Lessons Learned from the Field:

Connecting Californians to Broadband and Digital Careers

January 2013
Acknowledgements
This report features the experiences of the California Emerging Technology Fund and its 19 partners largely funded through grants to CETF made by the National Telecommunications and Information Administration’s (NTIA) Broadband Technology Opportunity Program (BTOP) as part of the American Recovery and Reinvestment Act (ARRA) of 2009. The goal of the programs is to advance Digital Inclusion in California. The BTOP funds totaled $14.3 million, CETF provided $2.6 million in matching funds, and the 19 partners contributed $3.5 million in matching resources to secure these grants. The partners were funded in two rounds, Broadband Awareness and Adoption and Access to Careers in Technology.

We are grateful to the Glen Price Group for coordinating the Learning Community for these projects. The material in this report is largely compiled from the Learning Community and individual interviews conducted by Aaron Price.
Table of Contents

Executive Summary 5
The Four Major Lessons 5

Introduction 7
Why Are Lessons Important to Share? 7
Key Factors Needed for Success 7
Lessons Learned by the Practitioners 8
Results by the Numbers 10
Partner Organization Names and Acronyms 13

Challenges and Solutions 15
1. Leveraging Broadband Training and Curriculum 15
   1.1 Challenge: Identifying Topics and Benefits that Effectively Convey the Value of Broadband 15
   1.2 Challenge: Understanding the Needs of Target Populations 16
   1.3 Challenge: Finding Curricula to Match Student Skill Level 16
   1.4 Challenge: Gaining Access to Computer Labs (Location-Dependent) 17
   1.5 Challenge: Keeping Curricula Up to Date 17
   1.6 Challenge: Obtaining Useful Topic-Specific Curricula 17
   1.7 Challenge: Delivering Consistent, High-Quality Training in Multiple Classroom Locations 18
   1.8 Challenge: Gaining Access to a Catalog of the Best Curricula 18
   1.9 Challenge: Providing Useful Training on Obsolete Computers 18
   1.10 Challenge: Locating High Quality Online Resources in Spanish 19
   1.11 Challenge: Addressing Different Skill Levels 19

2. Securing Job Placements 19
   2.1 Challenge: Providing Internship, Volunteer, and Job Opportunities to Training Participants 19
   2.2 Challenge: Obtaining Job Placement Information from Clients 19
   2.3 Challenge: Placing Hard-to-Employ Candidates in Internships and Jobs 20
   2.4 Challenge: Motivating Students in a Difficult Job Market 20
   2.5 Challenge: Funding Certification Exams 21
   2.6 Challenge: Clarifying the IC3 Certification Career Path. 21

3. Driving Adoption 21
   3.1 Challenge: Reaching Broadband Hopefuls 21
   3.2 Challenge: Following Up with Program Participants 22
   3.3 Challenge: Supporting Clients to Subscribe to Broadband Service (Go the Distance) 22
   3.4 Challenge: Obtaining Proof of Broadband Adoptions 22
   3.5 Challenge: Addressing the High Cost of Broadband Service 23
   3.6 Challenge: Finding High-Speed Internet Providers in Remote Areas 23
   3.7 Challenge: Finding Affordable Home Broadband Service 23
   3.8 Challenge: Supporting Participants to Navigate Complicated ISP Application Processes 23
   3.9 Challenge: Keeping People Connected 23
   3.10 Challenge: Providing Access to Refurbished Computers Statewide 24

4. Pursuing Sustainability 24
   4.1 Challenge: Securing Funding Specifically for Broadband Adoption and Digital Literacy 24
   4.2 Challenge: Raising Funder Awareness about the Digital Divide 24
   4.3 Challenge: Raising Funds Beyond Grant Awards 24
   4.4 Challenge: Achieving Program Sustainability Beyond Funding 25
   4.5 Challenge: Finding the Value in Collaborations 25

Appendix A: Partner Descriptions and Contact Information 26
Appendix B: The Findings from the CETF Get Connected! Public Awareness Program 31
Appendix C: Just The Facts—California’s Digital Divide 32
Executive Summary

The California Emerging Technology Fund (CETF) and its 19 partners reached millions of Californians between April 2010 and June 2013 in communities most impacted by the Digital Divide, promoting broadband awareness and adoption at home, offering computer training and computing devices, and providing job training for the 21\textsuperscript{st} Century. The purpose of this report is to share major lessons based on solutions to challenges for achieving broadband adoption and Digital Literacy\textsuperscript{1} in order to maintain a globally competitive workforce and provide educational and economic opportunities for all.

The federal government, through the National Broadband Plan and other initiatives, has made expanding access to broadband a national priority. This document is intended to be a resource for practitioners around the country as they plan new initiatives or seek course corrections to increase broadband adoptions and jobs.

The lessons have been developed through the work of CETF, Broadband Awareness and Adoption (BAA) and Access to Careers in Technology (ACT) partners, as part of two federal grants awarded in 2010 to CETF by the National Telecommunications and Information Administration (NTIA). The report was compiled from information shared at quarterly in-person meetings and in interviews conducted by the Glen Price Group. Through these meetings, the BAA and ACT partners formed Learning Communities\textsuperscript{2} for each grant, and as a combined group, with the intention of sharing their challenges and the subsequent solutions and Lessons Learned. The major lessons are summarized here and provide the framework for how the report is organized. Both grants had stretch goals yet achieved the intended outcomes. The adoption and job placement results are highlighted in the chart below. The infographics on pages 11 and 12 display all the results. For more information please visit www.cetfund.org.

The Four Major Lessons

1. **Leverage Everyday Activities into Broadband Training and Curricula**: How to engage participants with relevant training topics that will help drive new, sustainable home broadband adoptions.

2. **Secure Job Placements in the Growing ICT Field**: Strategies that have successfully helped program participants find jobs in Information and Communications Technology (ICT).

3. **Drive Broadband Adoption by Offering Affordable Full Services**: Service and resource combinations that are effective at driving (and securing!) adoptions along with affordable broadband and computing devices.

4. **Pursue Sustainable Programs**: How to integrate broadband adoption into other activities, such as health, education, financial literacy and community development.

### Broadband Awareness and Adoption (BAA)

<table>
<thead>
<tr>
<th>Outcome Description</th>
<th>Goal</th>
<th>Achieved</th>
<th>% of Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income individuals trained in Digital Literacy</td>
<td>678,000</td>
<td>719,255</td>
<td>106%</td>
</tr>
<tr>
<td>Homes subscribed to broadband Internet</td>
<td>133,000</td>
<td>198,743</td>
<td>149%</td>
</tr>
</tbody>
</table>

### Access to Careers in Technology (ACT)

<table>
<thead>
<tr>
<th>Outcome Description</th>
<th>Goal</th>
<th>Achieved</th>
<th>% of Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals placed in jobs</td>
<td>2,558</td>
<td>2,659</td>
<td>104%</td>
</tr>
<tr>
<td>Homes subscribed to broadband Internet</td>
<td>9,237</td>
<td>8,194</td>
<td>89%</td>
</tr>
</tbody>
</table>

\textsuperscript{1} Broadband adoption and Digital Literacy outcomes include home broadband subscription, Digital Literacy certification, job readiness and placement, and broadband awareness.

\textsuperscript{2} Through the BAA and ACT Learning Communities partners were convened in-person and for webinars to share information and experiences, engage in group learning, discuss new ideas, and support each other to overcome programmatic challenges.
Introduction

Broadband Awareness and Adoption (BAA) and Access to Careers in Technology (ACT) were funded in 2010 as part of the mission of the California Emerging Technology Fund (CETF) to promote home broadband adoption and ICT jobs so California will remain globally competitive in the digital age. They were funded in large part through grants to the CETF from the National Telecommunications and Information Administration’s (NTIA) Broadband Technology Opportunity Program (BTOP) as part of the American Recovery and Reinvestment Act (ARRA) of 2009. The BTOP funds totaled $14.3 million, CETF provided $2.6 million in matching funds, and the 19 BAA and ACT partners contributed $3.5 million in matching resources to secure these grants.

