



Little Tokyo Service Center 2010 Final Report for the California Emerging Technology Fund

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Name of Project: Neighborhoods Unplugged
Grant Number: 197032
Start Date: April 2008 **End Date:** February 2010

I. Financial Summary

- Total Project Budget Spent: \$1,200,987
- CETF Grant Amount: \$250,000
- Percentage of Match Funds Raised against Goal: (\$468,426) 50%
- Cost Per Unit of Outcomes: (Total Outcomes/Total Budget) \$264

II. Project Description, Goals and Objectives, and Outcomes

Project Description

Neighborhoods Unplugged, a project of Little Tokyo Service Center (LTSC), aims to close the Digital Divide in selected underserved areas of Los Angeles by increasing broadband availability in low-income neighborhoods through infrastructure deployment and education projects. The project will use broadband to stimulate community development with literacy training, small business education, workforce development, and public safety improvements. Additionally, the project will increase computer ownership in underserved households through donations and education.

This grant included an extension for community technology trainings, broadband access, and program support at five technology centers in Little Tokyo (2), Echo Park, Gardena/Torrance, and the San Gabriel Valley. The grant also covers technical support and outreach services to Get Connected! California campaign by CETF to local Asian and Pacific Islander (API) communities in the Los Angeles area.

Goals and Objectives Summary

Goal 1. Promote local and community economic development activities by increasing broadband access and availability in low-income neighborhoods.

- Objective A. Identify and assess broadband infrastructure needs in 4 LTSC affordable housing communities.
 - (1) Deploy three new wireless networks in affordable housing communities.
 - (2) Increase internet access to affordable housing residents through wireless networks.
- Objective B. Launch a community education campaign to target south Los Angeles residents in a demonstration Wi-Fi project.
- Objective C. Expand the Little Tokyo unplugged network to businesses and residents living in the nearby arts district.

Goal 2. Increase computer ownership among underserved households within targeted communities through the computer adoption program.

- Objective A. Form partnerships with private industry representatives to attract investors and solicit equipment donations/contributions.
- Objective B. Implement computer adoption programs in two targeted neighborhoods with community technology centers to provide computer ownership training.
 - (1) Perform resident outreach.
 - (2) Deliver computer adoption class.

Goal 3. Empower individuals with disabilities to use broadband to improve their quality of life.

- Objective A. Provide technology training to Pacific Bridge adult residential facility residents.
 - (1) Establish or upgrade two community technology centers.
 - (2) Complete 10 multi-session courses in Japanese, English and Korean.
 - (3) Deliver 20 one-session workshops.
- Objective B. Foster collaborations with regional centers to organize assistive technology (AT) workshops at CTCs.
- Objective C. Implement Discovery center's accessibility plan.

Goal 4. Stimulate community economic development through broadband demand by providing culturally and linguistically appropriate technology training to underserved communities.

- Objective B. Provide computer literacy training to seniors and other adults at Discovery centers.
- Objective B. Support ethnic small business efforts to establish an internet presence.
 - (1) Enroll small businesses in a do-it-yourself webpage class.
 - (2) Complete two 2-session workshops.
- Objective C. Provide underserved youth with pre-apprenticeship training opportunities on computer skills and wireless deployment.

Goal 5. Support community building activities through the deployment and application of broadband technologies.

- Objective A. Increase internet adoption through community/locally-produced content.
 - (1) Produce community-based blog content.
- Objective B. Increase community economic development through public safety and broadband technology.
 - (2) Partner with local agencies to invest in the Little Tokyo unplugged website's development.
 - (3) Deploy 6 video cameras and Wi-Fi access points.

Goal 6: support broadband adoption, awareness, and education among underserved urban communities, especially among Asian and Pacific Islanders.

- Objective A. Provide assistance to the Get Connected! Campaign.
 - (1) Participate in the 6 remaining Get Connected! Community fairs.
 - (2) Review Asian language outreach materials.
 - (3) Provide guidance on the content or design of the Asian language content on the website.
 - (4) Establish a booth at community fairs to promote the Get Connected! Campaign.

