



CALIFORNIA EMERGING TECHNOLOGY FUND
Connect + Communicate + Compete



Strategic Action Plan
June 2007

A yellow map of California is positioned behind the text. The map shows the state's outline and is divided into numerous small, white-outlined shapes representing county boundaries. The text "Strategic Action Plan" and "June 2007" is overlaid on the map in a bold, blue, sans-serif font.



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STRATEGIC ACTION PLAN

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STRATEGIC ACTION PLAN
June 2007

The Mission of the California Emerging Technology Fund is to provide leadership statewide to minimize the Digital Divide by accelerating the deployment and adoption of broadband and other advanced communications services to underserved communities and populations.

The purpose of this document is to set forth a Strategic Action Plan for the California Emerging Technology Fund (CETF) in order to be open, explicit and transparent about the approach and strategies being embraced for grantmaking to have the greatest impact from the seed capital on closing the Digital Divide and achieving Digital Inclusion (e-Inclusion). CETF welcomes input and feedback from experts, stakeholders and policy makers about which investments will best accomplish that goal.

Introduction and Background

The CPUC Order

The California Emerging Technology Fund (CETF) has been established as a non-profit corporation pursuant to orders from the California Public Utilities Commission (CPUC) in approving the mergers of SBC-AT&T and Verizon-MCI in 2005. As a condition of approval of the mergers, AT&T and Verizon are required to contribute to CETF a total of \$60 million over 5 years “for the purpose of achieving ubiquitous access to broadband and advanced services in California, particularly in underserved communities, through the use of emerging technologies by 2010.” AT&T will contribute \$9 million per year and Verizon will contribute \$3 million per year. The CPUC also directed that at least \$5 million should be used for telemedicine projects.

The CPUC stated that CETF should adopt the goals of expanding adoption and usage of broadband technology in addition to promoting ubiquitous access: “We understand that without computers and computer literacy neither availability nor access will ensure use. It is low use that is at the heart of the digital divide. CETF should consider the possibility of public/private partnerships to develop community broadband access points that provide both.”

The CPUC orders specified the composition and process for constituting the 12-person CETF Board of Directors: 4 were to be appointed by the CPUC, 4 were to be appointed by the companies (3 by SBC of which only 1 could be an employee and 1 by Verizon), and these eight were to appoint the remaining 4. The appointments were to reflect both the diversity of California and the private-sector expertise to achieve ubiquitous broadband. Initial appointments were made in April 2006 and the Board was fully constituted by the end of June 2006.

Definition of Broadband

High-speed communications is referred to generically as broadband and is defined by the Federal Communications Commission (FCC) in terms of speed: Lines or wireless channels that terminate at an end user location and enable the end use to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction. Advanced service lines are connections that deliver services at 200 kbps in both directions. However, it is generally acknowledged that the speed used by the FCC as the definition of broadband is not adequate for consumer demands and global competitiveness. The CPUC says that commonly broadband transmissions are considered to be two-way connections between 384 kbps to 25 megabits per second (mbps). Thus, jurisdictions across the country are officially pursuing faster speed goals. For example, Idaho has established requirements for a statewide broadband initiative as 256,000 bits per second (256 kbps) from a subscriber (upstream) and 512,000 bits (512 kbps) to a subscriber (downstream). It is recognized by CETF that most current and future broadband applications require faster speeds than the FCC definition.

Although various sources define alternative technologies differently, the following are generally recognized characteristics of broadband options compared to dial-up service:

Technology	Speed
Dial-Up	56 kbps
DSL	384 kbps – 1.5 mbps
Cable Modem	1.5 mbps – 3 mbps
T-1	1.544 mbps
Satellite	Uplink: 50-128 kbps Downlink: 400-500 kbps
WiFi	11-54 mbps Up to about 300 feet
WiMax	70 mbps Up to about 30 miles

The CPUC reports that across the U.S., cable modem technology provides 51% of the broadband connections and DSL provides 40% of the connections with the remaining technologies accounting for less than 9% of the national market. However, the percentages of market share are different in California, where DSL accounts for 49% of the connections, cable modem provides 37% of the connections and all other technologies account for 14%.

It will be important in the future to track deployment and adoption of broadband by type of technology and speed. Further, it must be underscored that CETF is technology neutral and is focused on end-use functionality for the consumer in implementing the directives from the CPUC.

Magnitude of the Challenge

Although the deployment and adoption of broadband technology is steadily increasing across the nation and within California, there are rural and remote areas that are not served by the infrastructure and there persists a pattern of differential access and use among socio-economic population groups—this reality is referred to as the “Digital Divide” and is a major concern for California’s future global competitiveness.

According to the FCC, the number of high-speed lines in the U.S. increased more than 10-fold between 1999 and 2004 with average annual growth rate of 184%. The U.S. Department of Commerce reports that broadband adoption is outpacing adoption of other popular technologies, including VCRs, personal computers and the Internet, and adoption of broadband is on pace with the adoption patterns for color TV. However, there is a significant urban-rural Digital Divide:

- 40.4% of U.S. urban households with Internet had broadband in 2003.
- 24.7% of U.S. rural households with Internet had broadband in 2004.
- 5% urban and 22% rural residents don't subscribe to broadband because it is not available.