The goal of CETF, a non-profit foundation created in 2006 by the California Public Utilities Commission, is to reach 98% of all state residences with broadband infrastructure and to achieve 80% home adoption statewide by 2017. This statewide goal can only be accomplished if the following hard-to-reach target communities achieve at least a 70% adoption rate: low-income populations, Latino households, rural communities, and people with disabilities.

Why Are Lessons Important to Share?

- To help practitioners and program managers plan successful approaches and practices to achieve particularly challenging outcomes (e.g., broadband adoption, job placement during challenging economic times);
- To help practitioners avoid seemingly promising practices that, in the end, did not achieve the desired outcomes;
- To inform funders of key challenges and solutions in the field of broadband adoption that can be used to set priorities when funding broadband initiatives; and
- To contribute to the communal body of knowledge in the field of broadband adoption, and encourage practitioners to engage in ongoing mutual learning to identify best practices.

Key Factors Needed for Success

CETF served as the project manager for the two grants and developed its own lessons to share. They are summarized here as the Key Factors Needed for Success. In many ways, they represent good management. However, CETF is also aware that Project Managers, be they in the public or private sectors, also can benefit from learning from others’ experience. Some of the ideas below may be new while others will serve to reinforce current practices.

1. **Grantee Executive Leadership and Staff Management Capacity Are Essential**

   Executive leadership and management capacities make a significant difference in the ability of an organization to achieve results. Many grantees realized they needed to do a better job assessing their own capacity to manage a large grant. The key assessments leading to this conclusion included staff Digital Literacy skills, project management experience, and fundraising abilities. “Hire the best people”, one grantee advised. It is important for partners to assess staff training needs before the start of a major new grant. If an organization is not hiring for new positions, think about how to help current staff members improve their skills with training, both at the outset of a new project and through ongoing coaching.

2. **CETF Coaching and the Learning Community Were Essential to Reaching Goals**

   CETF, as an investment partner, regularly supported BAA and ACT partners by providing educational opportunities; project monitoring; coaching; and course correction management, which proved a critical factor in reaching success. CETF also strongly supported collaboration and active Learning Communities among grantees and other partners to help leverage resources and overcome challenges.

3. **Thoughtful Work Plans in Advance Lead to Faster Recognition of Challenges**

   A successful work plan must be focused on results and accountability; accountability is essential to meeting program goals on time.
4. **Anchor Institutions and Community Organizations Need to Revise How They Work to Ensure Clients Actually Obtain Broadband (Not Only Provide Information and Encouragement)**

Often, organizations readily share information about how to subscribe to broadband service, however, they typically do not provide sufficient follow-up to ensure clients are prepared to complete the complex subscription process. Organizations must recognize the challenges inherent in purchasing broadband and obtaining a computer in order to effectively serve their program participants, regardless of any specific product or service.

5. **Integrating Digital Literacy and Broadband Adoption Training into Existing Programs Is the Best Way to Ensure Sustainability and Continually Narrow the Digital Divide**

Technology is not a stand-alone solution. However, it is a powerful tool to gain opportunity, be it access to better health care, key financial information, a higher-paying job, or improved educational options. Teaching Digital Literacy in the context of seeking the core organizational outcomes will lead to sustainable adoption.

Lessons Learned by the Practitioners

The Lessons are a synthesis of all the challenges and solutions described in this report. These Lessons represent the experience of the practitioners working day-to-day on outreach, recruitment, training and the other initiatives required for adoption and job placement. These are not considered the “magic bullet” to answer all issues but are offered with the hope of providing useful guidance as other practitioners encounter challenges. The specific challenges and solutions shared by practitioners are described beginning on page 15.

1. **Leveraging Broadband Training and Curricula**

   It is essential to first truly understand the needs and desires of the target population – what are they interested in and how can computers and/or broadband connectivity support and enhance their interests and well being? Practitioners should develop engaging curricula and training programs based on responses to this question. Information and referral agencies can provide a valuable service by identifying clients in need of services that rely on or can be more easily obtained with Internet access, and then referring these clients to training organizations.

   How curriculum is taught is critical to achieve success. Multiple instruction methods should be offered, including traditional classroom instruction, one-on-one tutoring, peer tutoring, open computer labs, and online material and instruction. In general, introductory or basic classes should be limited to 2 hours of instruction per day to keep students engaged, improving the chances they will enroll in more advanced, time-intensive courses.

   To keep curricula up-to-date, BAA and ACT partners have taken a variety of approaches including:
   - Developing an internship program and having interns update curricula;
   - Teaching students that technology is constantly changing and providing guidance on how they can keep up to date;
   - Providing regular updates (via email and web) to former students about relevant technology changes; and
   - Convening as a group to collaboratively revise and update curricula.

2. **Securing Job Placements**

   In addition to actively communicating with businesses to maintain an up-to-date list of job and internship positions, BAA and ACT partners also successfully placed clients directly in jobs and internships by:
   - Working with businesses to conceptualize, design, and implement internship programs. Through this process, practitioners can identify each company’s motivations and barriers for providing internships, and more effectively cater to their motivations.
   - Establishing an internship program at the partner’s own organization. This allows training program graduates to improve both their “soft” skills and technical knowledge, making them more competitive when applying for jobs.
Lessons Learned from the Field: Connecting Californians to Broadband and Digital Careers

Practitioners should maintain communication with training program graduates and provide job search and continued professional growth support. BAA and ACT partners found that, in addition to regular email communication with program graduates, inviting graduates to events such as BBQs, Thanksgiving dinners, and graduation ceremonies helped keep graduates in close contact and improved networking opportunities. Additionally, facilitating a Job Club that meets regularly to provide a forum for graduates to share their progress and experiences helped graduates maintain motivation to seek and retain employment.

Many program graduates lack regular access to computers and/or broadband Internet. This can be addressed by offering access to a business center or computer lab where graduates can compose and print resumes and search and apply for jobs online.

3. Driving Adoption

BAA and ACT partners learned to work with Internet Service Providers (ISPs) and computer distributors to promote affordable programs for participants. Californians without broadband at home can be subdivided into a number of subpopulations based on how likely or close they are to subscribing to broadband, ranging from “Broadband Hopefuls”, those who are very likely to subscribe, to the “Digitally Distant”, those who will require very significant amounts of information and training before subscribing. As an overarching approach to driving broadband adoption, BAA and ACT partners gained access to “Broadband Hopefuls” through strategic partnerships and targeted outreach (e.g., working with libraries, schools, and community-based organizations to promote broadband training and adoption). See illustration on page 22: All Non-Subscribers Are Not Alike.

To address the common barrier of broadband service cost, partners researched and presented broadband offers and discounts to clients, noting the importance of presenting a comprehensive set of options and allowing the client to make their own decisions about which provider and plan to choose. In addition, some partners incorporated information to help clients become smart shoppers for broadband now and in the future. They also shared information about the potential cost-savings associated with broadband (e.g., long-distance calling, money-saving coupons, etc.) during their training programs.

Some partners offered participants a free computer upon completion of a training program and/or subscription to broadband. Alternative incentives could include a cash prize, raffle to win a computer, gift cards, and discounts on computer hardware or software, or other ways to cover the costs of service for some number of months and/or additional fees associated with broadband subscriptions. Beyond driving participants to subscribe to broadband, BAA and ACT partners faced the critical challenge of following up with clients to confirm their subscriptions and/or provide continued information, training, and guidance in support of their broadband adoption process. Partners found that this follow-up process required significantly more time than planned and depended greatly upon the successful development of a trusting relationship between the partner and clients. Though the BAA and ACT partners identified many successful practices in the area of driving broadband adoption, significant challenges remained.

In regions that lack local computer refurbishers, partners should either develop relationships with organizations that ship refurbished computers statewide or purchase refurbished computers in bulk elsewhere in the state to resell to clients. Partners found that this follow-up process required significantly more time than planned and depended greatly upon the successful development of a trusting relationship between the partner and clients. Though the BAA and ACT partners identified many successful practices in the area of driving broadband adoption, significant challenges remained.

4. Pursuing Sustainability

With limited funding available for Digital Literacy training and broadband adoption specifically, partners should integrate these activities into programs and/or partnerships that specialize in delivery of services. A growing number of services, notably healthcare, workforce development, and financial services, require clients to have Internet connectivity and computer skills. In summary, partners can expand their funding opportunities by presenting Digital Literacy and broadband adoption as supportive training opportunities that will help achieve goals that are more aligned with the funder’s priorities.

