentation that it has done so. At that point, the CPUC will grant reimbursement for costs expended, up to one quarter of the grant amount.

Recommendation 52. Similar to Recommendation 44, CD staff recommends the Commission require adoption grantees keep files, invoices and other related documentation for up to years three after the Commission makes its last reimbursement in order to comply with any audit request the Commission might make during that time.

12.4. Penalties

Under Decision 14-02-018, the Commission stated that it “has ancillary jurisdiction over its own public purpose programs, including the CASF program, pursuant to SB 740, which amended § 281.” Similarly, here, AB 1299 grants the Commission jurisdiction over this new public purpose program pursuant to AB 1299. Based on this jurisdiction the Commission found that § 2111 permits the Commission to enforce the CASF requirements in both the construction and the post-

construction phases against non-telephone corporations, i.e., entities which do not hold CPCNs or WIRs, through the use of penalties.⁷⁹ And the Commission also concluded that § 2108 permits penalties up to \$50,000 for each offense.⁸⁰

Since CD staff proposes to require post construction compliance measures, the Commission will rely on the penalty provisions of § 2111 and 2108 to enforce those measures. Also, where any abuse of funds or fraud is found, the CPUC reserves its right to invoke the penalty provisions of § 2111 to recover any misused funds. Thus, grantees in this program must keep their files, invoices and other program documents for up to three years after the last funds are disbursed so that the CPUC may perform any audits.

12.4.1. Staff Findings and Recommendations

Recommendation 53. CD staff proposes to use quarterly reporting requirements to monitor applicants and work with them before we must resort to penalty measures. This may include site visits or other special attention.

(END OF ATTACHMENT)

⁷⁹ Decision 14-02-018.

⁸⁰ *Id.*