



Fresno Housing Authority Final Report for the California Emerging Technology Fund March 2017

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Name of Project: GetConnected Fresno
Grant Number: N/A
Start Date: 3/2016 **End Date:** 3/2017

I. Financial Summary

• Total Project Budget Spent: (Attachment A contains the detail. Use the budget template from the)	\$205,565.12
• CETF Grant Amount:	\$50,000
• Number of First-Time Adoptions Achieved	340
• Number of Reconnects (Adoptions) Achieved	NA
• Percentage of Match Funds Raised against Goal (\$187,184):	91%
• Cost Per Unit of Outcomes: (Total Outcomes/Total Budget)	\$ 604

II. Project Description, Goals and Objectives, and Outcomes

Project Description

CETF committed \$50,000 to support the implementation of GetConnected Fresno. GetConnected Fresno is a collaborative joint venture with HUD and various private partners to increase Digital Literacy and adoption. The \$50,000 is meant to optimize the impact of GetConnected Fresno on improving the lives of participating residents.

The CETF funds were meant to be used for:

1. Support the management of the program for 12 months to assist FHA in achieving the three main GetConnected Fresno goals. Including at least connecting at least 161 households to the internet, teaching basic Digital Literacy to a minimum of 100 residents and ensuring the successful program implementation and completion.
2. Train 50 residents in intermediate and advanced computer courses, such as web design and robotics.
3. Conduct a community Tech Fair to inform residents of the programs and resources available.

Goals and Objectives Summary

Fresno Housing planned to connect 161 households by July 2016. This number represented approximately 40% of the combined number of units at Parc Gove Commons (215 units), Parc Grove Northwest (148 units), and Viking Village (40 units). We are happy to report that we have surpassed the original goal and have successfully connected an estimated 183 units (42%). In an effort to expand the reach of this initiative and provide services to a broader reach of families, we believe this number can be improved by increasing outreach.

Basic Digital Literacy training was provided through partnerships with California State University of Fresno, Bitwise, GitHub, and the Fresno County Public Library. We are very happy to report that we had a total of 115 students attend, surpassing our goal of 100. The students learned various topics including; What's inside a computer, how does the internet work, how will technology change our careers and the world around us, how can you use software to change the future, and understanding their digital footprint.

In addition, we held two intermediate and advanced computer courses. The courses were aimed at children in grades 3rd -12th. The children learned Web design, Robotics, and software development. This was our first venture into providing next level digital training beyond basic computer skills. This was also our first "Place Based" technology training. The residents were very excited to experience a technology environment and see firsthand that careers in technology are attainable by anyone, including those living in affordable housing. The technology hub and teachers are great examples that all you need is hard work and creativity! Residents received next level tech training usually thought of as being out of their reach. In total we had 42 students attend the intermediate and advanced courses. While this was 84% of our target 50 students, we believe that this can be attributed to it being a new program to our residents, staff, and the Fresno technology industry. Given the success and feedback, we believe that attendance will grow in the coming years as the word travels. In addition, Fresno's technology leaders have made a decree to further invest in growing resources to ensure Fresno residents at any stage in life and economic status can see, touch, and feel the chance to enter the growing tech industry.

In June of 2016 Fresno Housing teamed up with over 20 tech partners to host a GetConnected Fresno launch Party. Over 200 residents attended the event where they learned about local tech companies, school programs and services offered in their community. The event aimed to immerse attendees in the world of technology with interactive booths featuring robotics, education, and even a beat making station that gave residents the ability to make their own beat!

Project Outcomes Summary

(Please list the Outcomes and indicate the goal and result from the Outcome Tracker. Not deliverables!)

Example

Outcome Description	Actual	Goal	Percent Completed
Number of new internet connections	183	161	114%
Basic digital literacy training	115	100	115%
Intermediate and advanced computer courses	42	50	84%

III. Accomplishments and Challenges

Summary of Accomplishments and Impacts of Project

Accomplishments

Fresno Housing had 3 outcomes and achieved above 100% of 2 of the outcomes. Fresno Housing reached 84% of the third outcome.