Beyond funding, organizations should seek opportunities to expand organizational capacity and services by designing programs that will outlive their initial funding source (e.g., online informational resources that will require significant resources to develop but only minimal funding to maintain).
Results by the Numbers

The work in the two federal grants was successful because partners were willing to adjust, change and recalibrate their activities quarterly. They worked individually and as a collaborative. The ACT grant still had 6 months remaining when this report was published. The results on the following two pages are displayed as visual representations in infographics. The outcomes are the aggregate results by grant. Appendix A contains a brief description of each partner and some of their individual results.

The source information for the state and national Home Broadband Adoption Rates:

National

California
The Broadband Awareness and Adoption project, managed by the California Emerging Technology Fund, set these goals:

- Reach 5,000,000 California residents through an awareness campaign.
- Connect 133,000 California households to broadband.
- Train 678,000 low-income Californians in Digital Literacy.
- Distribute 4,000 refurbished computers to low-income residents.

Activities and Results:
- **13,296,068 Got The Message** 266% of Goal
- **719,255 Got Trained** 106% of Goal
- **198,743 Got Connected** 149% of Goal
- **6,866 Got Computers** 172% of Goal

Project Goals:
- **Home Broadband Adoption Rates**
  - 2010 (Project Start)
    - U.S.: 66%
    - California: 66%
    - CA Latinos: 50%
    - Central Valley: 64%
  - 2012 (Project End)
    - U.S.: 70%
    - California: 73%
    - CA Latinos: 58%
    - Central Valley: 71%

Activities and Results:
- **Reach 5,000,000 California residents through an awareness campaign.**
- **Connect 133,000 California households to broadband.**
- **Train 678,000 low-income Californians in Digital Literacy.**
- **Distribute 4,000 refurbished computers to low-income residents.**

CETF and its partners have made significant progress. There is still work to do to reach 2015 Goals of:

- **Goal: 80% of Households Have Broadband at Home**
  - 70% of Each Target Community Has Broadband at Home
  - Low-income • Rural • Latino • Disabled

To achieve these goals, 880,000 households need to get connected to broadband.
The Access to Careers in Technology project, managed by the California Emerging Technology Fund, set these goals:

- **Train 36,970 low-income Californians and businesses in Digital Literacy.**
- **Connect 9,237 California households to broadband.**
- **Place 2,559 low-income Californians in jobs.**

### Activities and Results

#### Digital Literacy and Job Training

- **33,171 Got Trained**
  - 90% of Goal
- **8,194 Got Connected**
  - 89% of Goal
- **2,659 Got Jobs**
  - 104% of Goal

### Home Broadband Adoption Rates

- **2010**
  - U.S.: 66%
  - California: 70%
  - CA Latinos: 50%
  - Central Valley: 64%
- **2012**
  - U.S.: 66%
  - California: 73%
  - CA Latinos: 58%
  - Central Valley: 71%

### The Challenges Ahead

To achieve these goals, 880,000 households need to get connected to broadband.
Partner Organization Names and Acronyms

The partner organizations that were part of each grant can be found below along with the acronym used for the group in this report. Appendix A has a description of each partner, its role in the grant, and contact information, including a website link.

Partners for Both Grants

- National Telecommunications and Information Administration (NTIA)
- Broadband Technology Opportunities Program (BTOP)

Broadband Awareness and Adoption (BAA)

- 2-1-1 California/United Ways of California (2-1-1CA)
- Access Now
- Center for Accessible Technology (CforAT)
- Chicana/Latina Foundation (CLF)
- Dewey Square Group (DSG)
- Latino Community Foundation (LCF)
- Radio Bilingüe (RB)
- Social Interest Solutions (SIS)

Access to Careers (ACT)

- California Resources and Training (CARAT)
- Chrysalis
- EmpowerNet California
- Goodwill Industries of San Francisco, San Mateo, and Marin Counties (Goodwill)
- Mission Economic Development Agency (MEDA)
- OCCUR
- San Diego Futures Foundation (SDFF)
- Southeast Community Development Corporation (SCDC)
- Stride Center
- The ACME Network (ACME)
- Youth Radio
Challenges and Solutions

Each of the 4 Lessons Learned contains specific challenges that were confronted by BAA and ACT partners along with solutions they found effective. The challenges and solutions were identified using two primary methods: reviewing notes and materials from monthly webinars and quarterly in-person meetings of the BAA and ACT partners; and conducting phone interviews with BAA and ACT partners specifically for the purpose of identifying challenges and solutions. BAA and ACT partners were presented with multiple opportunities to review and edit this report.

This information is formatted throughout the section in the following style:

1. **Category (e.g., Leveraging Broadband Training and Curriculum)**
   1.1 Challenge: (e.g., Identifying Topics and Benefits that Effectively Convey the Value of Broadband)
   
   **Challenge description (as needed)**
   - **Solution description** - Explain how high-speed Internet can help participants with long-distance family and friends.
     - **Solution Example** - Senior citizens participating in SDFF programs often ask about social networking and Skype, partly to connect with family.

A partner organization name appears in parentheses at the end to indicate that the partner provided the solution. Solutions not identified with a specific partner emerged from group discussions or from experiences shared by several partners.

Solutions are defined for this report as strategies, approaches, or activities that partners think contributed to successful program outcomes. Solutions were not identified through a scientific survey or research process; the solutions are self-reported and should be considered “experience-based” and not “research-based”.

1. **Leveraging Broadband Training and Curriculum**

Here are specific information and/or approaches that have resulted in participants adopting broadband.

1.1 Challenge: Identifying Topics and Benefits that Effectively Convey the Value of Broadband

- Explain how high-speed Internet can help participants with long-distance family and friends.
  - Senior citizens participating in SDFF programs often ask about social networking and Skype, partly to connect with family.
  - SDFF, serving a large Mexican immigrant population, found that many clients get excited about being able to connect with long-distance family and friends through the Internet. SDFF also found that clients were interested in online banking and searching and applying for jobs.

- Inform participants of the online opportunities for saving money such as online shopping and coupons and online applications for academic financial aid.
  - Radio Bilingüe incorporates broadband adoption and Digital Literacy training into financial education workshops, including how to apply for college financial aid. When working with a financial counseling agency, part of the training, interview, or radio show focuses on online banking and how to apply for SSI and unemployment benefits online.
  - 2-1-1CA provides meaningful and attractive discounts online as the primary motivation for participants getting online.
  - Multiple organizations demonstrate how broadband can be a more affordable alternative to TV cable subscriptions (by using streaming services such as Netflix, Amazon TV/Movies, Hulu, etc. and movie rental kiosks including RedBox and Blockbuster).

---

3 Throughout this document “broadband”, “high-speed Internet”, and “Internet” are used to refer to Internet connectivity with speeds at or greater than 768 kbps downstream and 200 kbps upstream.
• Show participants the vast amount of media, entertainment, and information that is available online (news; videos, TV shows, and movies; and music) (Youth Radio).

• Educate parents about how their children are avid consumers of online media. That can be a good motivator for parents to subscribe to broadband and become digitally literate (Youth Radio).

• Show participants, if applicable, how K-12 schools use the Internet for both academic and administrative purposes.
  ➢ San Diego Unified School District is requiring that students visit a website (“Learning Upgrade”) every week as part of their homework (SDFF).
  ➢ Radio Bilingüe partners with school districts to work with students and parents. They focus on the importance of students having online access at home and explain to parents that they can access report cards online. Some schools that Radio Bilingüe works with are requiring students to have tablets and use electronic books.

• Use health topics to engage families and senior citizens. The California Department of Health and Human Services has a website where families can track their medical records and prescriptions (SDFF).

1.2 Challenge: Understanding the Needs of Target Populations

• Demonstrate how broadband can help address participants’ primary needs or desires.
  ➢ 2-1-1CA found that linking broadband connectivity to a pre-existing need or desire helped motivate clients. For example, callers seeking unemployment benefits were informed that they must go online to register for benefits.
  ➢ DSG built a partnership with Catholic Charities to establish a computer lab where Catholic Charities referred clients seeking job or food assistance to computer training workshops.