Project Outcomes Summary

Outcome Description	Actual	Goal	Percent Completed
Number of residents connected.	321	300	107%
Number of housing units connected (not subscribed).	2,479	1,120	221%
Number of youth who completed basic digital literacy course work.	20	15	133%
Number of blog page views.	41,279	22,000	188%
Number of adult students who completed basic course work on using the Internet	1,269	852	149%
Number of businesses reached.	90	74	122%
Number of systems refurbished and donated.	33	30	110%
Have staff attended face-to-face accessibility training? (Yes=1, No=0)	1	1	100%
Access plan completed and turned in? (Yes=1, No=0)	1	1	100%

IV. Accomplishments and Challenges

Summary of Accomplishments and Impacts of Project

Assessment of Outcomes Achieved in Comparison to Grant Agreement

All outcomes were met or exceeded:

- 13 free community wireless networks deployed in apartments and communities throughout Los Angeles, 9 of these deployed in low-income communities reaching 2,479 housing units.
- 33 computers distributed to low-income families.
- 63 computer classes and 27 workshops provided at three community computer classes with an enrollment of 1269 students.
- 158 blog postings by community members, with over 10,000 unique page hits.
- Over 2,223 unique users access one of our 12 free Wi-Fi networks.
- 20 low-income, underserved youth completed a 40-hour training program on Wi-Fi networking.
- 4 new community computer centers established or upgraded.
- 72 hours of computer-based training for adults with developmental disabilities.
- 90 small business owners completed a website.

Delineation of Deliverables and Outcomes Not Achieved and Explanation

LTSC was not able to complete the following deliverables and outcomes originally outlined in its workplan:

- Deploy three networks. One network at an affordable housing community (Reno Apartments) was completed; insufficient funds postponed plans for other deployments; the PHD Apartments, an 83-unit rehabilitation low-income project in Koreatown, is scheduled for construction of 5 free broadband networks in September 2010.
- Acquire non-caster chairs at DISKovery Little Tokyo. Primarily due to budget constraints, LTSC was unable to acquire chairs to replace current seating in our flagship technology lab. This was primarily due to budget constraints. LTSC is actively soliciting donations of 20 wheel-less lab chairs through the LTSC website.
- Deploy 6 video cameras and Wi-Fi access points. Though we have secured the funding and equipment to pay for a consultant to deploy Little Tokyo's public safety Wi-Fi cameras with the support of the Community Redevelopment Agency of Los Angeles (CRA), the project schedule had been extended due to delays resulting from appropriate approvals from various City departments including the Los Angeles Police Department. The estimated completion of this project is the end of summer 2010.
- 6 completed Wi-Fi network deployments. One of these deployments targeted residents of the nearby Arts District. However, this project activity is contingent on pending CRA funds. A Letter of Agreement by the CRA with the funding source has been completed, and project implementation will begin summer 2010.

Discussion of Other Positive Results from Project

South L.A. Youth Training Initiative. With the support of CETF funding, LTSC was able to partner with the All Peoples Christian Center (APCC) to establish a new community computer lab with a technology coordinator. This partnership has helped lay the foundation for APCC to leverage its funding and secure additional grant monies to upgrade the coordinator to a full-time position. In addition, APCC, with technical support provided by LTSC, is building upon our Wi-Fi training program and community network deployment to develop a more intensive summer technology training initiative targeting under-served youth in the community.

Broadband at Affordable Housing Projects. One of LTSC's technical challenges was the need to address insufficient wireless gateways at affordable housing developments. Traditional wireless mesh deployment strategies were prohibitively expensive. As a result, LTSC successfully deployed a unique strategy for the distribution of wireless services at the Reno Apartments using off-the-shelf Broadband over Powerlines (BPL) technology.

With the capacity-building resources provided by an AmeriCorps VISTA member, LTSC was also able to develop a community-based wiki (wiki.ltsc.org) that serves as a resource for resident volunteers and users of LTSC's wireless networks. In addition, the VISTA member developed a Request for Proposal that produced a vendor proposal to deploy a xDSL broadband network to an 83-unit multi-site rehabilitation project for low-income residents which is scheduled for construction in September 2010. LTSC developed the construction financing necessary to deploy this network.

Until recently, the LTSC networks were open (e.g. no encryption) with no means of tracking usage or ensuring that the wireless broadband connections were directly benefiting the targeted users. The VISTA member installed a new free tracking service to our Open-Mesh wireless networks that has enabled LTSC to register and track users with better ease, with the benefit of allowing users to use multiple devices.

DISKovery JCI. An unintended positive outcome that emerged during our grant term has been a newfound partnership with the Japanese Cultural Institute (JCI), a community center located in Gardena/Torrance that primarily serves the senior Asian American population in the South Bay area. The combination of LTSC's expertise in the area of community-based technology training for underserved seniors and JCI's pre-existing computer lab has helped produce a vibrant and active computer training program reaching hundreds of Asian American seniors.

