San Diego Futures Foundation
Final Report for the California Emerging Technology Fund
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Name of Project: San Diego Broadband Initiative
Grant Number: 1986117
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I.   Financial Summary

- Total Project Budget Spent: $1,344,944
- CETF Grant Amount: $250,000
- Additional Grant: $100,000
- Percentage of Match Funds Raised against Goal: 100%
- Cost Per Unit of Outcomes: $200

II.   Project Description, Goals and Objectives, and Outcomes

Project Description

The San Diego Futures Foundation (SDFF) is a 501(c)3 social enterprise established in December 1999 to help bridge the Digital Divide and improve the lives of underserved individuals, organizations, and disadvantaged small businesses in San Diego through the provision of low-cost computers, technical training, and educational programs. By the end of 2009, SDFF had donated more than 20,000 computers and provided more than 25,000 hours of technical services and training to San Diego non-profit organizations, individuals a and families.

In 2008, SDFF created the San Diego Broadband Initiative (SDBI) to provide computers, training, and support services to low-income families. The mission of the program is to improve the educational and economic outcomes of underserved families by providing the resources and training necessary to be successful.

The SDBI program was developed in response to a 2005 study by the City of San Diego entitled *"An Examination of the Impact of San Diego's Digital Divide on Regional Economic Prosperity,"* which described the correlation between computer adoption, literacy, Internet use, and jobs. In part, the report found that:

- 21 of the 25 occupations in sectors with the highest project job growth will require computer skills. There are many cluster jobs that do not require a bachelor's degree, but still require computer literacy.

- Over two-thirds of residents age 25 and older in San Diego's low-income communities have no more than a high school education or less. These communities also report the lowest levels of computer literacy.

- Latinos comprised 28% of San Diego's general population but they made up 40% of the "unwired" population.

- Latinos also had the lowest rate of computer ownership with nearly 30% reporting that they did not own a computer.

- Reporting by income levels, individuals and families earning between $20,000 and $34,999 had the lowest rate of computer ownership.

- 29.6% of those who do not own a computer indicated that they had no access to a computer at all.

Goals and Objectives Summary

The primary goal of the program is to provide computers, software, training, and support to San Diego's low-income families. The objective for the first year (July 2008 through June 2009) was to serve 1,625 families. In September 2009, SDFF extended the program to serve an additional 500 families. Specifically, our goals were to:

Goal 1: Expand access to technology in order to increase educational opportunities for youth and families.
Goal 2: Increase educational opportunities for disabled youth and families.
Goal 3: Increase educational opportunities for youth and families.
Goal 4: Pursue universal broadband.
Goal 5: Strengthen and revitalize the community through technology.
Goal 6: Enhance community commerce through technology.
Goal 7: Create or enhance a web portal for relevant communication programs and applications.
Goal 8: Create a replicable model for community technology.

Project Outcomes Summary

Outcome Description	Goal	Actual
Number of People that Completed Courses e.g. resume writing, job search	24	16
Number of Parents that Completed Training	175	125
Number of Youth that Completed a Basic Course	289	235
Number of Adults Who Completed Basic Training.	2,269	2,100
Number of Refurbished Computers Distributed	2,811	2,125
Number of Individuals with Disabilities Served	400	N/A
Accessibility Training and Plan Completed	Yes	Yes
Number of Households with New Broadband Service	733	500

III.   Accomplishments and Challenges

Summary of Accomplishments and Impacts of Project

Several important accomplishments were made in the first year of the program.   Among the most significant was the formalization of our network of 14 nonprofit and businesses partners serving low-income populations. The partners developed a strategic plan, established benchmarks and objectives, and implemented a systematic approach to closing the Digital Divide in San Diego.

SDFF also negotiated an important business relationship with Cox Communications, resulting in a significant reduction to the cost of broadband and other barriers keeping low-income families from adopting technology. SDBI families choosing Cox as their Internet Service Provider simply call a special number to have their cable modem delivered. There are no up-front hardware costs, activation fees, or credit checks involved.

The program was successful in delivering technology resources including hardware, software, training, and technical support to more than 2,400 of San Diego's disconnected families. Significantly, more than 20% of the computers and services provided went to individuals with disabilities.

The overall goal of the program was to create community and business partnerships that resulted in the delivery of technology and resources to disconnected families, and that goal was met.

Assessment of Outcomes Achieved in Comparison to Grant Agreement

All but one of the outcomes and objectives defined in the original grant agreement were met or were exceeded. Additionally, in 2010, SDBI is prepared to expand service levels and add program components including employment-based training and job assistance. SDFF is also positioned to further develop the sustainability model which will include charging affordable fees for high-value, high-demand equipment and services available solely to the target populations.

Delineation of Deliverables and Outcomes Not Achieved and Explanation

With regard to the outcome "determine low rates of broadband use in San Diego County utilizing partners' service population," SDBI partners elected to eliminate this outcome. Collecting such data may have been perceived as a potential invasion of privacy and therefore detrimental to building community and engagement in the early stages of the Initiative.