• Develop and/or customize curricula in partnership with organizations that are deeply embedded in the target population (LCF).

• Offer instruction in a variety of settings. People become interested in broadband or Digital Literacy training for a range of reasons and with different levels of understanding. The traditional classroom setting can present a barrier because instruction is generally provided on a few select topics and at a distinct level of complexity (DSG).
  ➢ DSG helped develop Club Digital (http://club-digital.com/home) in a partnership with La Opinión publisher, ImpreMedia. The website contains free online instruction in multiple formats, covering a wide range of topics in English and Spanish.

• Cluster curriculum modules or topics for a specific target population (e.g., combine modules on applying for benefits and searching for job opportunities to target an unemployed population) (DSG).

• Understand demographics as a way to know what is useful to the population. Senior citizens have different interests than people in their 20s. In general, people will have the strongest interest in learning about topics and tools that have a direct impact on their lives (DSG).

• Engage community members already using broadband as broadband ambassadors who can communicate its value to the rest of the community (CLF).

1.3 Challenge: Finding Curricula to Match Student Skill Level

• Provide one-on-one tutoring that personalizes the learning process and helps participants become more engaged and motivated (Goodwill).

• Provide access to computers between classes. Having a computer lab also helps create a presence and draw more people into classes (The Stride Center, Goodwill).

• Engage students to help each other through peer tutoring.
  ➢ The Stride Center employs a peer tutoring system by pairing a high-performing student with a low-performing student. The Stride Center has found that students learn better from each other (as opposed to the instructor who has mastered the course material).
Youth Radio uses a cascading mentorship model of peer tutoring in which class graduates serve as Peer Teachers through a paid internship program. Peer Teachers help increase the teacher-to-student ratio, enabling Youth Radio to provide more hands-on and individualized instruction. As an additional benefit, the Peer Teacher program allows class graduates to refine their expertise and become technology practitioners.

- Use step-by-step guides with screen shots and helpful graphics (Chrysalis).

1.4 Challenge: Gaining Access to Computer Labs (Location-Dependent)

- Find local computer labs and seek out mutually beneficial partnerships (Chrysalis).
- Set-up a computer lab if none are available, if possible.
  - OTX West and ReliaTech are willing to provide low-cost computers for labs (The Stride Center).

1.5 Challenge: Keeping Curricula Up to Date

- Select cross-platform applications whenever possible to ensure maximum compatibility with outmoded and constantly evolving operating systems and devices (e.g. Skype and web-based applications).
- Limit the number of topics each instructor teaches so they have a deep knowledge of the curricula and can devote time to updating it.
  - Youth Radio developed a Peer Teacher Internship Program in which interns focus on specific computer applications and/or technologies. Interns then rotate every quarter to a new application/technology, enabling them to gain in-depth expertise in a variety of applications by focusing on one at a time.
- Manage student expectations and teach that computer hardware and software is continuously evolving. To the extent possible, teach universal computer skills such as using help files, search engines, and common keyboard shortcuts (Youth Radio, Curriculum Workshop4).
  - SDFF teaches that “the use of technology is growing and expanding,” and reviews curricula to customize it for specific audiences (e.g., workforce development modules are removed and security modules are expanded for classes targeting senior citizens).
- Provide regular information updates to program graduates.
  - SDFF maintains a blog with articles to keep students and graduates informed of important hardware/software changes.
- Dedicate staff and interns to keeping curricula up to date.
  - Chrysalis, through a formal internship program, established a team of interns to help update curricula and develop instruction materials. Chrysalis highly recommends this approach, as long as it includes supervision of interns.
  - Chrysalis hired a full-time Curriculum and Training Manager who monitors and updates curricula.
- Collect suggestions for curricula changes or updates from instructors (CARAT).
- Collaborate with partners who are working on curricula to address similar challenges (The Stride Center and LCF).

1.6 Challenge: Obtaining Useful Topic-Specific Curricula

- Develop curricula to match student needs.
  - SCDC developed its own curriculum to most effectively address the needs of its instructors and students. This included basic computer literacy curriculum provided in basic Spanish (existing options were written in college-level language).

---

4 Curriculum workshop participants included SDFF, The Stride Center, ACME, and CARAT.
• Leverage existing curricula as appropriate.
  ➢ SCDC has found Club Digital (http://club-digital.com/home) instructional videos in Spanish to be a very valuable resource in their courses.

• Be mindful not to overwhelm participants in training with too many new topics. Strategically design curricula so it is focused on a specific topic that targets a specific population (The Stride Center, LCF, DSG).

• Focus on employment, health, and safety topics, as they typically are the three most compelling training topics (DSG, LCF).

• Visit the partner portal at www.GetConnectedToday.com for additional resources.

1.7 Challenge: Delivering Consistent, High-Quality Training in Multiple Classroom Locations

• Conduct in-person workshops for instructors to share best practices for training.

• Use a class management system to standardize instruction across locations.
  ➢ The Stride Center uses an online learning tool to manage the curriculum for all classes. This system helps standardize materials, schedules, and tests across all training locations and classes. All tests are administered through this system, enabling instructors to see how their students are doing and compare test results among multiple classes to identify problem areas.

• Be flexible with instruction and plan to customize training to conform to different conditions, such as training at different facilities or age groups (Youth Radio).
  ➢ Youth Radio often teaches classes and workshops at offsite locations and adapts trainings as needed to maintain high quality instruction while managing student, instructor, and partner expectations based on the classroom setting.

1.8 Challenge: Gaining Access to a Catalog of the Best Curricula

• Partner with organizations that already provide curricula/training on specific topics and design a referral system (The Stride Center, CLF).
  ➢ SDFF partners with the antivirus company ESET to provide training curricula and materials related to computer/online security.
  ➢ Youth Radio partners with OTX West to provide training. Youth Radio delivers a presentation to OTX West students and helps teach the OTX West curriculum. OTX West gains instructors and Youth Radio is able to master the OTX West curriculum while recruiting participants for Youth Radio classes.

• Talk with local CBOs, libraries, and colleges when researching curricula (CETF).

• Partner with experts such as Skillsoft or LearnKey to purchase curricula (SDFF).
  ➢ Goodwill partnered with the Veterans Administration to purchase the IC3 curricula.

• Visit the partner portal at www.GetConnectedToday.com for additional curricula resources.

1.9 Challenge: Providing Useful Training on Obsolete Computers

• Train participants on how to transfer skills to new devices, as well as showing them resources to learn new technologies (e.g., senior citizens seem to prefer using tablet computers but there isn’t a refurbished market for tablets yet (SDFF).

• Investigate sources for refurbished computers. The cost of a device with licensed software ranges from $85 to $250.
  ➢ iFoster, The Stride Center/ReliaTech, San Diego Futures Foundation, and Computers for Classrooms are regional and statewide suppliers. The local 2-1-1 telephone information and referral service may have resources.
1.10 Challenge: Locating High Quality Online Resources in Spanish


1.11 Challenge: Addressing Different Skill Levels

- Schedule no more than 2 hours of instruction per day for basic training. New users often want to sign up for more advanced classes after the initial training (CLF).
  - Chrysalis, in addition to two hours per day of instruction, provides students with computer lab time and one-on-one support from volunteers.
- Use the waiting list from a popular class to identify participants for a different class (Goodwill).
- Focus on how students will use an application to supplement training. Provide personalized training to explain how broadband and/or technology can bring benefits to each person or company (CARAT).
- Offer additional short workshops or classes that build on the core curriculum (Youth Radio).
  - Youth Radio offers short, targeted training classes on specific skills or applications for students participating in longer training programs. Youth Radio strategically schedules these sessions to fit youths’ schedules (e.g., it offers a 1-to-3 week workshop that meets 2 or 3 times a week.)