Assessment of Outcomes Achieved in Comparison to Grant Agreement

- Our intermediate and advanced training fell a bit short of the target 50 student with 42 students actually attending the course. The hardware funding limitation took a lot of resources trying to find a suitable option. In addition, there were also challenges with transportation. Given that resources were already tight; this took time away from resident outreach.

Discussion of Other Positive Results from Project

Fresno Housing believes that one of the most positive results from the GetConnected Fresno program is that it serves as another opportunity to change the perception of the Housing Authority in Fresno. GetConnected Fresno is one of the many ways that we have been demonstrating to residents that we are community partners in addition to housing providers. Our digital literacy programs are one of the many Resident Services we offer.

1. Summer Tech Camp: The FH/GeekWise Summer Tech Camp is the first of its kind in Fresno and within the ConnectHome community. Across the nation most communities are focused on basic digital literacy that takes place within their housing development. We believe that the summer tech camp provides opportunities for our kids to build relationships with people within the tech industry and hopefully break down preconceived notions about education and economic prerequisites.
2. Community Wi-Fi: While the community Wi-Fi project had a lot of challenges, we still believe that it is the right solution. Our challenges have started nationwide conversations about how to make this model work. There have already been huge success stories in Kansas City and San Antonio.

Impacts of the Project

The Summer Tech Camp has had a lasting impact on our kids. The overwhelming need and feedback we received only made it more apparent that we need to make this an annual program. Here are some of their comments:

“My favorite thing about this week was learning all the coding we learned with the Arduino uno boards and bread boards. Also because I met my best friend ever... Breanna. I also had fun meeting all these new people that I didn't know before. This really helped me expand my mind to know all these new things that I didn't know before. Another part was me and my partner being able to put 31 LED'S on a board at once and coding all the lights to work. My least favorite part was waking up early in the morning all the time for the camp but it was worth it.”

“My favorite part of this week was when he had us do the LED lights and also when he let us power them up and make sure that we feel comfortable in this class and also because he made sure that we were all the way done before he went again. The least favorite part about this is that most of it was hard and very complicated to do in the beginning when we first got here. Another one of my favorite parts in this camp was all the challenges that we were able to do in the beginning.”

Overview of Major Challenges to Achieving Planned Results

Identify Major Challenges to Successful Implementation

Fresno faced two major challenges during the grant period; Funding for devices and Internet Service Provider cooperation for community Wi-Fi model.

- Fresno Housing had very strict funding regulations when it came to purchasing hardware. We were not able to use any of the CETF grant towards devices. In addition, CPUC funding had a cap of \$250 per computer. CPUC also stated that if the computer wasn't a new computer, it must come with a 3-year warranty. We found that it is very rare for any vendor to provide a 3-year warrant on a used computer. Fresno Housing intends to pursue any and all funding opportunities and educate partners on the importance of hardware purchasing flexibility.
- The community Wi-Fi model we selected was jeopardized by the withdrawal of Comcast from our service contracts. This withdrawal made the projects less competitive than other models and financially infeasible for the agency.

The Fresno Housing Authority (FH) is a recipient of broadband infrastructure grant funds through the California Public Utilities Commission's (CPUC) California Advanced Services Fund.

On January 1, 2015, the Authority submitted ten (10) infrastructure applications to the CPUC. As part of our application, the Authority relied on pricing for service to the ten sites. Comcast had been involved in the planning of the implantation to ensure it was a successful program.

On July 6, 2015, FH received notice from the CPUC that its application had been approved. In February, 2016, FH completed its installation of necessary broadband infrastructure and, as a result, signed seven contracts with Comcast for the provision of broadband internet service. Additionally, FH intended to sign three more agreements for properties still under construction. As part of these agreements, FH was to pay \$92,038 for five years of service (approximately \$22 per unit per year).