10 Year Anniversary Event. The DISKovery Center, a community technology lab of the LTSC that provides computer classes to seniors, low-income families, and youth, celebrated its 10-year anniversary at its location in the historic Far East Building in Little Tokyo on March 27th. Over 75 people attended the event, which unveiled the DISKovery Center's new iMac computers, made possible by the California Consumer Protection Foundation and the California Emerging Technology Fund. The new computers are enabled with multiple operating systems – MacOS, Windows XP, Windows Vista, and Ubuntu – to meet the growing needs of the community.

Overview of Major Challenges to Achieving Planned Results

Identify Major Challenges to Successful Implementation

Neighborhoods Unplugged took on multiple, comprehensive broadband deployment, and adoption activities. The planned objectives included computer training in multiple languages, computer distribution to low-income families, wireless deployments, network training for disadvantaged youth, developed an accessibility training program for adults with disabilities, webpage development for small business owners, and a public safety camera deployment. Though LTSC accomplished most of these original objectives, and in some cases exceeded expectations, its ambitious plan was challenging in the coordination and follow-through of for this many activities.

One major challenge was in the development and execution of the youth Wi-Fi training program. LTSC realized that this project activity was under-resourced and time consuming due to less-than adequate planning, coordination, and staffing. In addition to struggles with youth training, the ability LTSC to deliver the amount and diversity of broadband adoption training programs has been deeply curtailed due to deteriorating financial circumstances. Though digital literacy programming has continued, many activities have been cut.

Another one of our major challenges has been funding and process delays while working with local City agencies. As a result, planned activities such as the proposed Wi-Fi public safety camera deployments and Wi-Fi network expansion into the Arts District were continually postponed.

LTSC was only able to complete the deployment of one of three residential Wi-Fi networks that were planned under this grant. This was somewhat due to limited funding, but the timeline was also a major factor as the LTSC deployment plans were constrained by the housing rehabilitation construction process. Finally, equipment costs helped dictate our selection of wireless mesh access points, which produced some unanticipated consequences. Our decision to select more affordable equipment came at a cost in terms of increased staffing, maintenance, and data reporting.

Discuss Efforts to Address Challenges and Resolve Problems

Youth Wi-Fi trainings. To address the challenges we encountered with our youth Wi-Fi summer training program, our collaborative will be dedicating additional resources and time in providing technology training to the disadvantaged youth population of South Los Angeles. Coalition for Responsible Community Development (CRCD) and the All People's Christian Center are extending the program from 7 weeks to 20 weeks, hiring a case manager, developing a more holistic training curriculum, and focusing on pre-A+ Certification computing skills development. The goal of this re-tooled program is to prepare the youth for formal A+ Certification offered by L.A. Trade Tech, a local community college. In addition, the collaborative has established clearer skills assessment

guidelines to ensure participants meet basic computer skills. LTSC will continue to provide technical assistance in the development of this collaborative project.

Public safety camera deployment. Despite the delays we faced in fulfilling this objective, the project is still moving forward to the deployment of wireless public safety cameras in the Little Tokyo neighborhood. In conjunction with the CRA and the LAPD, we've identified locations for the placement of cameras. A letter of agreement has also been finalized with the LAPD, and LTSC is now completing work orders with a consultant to install the cameras.

Wi-Fi Expansion to Arts District. The barrier to completing this project activity has been due to funding delays. However, the grant dollars have recently been submitted by the CRA and approved by the MTA to deploy a wireless network extension from Little Tokyo to the Arts District. This funding will be available within the next 12 months. In addition, the CRA has proposed that LTSC be the subcontractor to deploy a community wireless network in the Los Angeles Chinatown neighborhood.

Wireless equipment/vendor selection. Given the staffing requirements to maintain and support Open-Mesh networks, LTSC has since decided to return to using Meraki in its wireless deployments. Though the initial upfront costs of Meraki access points are three times that of Open-Mesh, we believe that our savings in maintenance and the superior data collection and tracking system of Meraki are worth the investment.

Wi-Fi Deployments. By the end of 2010, LTSC will have deployed five new residential networks with financing made available by the housing developments. These services will be available at no cost to over 120 residents.