2. Securing Job Placements

*Here are successful strategies that have led program participants to find employment.*

2.1 Challenge: Providing Internship, Volunteer, and Job Opportunities to Training Participants

- Prepare students for interviews by communicating and upholding the expectation that students treat class time as a work environment. Students should attend class in professional dress, exhibit professional demeanor, and communicate professionally (The Stride Center).
- Develop relationships with businesses through: business referral networks; Chamber of Commerce meetings; networking opportunities; word of mouth; past successes; and temp agencies.
  - SDFF has an Employment Specialist maintain a database of ICT employers in San Diego County, and works with clients to find job opportunities and schedule interviews.
- Foster the development of internships by working with companies to design an internship program.
  - The Stride Center, in some cases, will design and implement an internship program for a company (e.g., write the job description, find a candidate). Some companies will say that they’re interested in providing an internship opportunity but don’t know how to set it up and/or it seems like too much work.
  - Goodwill has been successful in placing students in internships by identifying the needs and motivations of the business to bring on an intern (e.g., they want low-cost or temporary help, they want to train future employees). Ask ICT companies, for example, to consider offering an internship opportunity around a specific project.
- Establish an in-house internship program.
  - Youth Radio built a paid internship program in which interns learn “soft skills” as they enhance their technical knowledge.

2.2 Challenge: Obtaining Job Placement Information from Clients

- Ask clients for job information before they go to the interview. If the client does not return, contact the employer to verify their employment.
- Contact program graduates regularly.
  - For clients to keep their file open at Chrysalis, they have to make contact at least once a month. Chrysalis will provide services even if no contact is made, but having this rule encourages ongoing communication with clients.
Lessons Learned from the Field: Connecting Californians to Broadband and Digital Careers

- Chrysalis sends a standard email message to all clients who have completed Chrysalis courses to request job information.

- Offer incentives for submitting job placement documentation (e.g., supportive services rewards).
  - Chrysalis offers gift card incentives for clients who bring in their pay stubs, which has helped somewhat with documentation. Clients receive a $5 grocery store gift card for their pay stubs each month for the first 4 months, then another gift card at 6 months, and a final gift card at 12 months.
  - SCDC has successfully used $15 gift cards as incentives for clients to submit job placement documentation. SCDC provides a documentation checklist and clients receive a gift card once they have completed the checklist.
  - Goodwill provides incentives and sponsors Job Clubs that meet regularly to provide an opportunity for graduates to share their progress and success.

- View graduation ceremonies as an opportunity to communicate with program graduates, alumni, and families (Youth Radio, The Stride Center).
  - Chrysalis holds summer barbeques and Thanksgiving dinners as opportunities to connect with current and past clients.

2.3 Challenge: Placing Hard-to-Employ Candidates in Internships and Jobs

- Target employers with the shared values of:
  1. Getting the best-qualified candidate in the job.
  2. Supporting a great training program (The Stride Center).

- Invite employers to trainings that highlight the professionalism of students.

- Treat employers as customers (not donors): “If they couldn’t get a job at your organization, don’t sell them to someone else” (The Stride Center).

- Partner with outside companies or temp agencies to provide job readiness training.

- Provide an intimate setting for employers to speak one-on-one with strong program participants.

- Promote stories of hard-to-employee candidates successfully gaining employment in communications and through media outlets.

- Provide corporate/professional mentors for job seekers and build “social capital” by serving as their network until they develop their own.

- Design program and outreach materials with care to avoid reinforcing stereotypes employers may have about certain job candidates. Recognize that employers need to be educated and the best way is to provide examples of previous successful job placements.

2.4 Challenge: Motivating Students in a Difficult Job Market

- Provide a balanced training program that incorporates expectations of self-sufficiency along with one-on-one instruction, with extra support needed during tough economic times.
  - Goodwill clearly communicates the intended results of a course/program (e.g., communicate the expectation that participants will complete the course and find employment). Additionally, Goodwill operates Job Clubs that incorporate a system of incentives (e.g., attend a certain number of Job Club meetings to earn a certificate to meet with an employer).

- Plan activities to keep students motivated to look for jobs 3, 6, or 9 months after receiving a certification.

- Be aware that when the paycheck is the only motivating factor, the placement typically is not sustainable. The work must connect to something the job seeker cares about.

- Provide ongoing opportunities to help with job search and boost morale. Many students need additional support beyond course instruction. Acknowledge the difficulties everyone has while searching for a job (low self-esteem, high stress). Continually clarify that rejection isn’t personal.
Lessons Learned from the Field: Connecting Californians to Broadband and Digital Careers

- SCDC partnered closely with an employment center that includes a job board, computers with Internet access and MS Office applications, including resume writing software. Staff at the employment center provided assistance with faxing, printing, and/or emailing resumes and cover letters. The center has helped SCDC build strong relationships with clients, which has increased employment and submission of documentation to SCDC.

- Chrysalis held employer panels as an alternative to job fairs for clients to interact with employers without an expectation of hiring/being hired. Panels consist of 2-3 employers (ideally a manager or representative from Human Resources, possibly from a specific industry) with a Chrysalis staff member moderating the panel and encouraging audience questions. Useful information to obtain from panelists includes: the skills they look for, what they consider deal breakers, and their list of dos and don'ts.

2.5 Challenge: Funding Certification Exams

- Budget for certification exam costs.
  - The Stride Center includes certification exam costs as a budget item in all grant applications. CompTIA will occasionally offer free certification vouchers.

2.6 Challenge: Clarifying the IC3 Certification Career Path.

- Consider the career path. IC3 training takes a significant time. Students often need test preparation incorporated as this is the first test they have taken in awhile. Job readiness must be integrated into IC3 because students do not come back for separate job readiness courses.
  - The Stride Center plans to pair IC3 certification with job-specific training (e.g., call center) to directly incorporate a career path into their IC3 program.

- Highlight specific skills instead of the certification document (Goodwill). Some programs are having better success developing short-term literacy courses in Microsoft Office software rather than referring students to A+ programs, which have longer training periods
  - Chrysalis is focusing on teaching specific skills and software instead of using the IC3 curriculum.

3. Driving Adoption

Here are service and resource combinations that effectively drive (and secure!) broadband adoption.

3.1 Challenge: Reaching Broadband Hopefuls

- Establish trust with local community members and/or use trusted messengers by partnering with local trusted organizations.
  - Radio Bilingüe, working in the Central Valley, recognized that people in their target community tend to have more trust in people who speak their primary language.
  - DSG partnered with organizations with staff that already had existing trusted relationships with and knowledge of the target population. In Fresno, DSG partnered with Catholic Charities to establish a new computer lab and Digital Literacy training curricula.
  - The Stride Center is using a Neighborhood Technology Center model that contains information stations that address specific Digital Literacy topics (e.g., how to buy a computer, how to use cloud computing, how to get the best deal on broadband service).
  - CLF held many classes before anybody signed up for broadband and received or brought a computer. Once the positive experience eventually generated word of mouth recommendations, many more followed. Personal testimonials are very powerful, particularly in limited English communities.

- Speak with libraries about promoting training and resources. Offer to teach courses at libraries (SDFF).

- Encourage participants to call for guidance if they feel intimidated by broadband options/choices.

- Hold sign-up days/tables at events, demonstrating available laptops and offering prizes.

- Conduct outreach at libraries, schools, cyber-cafes, CBOs, afterschool programs, and housing authorities.
• SDFF has built relationships with school principals resulting in student, parent, and family referrals to SDFF based on trust and experience.

• Work with local businesses to promote broadband to their employees and/or clients.

3.2 Challenge: Following Up with Program Participants

• Call and talk with participants (a lot of support and encouragement) several times to build trust.
  ➢ 2-1-1CA found that increasing outreach efforts from one follow-up call to two encouraged clients to actually contact the organization to which they were referred.

• Obtain an alternate phone number for training participants since the primary number often changes or is disconnected (CLF).

3.3 Challenge: Supporting Clients to Subscribe to Broadband Service (Go the Distance)

• Offer a refurbished computer in exchange for broadband subscription documentation.
  ➢ LCF found that an incentive for broadband adoption is essential. For future broadband adoption programs, LCF will provide a computer as an incentive, not only to motivate students to get connected, but also to ensure that they have a working computer at home.
  ➢ CLF requires that participants submit proof of their new broadband subscription before receiving a computer.

• Talk participants through their bills to address questions and make sure they understand all charges (Goodwill).