Discussion of Other Positive Results from Project

- Over 2,400 San Diego families received a computer, software, Internet access, training, and technical support.

- Twenty-three percent (575) of the program's 2,400 participants are individuals with disabilities.

- Program partners benefitted from the opportunity to develop more in-depth and structured training for their clients. Participation also resulted in new clients for partner programs.

- More than 100 high school students recruited parents to join the program in order to have a computer at home.

- SDFF established itself as committed community leader and as a principled partner with San Diego non-profits serving low-income communities and has become a trusted source for information and technology in San Diego.

- SDBI increased awareness of Digital Divide issues in San Diego County. A great number of participants were referred to the program through word-of-mouth.

- FCC staff invited SDFF to participate in a field hearing to solicit information for a National Broadband Plan. FCC staff paid a visit to SDFF offices to discuss the SDBI program.

- SDFF obtained additional financial support for SDBI through grant applications totaling $82,000.

- SDFF organized and led a Learning Community with 7 CETF grantees for the purpose of standardizing the curriculum and training statewide. The CETF Affinity Group developed an online resource toolkit which can be delivered during training and used independent of classroom instruction.

- SDFF Launched and promoted the Get Connected Campaign in San Diego. Seven-hundred community members attended this event. Fourth District County Supervisor Ron Roberts attended the event and announced April 17 as "San Diego Futures Foundation Day."

Overview of Major Challenges to Achieving Planned Results

Identify Major Challenges to Successful Implementation

- *Barriers to entry*
  o High monthly costs, credit checks, and up-front fees for Internet services.
  o Reluctance in community to adopt Internet services due to lack of knowledge about the products and services being offered.
- *Equipment*
  o Availability of donated and low-cost hardware and software.
  o Partners' ability to warehouse computers for distribution.
  o Logistics related to delivery and pickup of equipment, and client and partner transportation.
- *Services*
  o Lack of standardized training curriculum amongst partners.

- o Lack of standardized methods for providing technical support.
- o Viruses and malware infecting recipient PCs shortly after computers were distributed placing high-demand for post-distribution services.

Discuss Efforts to Address Challenges and Resolve Problems

Barriers to Entry
Through our initial surveys and follow-up interviews we discovered that the top two reasons people did not sign-up for Internet service were the high up-front and recurring costs, and reluctance to purchase a product they were not familiar with.

SDFF negotiated discounted Internet services with Cox Communications. Cox made available plans starting at $14.99 per month for the first 3 months and $19.99 per month thereafter. SDFF also partnered with One Economy resulting in the availability of no-cost AT&T DSL accounts for 2 years.

Many families were reluctant to sign up for Internet service because of the credit checks, sign-up fees, equipment fees, and other requirements of the ISPs. SDFF was able to negotiate with Cox Communications and One Economy to drop these "up-front" requirements and streamline the process, making it as easy as a phone call.

Equipment
SDFF was able to commit more than 2,400 PCs from its inventory to the program. Without the equipment, the program would have been far less impactful and possible. Additionally, SDFF was able to offer Microsoft Office at a cost of $10 to participants through the Microsoft Authorized Refurbishers program. Still, the number of PCs needed to close the Digital Divide in San Diego cannot possibly be met through donated PCs alone. SDFF has begun to offer low-cost equipment to families who have the ability to pay, thereby freeing up donated inventory for the most needy and lowest-income families. SDFF will continue to investigate avenues for significantly increasing the number of computers available to the community as part of the program.

Computer distribution proved to be a challenge for partners due to the number of computers they were picking up and delivering, the frequency of their donations, and their limited methods of transportation (i.e., small cars). SDFF solved this problem by raising funds to buy a truck and delivering to partners as needed.

Services
One of the goals of the program is to ensure that all participants receive basic training on the use and maintenance of a PC prior to receiving one. Partners serving our target audience were recruited, in part, for their existing computer training capabilities. Some partners required help formalizing their existing training program, expanding their curriculum, and creating training documentation. With the assistance and input of all training partners and SDFF, these shortcomings were resolved and a standard set of core training modules and training curricula was developed for all partners to share and use.

All participants are fully trained on the threat malware and viruses pose, where they come from, and how to avoid them, yet a very, very large number of computers became infected and continue to be today. One of the solutions developed is a "restore disk" that partners can provide, which will rebuild the computer to its original state. The California Consumer Protection Foundation supports a full-time staff position that provides help desk assistance and hardware plans for program participants. The extensive services help increase adoption by ensuring computers stay functional and participants continue to increase skills and access resources.

IV.   Lessons and Recommendations

Summary of Lessons Learned

- Ensure online forms and content are easy to follow.
- Provide assessments for experienced users.
- Standardize computer training.
- Standardize partner reporting processes.
- Streamline computer deployment processes.
- Change 1-year warranty to 90 days.