Broadband Adoption and Computer Literacy. The LTSC Community Technology Program is awaiting news of several grant applications that include federal stimulus funding and private foundations. The proposals seek to support an economic development initiative that will promote computer literacy and broadband adoption among the Asian Pacific Islander (API) senior workforce in collaboration with the National Asian Pacific Center on Aging and e-commerce development with the Asian Pacific Islander Small Business Program.

V. Lessons and Recommendations

Summary of Lessons Learned

Lesson #1: LTSC has learned that first and foremost, a better and more carefully thought-out plan to manage its broadband adoption and deployment activities is crucial. Secondly, LTSC needed to anticipate the time needed to work with City agencies. Though LTSC may not have full control over the distribution of funding or the coordination of activities with city-based organizations, ample time to facilitate these processes and timeline assurances must be part of the plan. LTSC learned that successful wireless deployment in affordable housing projects requires a dedicated staff/volunteer member to manage and develop outreach activities. LTSC recruited a VISTA member who had the technology skills, relationship building responsibilities with tenants, and communication skills necessary to increase community buy-in. In addition, the dedicated resources to setting up a broadband network enabled the project to adequately document activities and technical information towards sustainability.

Lesson #2: The collaborative work of LTSC with partners in South Los Angeles yielded important lessons on planning, goal-setting, and developing adequate resources for an impactful training program. Leveraging LTSC partnerships with the Asian Pacific Islander Small Business Program and the Asian Business Association, for example, to increase broadband awareness in those communities held potential. Connecting with the Asian Pacific Policy and Planning Council was also a missed opportunity to educate the API community on the benefits of broadband.

Lesson #3: As LTSC expanded its program to the East San Gabriel Valley and the South Bay areas during the grant period, staff learned the importance of standardizing the technology and curriculum of the DISKovery Center program. As a result, the information technology staff established plans to deploy workstations with identical operating system and software configurations across all of DISKovery Center's computer centers. Staff also initiated discussions on consolidating, centralizing, and standardizing curriculum so that staff and volunteer trainers could have access to the same lesson plans, teaching modules, and competency objectives.

Lesson #4: Finally, LTSC understands that to develop a successful initiative, it needs to hone down the breadth of its community technology projects in order to produce quality results and outcomes. We need to prioritize its activities given the available resources, staffing, and time.

Recommendations

Recommendations for Expanding the Project in Region or Scaling Up Statewide

Recommendation #1: Assemble and coordinate affordable housing developers and policymakers around the issue of broadband. LTSC successfully established Wi-Fi networks in its low-income properties. In order to replicate access to broadband within low-income communities, it is essential to work with housing developers and advocates to promote the deployment and use of high-speed networks. CETF should bring together deployment operators, non-profits, and broadband providers to consolidate resources and develop a comprehensive initiative backed by a business model that address both broadband deployment and adoption.

Recommendation #2: Promote the establishment of community technology centers (CTCs). Community computer centers are, and will continue to be, important training centers that promote the use and adoption of broadband. These centers, such as those operated by LTSC, meet the technology training needs of community members left behind by the Digital Divide. However, CTCs need to be established in partnership with agencies and organizations that have a broader mission of service delivery; stand-alone CTCs face great challenges in sustaining funding.

Recommendation #3: Broker arrangements with equipment vendors to help make deployments affordable and available to non-profits. If CETF can aggregate equipment purchases or negotiate better price breaks for its partners (such as with Meraki), broadband deployments could be quicker and more cost-effective.

Recommendations to CETF Regarding Grants Management

We understand that CETF continues to develop and optimize its reporting requirements. To help facilitate this process we submit the following recommendations:

Recommendation #1: Include *specific* directions and examples on for each narrative and financials section required, in the same way CETF provided this information in the grant application.

Recommendation #2: Impose a page maximum/limit for narrative reports.

Recommendation #3: Prepare an electronic version of the originally-stated goals/objectives from the original grant agreement to the grantee (we have had to re-type this from our signed hard copy).

Recommendation #4: To the extent possible, make requests for specific data and outcomes *before* the grantee launches the initiative, so as to prepare for the collection of information.

VI. Grant Agreement Requirements

Purchased Equipment

The project purchased a total of \$7,000 in computers and related equipment to build out a computer lab at All People's Christian Center.

Date	Description	Purpose	Amount	How it will be used.
01/29/2009	Computers	All People's Christian Center Computer Lab	\$7,000	It will serve APCC's technology program participants

CETF of Grant Funds

All of the CETF grants funds were expended.