• Place the entire food chain at one central location. Advertise the benefits and provide the means to realize that value (e.g., broadband benefits along with training, information with actual discounts, hands-on experience with hardware and software, and broadband sign-up support) (2-1-1CA).

• Provide support systems and guidance in addition to offering access to everything at one location. This includes outreach and marketing to generate interest and onsite trainers and advisors to help participants navigate services, systems and application processes (EmpowerNet).

• Recognize broadband adoption involves a combination of factors including economic viability, trust, and understanding the value of broadband at home (DSG).

• Anticipate a timeline from initial contact to broadband adoption that is longer than expected, and often includes waiting for certain situations to change (e.g., obtaining a pay check in order to pay for service) (DSG).

• Structure programs carefully to meet all requirements (e.g., documentation) and budget for all program components, recognizing getting participants subscribed to broadband requires a significant time investment (EmpowerNet).

3.4 Challenge: Obtaining Proof of Broadband Adoptions

• Be specific with participants about the rules of what serves as proof of their broadband subscription, and clearly communicate these requirements at the beginning of training programs focused on driving adoption.

• Offer incentives to participants for submitting broadband subscription documentation.
  ➢ Radio Bilingüe offers incentives for submitting broadband subscription proof. Tickets to the Mariachi Festival were an especially effective incentive. Radio Bilingüe also has developed a form for clients to fill out, certifying that they have subscribed to broadband service. This has worked moderately well.
• Clarify terminology and required documentation and build the collection of all required documentation into program design (EmpowerNet).
  ➢ For ISPs that don’t issue paper or email confirmation letters, SDFF developed an applicant statement and photocopied the information on the client’s modem box.

3.5 Challenge: Addressing the High Cost of Broadband Service
• Provide financial incentives that reduce the added cost of broadband service such as a check to help defray the upfront cost of the modem or installation (SIS).
• Demonstrate the cost savings participants can realize with broadband access at home.
• Inform clients to ask their current telecom providers about adding broadband service. Often for a small additional cost, broadband services can be added to an existing service.
• Develop relationships with local ISPs to establish a program for participants to receive discounted broadband service (SDFF).

3.6 Challenge: Finding High-Speed Internet Providers in Remote Areas
• Call local 2-1-1s, which may have information about options.
• Get in touch with the Rural and Urban Regional Broadband Consortia, since their work is to establish demand for broadband services and they may know of plans for new or future service. To obtain local contact information, please visit http://www.cpuc.ca.gov/PUC/Telco/CASF+Consortia/.

3.7 Challenge: Finding Affordable Home Broadband Service
• Contact local cable and telecom providers, the National Cable and Telecommunication Association (NCTA) and visit www.connect2compete.org for current information. Certain providers are offering discounted broadband ($9.95) for low-income families with students who qualify for the free school lunch program or who live in certain zip codes.

3.8 Challenge: Supporting Participants to Navigate Complicated ISP Application Processes
• Explain each step of the ISP application process and provide personalized support to walk participants through the sign-up process.
  ➢ SDFF schedules conference calls with its staff, the ISP, and the client to help work through the subscription process. In addition, SDFF distributes fliers with step-by-step instructions on how to get connected.
• Establish a phone-based technical support center.
  ➢ SDFF issues membership cards to all clients who participate in its programs. The cards have a toll-free support number that connects to the multilingual technical support center operated by SDFF. The toll-free number also is advertised on outreach materials to draw more clients.

3.9 Challenge: Keeping People Connected
• Ask clients for notification before disconnecting from broadband, and if possible refer them to discounted offers for which they would be eligible. People often drop their broadband service based on the cost, particularly after the lower introductory rate expires.
• Establish a relationship with a reliable non-profit that can regularly advise clients on financial literacy, credit repair, and budget management.
• Ask new subscribers to come back with their first or second bill. This is a good way to get proof of subscription and offer the valuable opportunity to teach people how to read their bill. Use the interaction to help them understand how to arrange for a payment schedule if they need it.
3.10 **Challenge: Providing Access to Refurbished Computers Statewide**

- Obtain refurbished computers through an organization that will ship them to clients.
  - 2-1-1CA partnered with iFoster, which has a nationwide program to ship refurbished computers.
  - ReliaTech offers great deals on computers (The Stride Center).
- Check the return and warranty policies of refurbishers and insist they use licensed software on the devices (CLF).

4. **Pursuing Sustainability**

*Sustainability can be achieved through program integration in other fields, such as health, education, and community development, and strong collaborations.*

4.1 **Challenge: Securing Funding Specifically for Broadband Adoption and Digital Literacy**

- Integrate broadband adoption and/or Digital Literacy programs into other program areas and/or larger projects (“Don’t lead with tech”).
  - 2-1-1CA integrates its broadband adoption program into all grant proposals (as appropriate), and is especially interested in funding broadband adoption and Digital Literacy as a component of a healthcare enrollment program.
  - SCDC is actively seeking workforce development grant funding to support broadband adoption and Digital Literacy training.
  - The Stride Center’s primary motivation of is to reduce poverty in the inner cities; this mission has led it to incorporate broadband and Digital Literacy when partnering with workforce development and poverty mitigation organizations and programs.
  - Goodwill embeds Digital Literacy into its workforce development programs.
- Identify broadband adoption and Digital Literacy as key priorities. Be sure to understand what the funder’s priorities are and effectively communicate how access to broadband is closely linked to them (CLF).

4.2 **Challenge: Raising Funder Awareness about the Digital Divide**

- Leverage funder relationships and ask if they will host a funder briefing.
- Identify and engage partners who understand the urgency to close the Digital Divide, and seek introductions to their funding partners.
- Use respected survey data such as the Public Policy Institute of California, Pew Internet & American Life Project to demonstrate the need for more resources to bring broadband to all Californians.

4.3 **Challenge: Raising Funds Beyond Grant Awards**

- Explore new ways to raise funds such as employee-directed donations, volunteers, and alumni programs.
  - CLF operates a scholarship program in which volunteers decide who receives scholarships. Volunteers have gone back to their companies and encouraged them to support CLF programs.
- Ask foundations to help support board development such as building board fundraising capacity.
- Host *friendraiser* events where current donors attend and bring a friend, to promote broadband priorities to a wider audience.
- Design programs that generate income.
  - The Stride Center uses a self-sustainability system by generating income through its programs. This requires a major commitment of time and resources, and is difficult, Still, everybody providing computers and/or training should have a plan for generating income and promoting an exchange for the value that they are bringing to the community.
4.4 Challenge: Achieving Program Sustainability Beyond Funding

- Build knowledge capacity for the board and staff.
- Seek training opportunities for other elements that can sustain an organization.
- Plan for program longevity and/or replication in the absence of new funding.
  - Access Now trained volunteers to replicate the Computer Help Day model as a method for expanding impact at minimal cost.
  - DSG planned and assisted with the building of Club Digital (http://club-digital.com/home) with the intention that it will outlive the grant period.

4.5 Challenge: Finding the Value in Collaborations

- Provide a comprehensive approach by forming a collaborative, such as ACT and BAA (The Stride Center).
- Build successful collaborations by offering strong commitments to achieving shared objectives and results throughout different levels of the organization (EmpowerNet).
- Design programs that generate income.
  - The Stride Center uses a self-sustainability system by generating income through its programs. This requires a major commitment of time and resources, and is difficult. Still every organization providing computers and/or training should have a plan for generating income and promoting an exchange for the value that they are bringing to the community.
- Prompt partner organizations that may have more to offer than their staffs initially realize. Partners can effectively provide high-quality training focused on their particular priority (DSG).
- Collaborate with experienced partners.
Appendix A: Partner Descriptions and Contact Information

National Telecommunications and Information Administration (NTIA)
Laura Breeden, Director, Broadband Technology Opportunities Program
Gwenn Weaver, Program Officer
(202) 482-2048, www2.ntia.doc.gov/

The Broadband Awareness and Adoption (BAA) and Access to Careers in Technology (ACT) projects were made possible with generous funding from the American Recovery and Reinvestment Act (ARRA) within the U.S. Department of Commerce to the California Emerging Technology Fund (CETF). Projects focused on increasing broadband Internet usage and adoption, including among vulnerable populations where broadband technology traditionally has been underutilized. The Sustainable Broadband Projects included Digital Literacy training and outreach campaigns to increase the relevance of broadband in people’s everyday lives. Long term, these Recovery Act investments have helped bridge the Digital Divide, improve access to education and healthcare services, and boost economic development for communities held back by limited or no access to broadband – communities that would otherwise have been left behind.