- Develop sources of low-cost computers to sell.
- Develop technical support ticketing and remote support systems.
- Provide training on the use of tech support systems.
- Conduct regular Train-the-Trainer workshops.
- Provide resources in English and Spanish.

Lesson 1: *Affordability* – One of the most important lessons learned through SDBI operations is that over half the targeted population will become technology consumers. SDBI members were surveyed regarding their views and behaviors about technology. SDBI members reported an increased understanding of the value of technology in their daily lives through participation in SDBI. Over half of the surveyed population stated they would purchase technology equipment and services in the future. There will remain a portion of the population who will not become technology consumers regardless of the benefits. These people subsist on such limited incomes they would literally have to give up food, shelter or utilities for connectivity.

Lesson 2: *Applications* – Families are using the web for all of the major applications and benefits. The top activities reported by adult users are:

TOP SDBI ACTIVITIES	
Email	86%
Searching and Research on the Web	75%
Talk with Friends and Family - Chatting, Social Networking, VOIP	62%
School Related - eLearning, Research, Visiting School Websites	59%
Games - Video game websites and Online Gaming	56%
Job Search – Online newspaper, Craigslist, Monster, Jobing	52%

The SDBI website is proving to be an extremely important and valuable tool, both for families and for programmatic use. The site receives approximately 12,000 visits per month from roughly 1,200 unique visitors. SDBI families use the site to find resources and learn about the ongoing program benefits.
The site is also used to communicate with partners. It is the central repository for programmatic data and houses the ticketing system used to provide technical assistance. Today, we can communicate with more than 2,400 SDBI families simply by email or by posting banners and messages on the site.

Lesson 3: *Access* – To be included in the program, participants were required to attend a training session lasting anywhere from 8 to 16 hours depending on the partner. We found that some of the participants did not need the training since they used computers either at work or at public computing centers such as the library. Additionally, as reported, the high cost of internet service and lack of knowledge about the products were barriers to entry or access.

Lesson 4: *Accessibility* – SDFF became aware of the broad range and types of disabilities and how they can affect people's access to technology. SDFF also learned about a wide array of adaptive technologies and the appropriate way to work with people with disabilities. Specifically, SDFF learned how to accommodate various needs while using the correct terminology and treating disabled clients with respect and courtesy.

Lesson 5: *Assistance* – One of the greatest challenges of the program is providing support to families who, in a very short timeframe, download or otherwise infect their PCs with viruses and malware. We are installing utility applications on each PC to help ensure the malware is caught.

Recommendations

Recommendations for Expanding the Project in Region or Scaling Up Statewide
Recommendation 1: Develop a menu of refurbished and new computers to make available at no cost and at low cost. Refurbished computers can be offered at fair market value. If possible, provide funding to reduce the price of new computers to 25% less than what is offered elsewhere. Make this offer available only to nonprofits and

ensure a limit is set on the number of discounted PCs available. The nonprofit should also sell new PCs acquired through the normal wholesale channel at normal markups.

Recommendation 2: Create a "social network" around the programs, giving those new to technology a safe and comfortable online environment in which to learn. Use the resource to continually promote other program offerings and web-based applications and uses.

Recommendation 3: Develop and administer standardized skills assessments to allow individuals with skills to "test out" and still receive a PC. Work with ISPs to develop reduced cost program packages.

Recommendation 4: Identify partners who are able to assist in training and accommodations. The first steps towards effective implementation: research users, talk to users, involve users and build relationships and partnerships with organization that specialize in assistive technology. Educational Resources: utilizing evaluation techniques to determine effective educational tools for assisting and training people with disabilities.

Recommendation 5: More time should be spent educating people on the sources of malware and viruses and how to avoid them. Utility applications should be configured with automatic updates. A backup partition should be created if possible, from which antivirus and malware software can be run on infected PCs. Recovery resources should provided so that families can "re-image" their machines and get them back to their clean state.

Recommendations to CETF Regarding Grants Management

- Allow for indirect or overhead as needed.
- Increase or add significant funding to support marketing.
- Streamline financial reporting requirements to match standard financial reports.
- Eliminate 4:1 match requirements.
- Fund financial and outcomes tracking and reporting systems.
- Maintain consistency between reporting requirements and grant applications/projections.
- Actively search for and introduce grantees to new funding opportunities.
- Develop, maintain, and make readily available grant reporting schedules.
- Continue hosting grantee workshops, enabling grantees to share information.

Recommendations for Expanding Project in Region or Scaling Up Statewide

- Offer low cost computer solution in a place that is convenient for families.
- Standardize Internet service packages.
- Request minimal upsell at initial Internet sign-up.
- Establish multiple locations for service delivery.
- Expand community partnerships.
- Leverage funding to secure additional financial support.
- Expand to rural or remote locations.

V.   Grant Agreement Requirements

Purchased Equipment
No equipment was purchased with this CETF grant.

Unspent CETF Grant Funds
The grant cash balance is $0.