In March 2016, FH received notice that Comcast's corporate leadership would terminate the contracts for our seven properties. FH, with the assistance from staff at the federal Connect Home initiative, spoke with Comcast's leadership but were unable to resolve the issue. Specifically, Comcast informed FH that any effort to "assign, license, sublicense, share, provide or otherwise utilize services in conjunction with a third party" would be prohibited pursuant to our agreement. Rather, Comcast requires that each unit have its own separate account for service. Comcast requested that each of our residents participate in its "low cost" Internet Essentials program at a minimum fee of \$10.00 per month. If FH procured this service, it would not be able to utilize the substantial broadband infrastructure investment that FH has made in the properties and potentially not comply with the terms of the CPUC grant.

Since Comcast's withdrawal, FH has been in discussions with six potential internet service providers. These companies represent the only service providers in our area willing to provide suitable service to the CPUC-funded infrastructure. Quotes for service from these companies during the five-year grant compliance period range from \$751,653 to \$1,182,780, which represents a nearly ten-fold difference from the Comcast agreements. Furthermore, at roughly \$240 per unit per year these alternatives do not represent good value or a responsible use of public funds as compared to individual market rate services.

Upon entering the program, it was our understanding that ISPs, including Comcast, had been involved in rule-making and implementation workshops. The CPUC's model cannot function without affordable access to bandwidth and without the full buy-in of ISPs or the creation of regulatory service standards. We are additionally concerned that the national discussions regarding low-cost models tend towards per unit or per resident agreements. While we greatly applaud the intention behind AB1299, we hope in the future ISPs, regulatory agencies, and non-profit partners can reach consensus on an affordable delivery model.

Discuss Efforts to Address Challenges and Resolve Problems

- In order to address the hardware funding restrictions, Fresno Housing has created minimum specifications for new and used devices. This includes price ranges and recommendations that will be shared with staff who are preparing grant submissions. By educating staff about the minimum specifications, we should be able to write a more accurate grant submission.
- Since the ISP challenges developed we have been seeking alternative connectivity options.
 - Option 1: Host "Sign up events" for residents to sign up for low-cost internet offerings.
 - Continue to pursue ISP's who do not have a local presence in the hopes that we will find an ISP that will be able to utilize our CPUC infrastructure.

IV. Lessons and Recommendations

Summary of Lessons Learned (Please provide context, not just bullet points, so the reader appreciates the lessons learned.)

Lessons Learned

Lesson 1: Incorporate national ISP decision makers early in the process. We believe that having Comcast management involved in the AB1299 grant writing process would have saved us a lot of heartache. The CPUC AB1299 grant seemed to have been awarded even though industry standards we leaning away from the community Wi-Fi model.

Lesson 2: Role clarity is essential. We have begun putting together a play book that describes who the partners are and what their role is. Having a lot of partners is the goal but we need to ensure that we all are working with the same information to maximize resource utilization.

Summary of Recommendations

Recommendations for Expanding the Project in Region or Scaling Up Statewide

Recommendation 1: There are so many successful programs across the state and nation, we believe it would be beneficial if there was a way to communicate more often and in an organized fashion. This way we can share best practices, funding opportunities, partnership opportunities, etc.

Recommendations to Close the Digital Divide Based On Your Experience

Recommendation 1: Find ways to provide low-cost devices to more low-income households.

Recommendation 2: Convince more funders (foundations, government) to support digital literacy and the work of helping people adopt broadband at home.

Recommendation 3: Convince ISP's to support community Wi-Fi projects. In addition, distribute information about attracting ISP's that do not have a local presence.

Recommendations to CETF Regarding Grants Management

Recommendation 1: Allow grant funding to be used for devices. With very limited options out there, it would be of been a huge help to sponsor the summer tech camp in its entirety. The cost of computers would have been an additional \$5K but would have guaranteed the success of the program.

V. Grant Agreement Requirements

Purchased Equipment *(If you purchased equipment with the CETF grant, please recap what was purchased and what will happen to it now that the grant has concluded.)*

We were given very specific instructions by CETF not to purchase equipment.

Date	Description	Purpose	Amount	How it will be used.
NA	NA	NA	NA	NA

Unspent CETF Grant Funds *(If there is a balance of CETF of grant funds please indicate the balance and the agreement reached with CETF as to the disposition of these remaining funds.)*

All of the CETF grants funds were expended.