California Emerging Technology Fund (CETF)
Susan Walters, Senior Vice President
Luis Arteaga, Director of Emerging Markets
Jennifer Riggs, NTIA Portfolio Manager

California Emerging Technology Fund has been working more than five years to achieve the twin goals of providing 98% of all state residences with access to broadband infrastructure and 80% home adoption statewide by 2017 in order for California to remain globally competitive. This only can be accomplished if the following specific hard-to-reach target communities achieve at least a 70% adoption rate: low-income populations, Latino households, rural communities, and people with disabilities. CETF worked with the 19 BAA and ACT partners to provide leadership and grant management for initiatives to close the Digital Divide by focusing on broadband awareness and adoption, Digital Literacy and training for ICT careers among these underserved communities and populations.

Glen Price Group (GPG)
Aaron Price, Associate
(510) 528-1558, www.glenpricegroup.com

Glen Price Group designed and facilitated Learning Communities for BAA and ACT partners. Partners regularly convened in Learning Communities, both in-person and online via webinars. In Learning Communities, partners shared successes and challenges, supported each other to plan for effective program implementation, and shared expertise in specific content areas such as certification-based training, building trust in communities, computer refurbishment, job skills training, and funding strategies.

Broadband Awareness and Adoption (BAA) Partners (Completed January 2013)

2-1-1 / United Ways of California (2-1-1CA)
Lilian Coral, Director of 2-1-1 California
(626) 422-5979, www.unitedwaysca.org

2-1-1 California is a free statewide information and referral phone service sponsored by United Ways, state agencies and municipalities, and private philanthropy in collaboration with the California Alliance of Information and Referral Services. It provides easy access to information about a wide range of health and human services. 2-1-1CA informed individuals seeking services about local Digital Literacy education and broadband resources. The network received and screened 193,592 callers statewide, referred more than 44,052 people to training programs, assisted 7,478 low-income households subscribe to broadband, and distributed 3,569 computers.
**Access Now**
Kari Gray, Executive Director
(415) 786-9935, [www.computerhelpdays.org](http://www.computerhelpdays.org)

*Access Now* provides one-stop computer repair services in the community. It hosted 28 community Computer Help Days in 7 counties to repair old equipment, offer subsidized refurbished equipment, provide hands-on computer training, and introduce meaningful online resources. *Access Now* trained more than 100 adults in basic computer and Internet navigation skills and repaired 640 computers.

**Center for Accessible Technology (CforAT)**
Dmitri Belser, Executive Director
(510) 841-3224, [www.atcoalition.org](http://www.atcoalition.org)

*Center for Accessible Technology* provides access to computers so children with disabilities can succeed in school, adults with disabilities can find and keep jobs, and all people with disabilities can have equal online access in the Digital Age. CforAT launched a website for the Accessible Technology Coalition (atcoalition.org) to serve people with disabilities, their supporters and families to help them make informed decisions about assistive technology. The website has registered 73,204 unique visitors and 229,983 page views. The Coalition trained 2,173 adults and anchor institutions on assistive technology and helped 66 low-income households subscribe to broadband.

**Chicana/Latina Foundation (CLF)**
Alicia Orozco, Project Coordinator
(650) 548-1049, [www.chicanalatina.org](http://www.chicanalatina.org)

*Chicana/Latina Foundation* recruited young leaders as broadband ambassadors to reach into underperforming schools and ultimately into the homes of the students to help families adopt broadband. This project focused on underperforming schools in low-income communities in eight Northern California counties. CLF trained 2,760 residents in Digital Literacy, distributed 1,076 computers and helped 1,054 low-income households subscribe to broadband.

**Dewey Square Group (DSG)**
Margaret Lyons, Principal – Social Innovation and Philanthropy
(916) 447-4099, [www.deweysquare.com](http://www.deweysquare.com)

*Dewey Square Group* used a two-pronged approach to reach new audiences for broadband: It designed a faith-based outreach strategy, working with 1,200 congregations throughout California to help introduce the benefits of broadband. DSG, in partnership with ImpreMedia/La Opinión, also developed Club Digital ([http://club-digital.com/home](http://club-digital.com/home)) to educate Spanish-language readers about Digital Literacy. DSG trained 630,041 people in Digital Literacy and helped 140,800 low-income households subscribe to broadband.

**Latino Community Foundation (LCF)**
Raquel F. Donoso, Executive Director
(415) 733-8581, [www.latinocf.org](http://www.latinocf.org)

*Latino Community Foundation* mobilized a network of 8 community-based organizations to provide Digital Literacy training to limited-English speaking families in 5 Bay Area counties. LCF trained 4,412 adults in basic computer skills and assisted 545 low-income households subscribe to broadband.
Radio Bilingüe (RB)

Jose Moran, Project Manager
(559) 455-5745, www.conectate.radiobilingue.org

Radio Bilingüe, a non-profit radio network, reaches rural and farm worker communities in the state’s Central Valley—an area with among the lowest per-capita rates for broadband access in California. RB produced special programming to reach 60,000 listeners (primarily Spanish speakers) about the benefits of broadband and how to subscribe. RB broadcasted 112 hours of live call-in programs addressing Digital Divide issues; produced and broadcast 92 public service announcements; attracted 457,118 unique website visits; and achieved more than 1 million radio impressions each quarter. In addition, RB helped 1,234 low-income families subscribe to broadband.

Social Interest Solutions / One-e-App (SIS)

Lucy Streett, Senior Policy Manager
(510) 273-4640, www.statewide.oneeapp.org

Social Interest Solutions (SIS) developed One-e-App, an online tool to help people navigate public assistance programs by themselves, or with help from a call center or Certified Application Assistant (CAAs). By integrating broadband awareness and resource information into One-e-App, SIS referred 222,496 people to training programs, trained 79,847 to apply online for benefits and assisted 2,031 low-income households subscribe to broadband.

Access to Careers (ACT) Partners (June 2013 Completion Date)

California Resources and Training (CARAT)

Selma Taylor, Executive Director
(510) 451-2545, www.caratnet.org

California Resources and Training (CARAT) worked with small business development centers to enroll 9,413 underserved small business owners and employees in Digital Literacy training. CARAT partnered with 11 small business development centers located at community colleges, public universities, and county workforce development boards across California. These partners were trained in outreach and delivered broadband adoption curriculum that CARAT developed specifically for small businesses and entrepreneurs.

Chrysalis

Michael Graff-Weisner, Vice President
(213) 806-6341, www.changelives.org

Chrysalis focuses on moving the homeless and low-income people into the workforce. Chrysalis provided basic Digital Literacy training to 1,083 individuals and placed 731 participants in jobs. Chrysalis partners included the City of Los Angeles Workforce Investment Board and WorkSource Centers.

EmpowerNet California

Joe McKinley, Chief Executive Officer
(510) 234-1300, www.empowernetca.org

EmpowerNet California provided training for 30 non-profit organizations throughout California on how to design and launch training programs for Information and Communications Technology (ICT) certification and job-training programs. Partners also received coaching as they trained 152 participants, with 66 achieving advance ICT certifications such as A+, Security+, and Server+.
Goodwill Industries of San Francisco, San Mateo, and Marin Counties (Goodwill) trained more than 2,000 low-income individuals in computer literacy and entry-level computer technician proficiency, resulting in 230 job placements. Goodwill also assisted more than 180 low-income households in adopting broadband. Goodwill partnered with Skyline College, One-Stop Centers, and the local business community to achieve these goals.

Mission Economic Development Agency (MEDA) provides training in Spanish to help low-income adults obtain certifications in Microsoft Office applications, job placement assistance, classes in basic Digital Literacy, and broadband adoption assistance. Through these programs, MEDA trained 249 participants, 65 of whom have achieved certification in advanced Information and Communications Technology (ICT). In addition, MEDA has assisted 20 households in adopting broadband services at home.

OCCUR (The Oakland Citizens Committee for Urban Renewal) has trained more than 680 low-income individuals at its Eastmont Computing Center, including multiple-session Digital Literacy courses that help new computer users become proficient at computer and Internet applications to look for work, expand their education and improve their lives. In addition, OCCUR has placed 20 participants in jobs using their new technology skills and assisted 222 low-income households subscribe to broadband services.

San Diego Futures Foundation (SDFF) has assisted more than 2,800 low-income households adopt broadband Internet. Technical assistance, and support services were also provided to ensure the sustainability of these adoptions. SDFF trained more than 4,800 people in classes ranging from basic Digital Literacy to advanced ICT certifications, placed 132 individuals in local jobs and distributed 3,939 computers.

The Southeast Community Development Corporation (SCDC) placed 142 individuals in jobs, provided Digital Literacy education to 3,455 local community members, and connected 164 low-income households to broadband. SCDC partners included the Huntington Park-Bell Adult School, The East Los Angeles College, and the HUB Cities WorkSource Center.
The Stride Center has trained 758 underserved and low-income adults, 561 of whom earned advanced Information and Communications Technology (ICT) certifications such as A+, Security+ and Server+. Stride placed more than 360 of these participants in ICT jobs with career paths to high-wage careers. Its partners included Skyline and Contra Cost Community Colleges, a variety of local Workforce Investment Boards, Sacramento Employment and Training Administration, and the Greater Sacramento Urban League.

The ACME Network works in underperforming Los Angeles schools to engage students and train them for careers in digital animation, with the help of Hollywood professionals who volunteer their time. ACME engaged 9,852 students and 134 teachers in an innovative online training and mentoring program, creating strong local connections with 41 high schools and 11 community colleges. ACME facilitated 535 new subscriptions to broadband and distributed 890 refurbished computers to low-income households.

Youth Radio focuses on training Bay Area youth for digital careers. Youth Radio trained 197 youth in digital technologies, media production, and social media networking, resulting in the placement of 54 youth in jobs. In addition, 80 parents were trained in Digital Literacy. Youth Radio provided resources to participating youth about how to connect to broadband at home, and they in turn helped connect 184 homes of their families and friends.
Appendix B: The Findings from the CETF Get Connected! Public Awareness Program

Findings from Focus Groups that Informed the Design of the Get Connected!

Pilot in Los Angeles County 2008-2010

(All participants were low-income, non-subscribers to broadband, and did not have a computer at home. The majority of focus groups—5 of 8—were conducted in a language other than English and all “in culture.”)

The Broadband Awareness and Adoption grant enabled the Get Connected! program to expand statewide in 2010.

- Cost is a barrier to adoption, including the set-up, ongoing and computer costs as well as long-term contracts. However, many people were not aware of the benefits of broadband and, therefore, not in the market so they did not know what computers or broadband cost. To address this, the PSA messaging CETF developed and the Get Connected! website (www.GetConnectedToday.com) emphasized the cost savings associated with being online (“Saving Time and Money”) as well how broadband can help daily living (“Make Your Life Easier”).

- There is a “fear of the unknown” about computers and broadband and “lack of time” to learn more about how to use it and its benefits. Participants felt intimidated by broadband companies and computer retail stores trying to sell them expensive products. Community Connect Fairs allowed people to experience first-hand what broadband is, ask questions, find additional training sites, and discover what tangible benefits broadband can bring to their lives. Also, they were held on weekends and in low-income communities to facilitate attendance.

- There is a need for basic and ongoing Digital Literacy in multiple languages by media and organizations that limited-English speakers know and trust. This informed the use of ethnic media and the partnership with La Opinión as well as the use of CETF grantees and other CBOs to participate at the Community Connect Fairs.

- A Public Awareness and education effort is incomplete without a call to action. All advertising mentioned the Get Connected! website, the Community Fairs or told people to call an easy to remember phone number (2-1-1) for more information. CETF contracted with 2-1-1, an information and referral phone line in Los Angeles County, to take calls and refer people to training or Community Connect Fairs, assist with identifying a broadband providers or low-cost computers.
### California’s digital divide

<table>
<thead>
<tr>
<th></th>
<th>Internet use*</th>
<th>Broadband at home</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All adults</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>70%</td>
<td>87%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asians</td>
<td>80</td>
<td>88</td>
</tr>
<tr>
<td>Blacks</td>
<td>82</td>
<td>93</td>
</tr>
<tr>
<td>Latinos</td>
<td>48</td>
<td>78</td>
</tr>
<tr>
<td>Whites</td>
<td>81</td>
<td>93</td>
</tr>
<tr>
<td><strong>Citizenship</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.-born</td>
<td>81</td>
<td>93</td>
</tr>
<tr>
<td>Naturalized</td>
<td>62</td>
<td>81</td>
</tr>
<tr>
<td>Noncitizen</td>
<td>36</td>
<td>73</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No college</td>
<td>47</td>
<td>76</td>
</tr>
<tr>
<td>Some college</td>
<td>81</td>
<td>93</td>
</tr>
<tr>
<td>College graduate</td>
<td>92</td>
<td>98</td>
</tr>
<tr>
<td><strong>Household income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $40,000</td>
<td>49</td>
<td>79</td>
</tr>
<tr>
<td>$40,000 to under $80,000</td>
<td>83</td>
<td>93</td>
</tr>
<tr>
<td>$80,000 or more</td>
<td>92</td>
<td>97</td>
</tr>
<tr>
<td><strong>Homeownership</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own</td>
<td>76</td>
<td>89</td>
</tr>
<tr>
<td>Rent</td>
<td>61</td>
<td>85</td>
</tr>
<tr>
<td><strong>Disability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>57</td>
<td>76</td>
</tr>
<tr>
<td>No</td>
<td>73</td>
<td>90</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 34</td>
<td>78</td>
<td>96</td>
</tr>
<tr>
<td>35 to 54</td>
<td>73</td>
<td>89</td>
</tr>
<tr>
<td>55 and older</td>
<td>58</td>
<td>76</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>71</td>
<td>89</td>
</tr>
<tr>
<td>Women</td>
<td>68</td>
<td>85</td>
</tr>
<tr>
<td><strong>Children age 18 or younger?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>69</td>
<td>87</td>
</tr>
<tr>
<td>No</td>
<td>71</td>
<td>87</td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Valley</td>
<td>71</td>
<td>88</td>
</tr>
<tr>
<td>San Francisco Bay Area</td>
<td>77</td>
<td>88</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>61</td>
<td>86</td>
</tr>
<tr>
<td>Orange/San Diego</td>
<td>73</td>
<td>90</td>
</tr>
<tr>
<td>Inland Empire</td>
<td>70</td>
<td>84</td>
</tr>
</tbody>
</table>

* For 2009–2010, “Internet use*” includes those who answered yes to the question “Do you ever go online to access the Internet or send or receive email?” or to the question “Do you send or receive email, at least occasionally?” For 2011, it includes those who said yes to the question “Do you use the Internet, at least occasionally?” or to the question “Do you send or receive email, at least occasionally?” For 2012, it includes those who said yes to the question “Do you use the Internet, at least occasionally?” or to the question “Do you send or receive email, at least occasionally?” or to the question “Do you access the Internet on a cell phone, tablet, or other mobile handheld device, at least occasionally?”

** “Disability” includes those who answered yes to the question “Does any disability, handicap, or chronic disease keep you from participating fully in work, school, housework, or other activities, or not?” or “Do you often have difficulty seeing, hearing, talking, or walking in the course of your everyday life?”


The margin of error for all adults in 2012 is ±2.9%; the margin of error for subgroups is larger. Pew Research Center’s Internet & American Life Project.

Contact: surveys@ppic.org

Supported with funding from the California Emerging Technology Fund (CETF).

June 2008, June 2009, June 2011 surveys were supported with funding from the California Emerging Technology Fund (CETF) and ZeroDivide.
The Hearst Building
5 Third Street, Suite 320
San Francisco, CA 94103-3206
415-744-CETF (2383)
415-744-2399 Fax

1000 North Alameda, Suite 240
Los Angeles, CA 90012-4297
213-443-9952
213-808-1009 Fax

www.cetfund.org
www.getconnectedtoday.com