Given that the majority of the population resides in urban areas, the availability of broadband has increased significantly. Approximately 84% of Californians and 81% of U.S. residents live in areas served by broadband between 200 kbps and 10 mbps in both directions (with 46% being served by 2.5-10 mbps broadband). However, it is important to note that these percentages refer to availability or deployment of the infrastructure and not to subscription rates or use.

The Pew Internet & American Life Project reports that home broadband adoption nationally grew by 40% from March 2005 to March 2006, twice the growth rate of the year before, with 42% of all American adults having a high-speed Internet connection at home as of March 2006. Pew also reports encouraging trends in adoption of broadband technology among middle-income households, African Americans, and those with lower levels of education, although the percentage of use among these consumer groups still is lower than for the overall population.

The CPUC reports that at the end of 2005, there were 7,345,304 broadband connections in California, a 36% growth over the previous year. Nationally, connections reached 50,237,139 with a 33% growth over the previous year. The CPUC calculates a broadband penetration rate in California of 16.98 connections per 100 persons and a penetration rate for the rest of the U.S. at 12.42 connections per 100 persons.

Only limited information exists today for trends in California and its regions. For example, the Bay Area Council tracked use of the Internet in the region from 1999 to 2003 and found an increase from 79% to 83% of residents who regularly used a personal computer at home, work or school. During that same period of time, the median number of hours online each week increased from 5.88 to 7, with most users going on line for reference materials, travel or weather information, and entertainment. The biggest increase in use was going online for shopping.

Notwithstanding the significant increase on adoption of broadband, there continues to persist lower rates of use of the technology by residents who have less education, have lower income, are not English proficient, are older, and are disabled. Further, there is not sufficient data for geographical and socio-economic population sub-groups to determine the exact status of the Digital Divide in California. Thus, it will be essential to establish a process and methodology to track use and progress for a sufficient period of time to determine trends.

Foundational Research

CETF began developing a strategic framework by surveying the literature and identifying best practices and successful models. Several states, including Kentucky, Illinois, Michigan, North Carolina, Idaho, Vermont, and Wyoming have launched broadband initiatives. The most impressive increases in broadband adoption have been achieved by ConnectKentucky.

ConnectKentucky was launched by the Governor with support from the industry to organize a systematic process to identify prospective users and aggregate demand to drive infrastructure deployment. ConnectKentucky maps the existence of technology county by county and then mobilizes eCommunity Leadership Teams to identify opportunities for demand in specific sectors (business, local government, education, healthcare, libraries, tourism, community organizations, and agriculture) to attract broadband providers to compete for customers. It operates with a staff of about 30 people on a budget of \$1.5-\$2.5 million annually funded by industry memberships on a steering committee. As a result, Kentucky has led the nation in growth of both broadband availability and adoption

Under the supervision of Commissioner Rachele Chong, the CPUC sponsored a report compiled by an intern, Ana Alicia Bradshaw, titled *“Filling in the Broadband Gaps: The Role of the California Emerging Technology Fund in Closing California’s Digital Divide.”* This report has become the foundation for developing the strategic framework for CETF. The following summarizes the findings and conclusions from the report:

Why Gaps in Use of Broadband Exist – Technology Factors

- Access
- Affordability
- Applications and Content

Socio-Economic Factors Contributing to the Digital Divide

- Over 65
- Household Income <\$35,000
- No High School Degree
- Rural Area
- Non-English Speaking or Limited English Proficiency
- Disabled

Conclusions

- Goal setting is crucial to determining who and where you want to serve, how you want to serve, and what resources are needed for this effort.
- Strategic planning must be an iterative process.
- A metric for success should be established so that Board members can determine whether CETF and its grant recipients are meeting their goals.
- Effective use of public relations is necessary to reach out to underserved populations.

Recommendations

- Partnership Building: CETF should strive to serve as an intermediary between existing networks of community leaders concerned with broadband deployment and adoption.
- Strategic Planning: An expert working group should be recruited to develop a strategic plan for the future of CETF.
- Additional Research: A portion of CETF resources should be allocated to collecting and analyzing data on the broadband usage of Californians.
- Project Funding: CETF should not limit itself to funding pilot projects, but rather should consider investing in expanding successful programs.

Mission and Overall Approach

Mission Based on Foundational Research

Based on the above foundational report and other research, the Board of Directors formulated the following Mission for the California Emerging Technology Fund:

Provide leadership statewide to minimize the Digital Divide by accelerating the deployment and adoption of broadband and other advanced communication services to underserved communities and populations.

The Board also embraced the findings from the report regarding the technology factors that contribute to the Digital Divide by recognizing the “5 As” that must be addressed: Access, Applications, Affordability, Accessibility and Assistance. Thus, to bridge or close the Digital Divide there must be strategies to invest in programs and projects that address all of the 5 As.

Access + Applications + Affordability + Accessibility + Assistance = Adoption

Values, Commitments and Roles

To achieve the Mission there must be explicit values and commitments that constitute a “brand identity” for the California Emerging Technology Fund. The values and commitments include:

- Dedicated to closing the Digital Divide and achieving e-Inclusion.
- Focused on outcomes and high “returns on investments” for grants.
- Driven by research regarding best practices and successful models.
- Inclusive and open to input.
- Transparent about process and decisions.
- Disciplined about analysis, monitoring and evaluation.
- Accountable to public, partners and stakeholders for results.

These values and commitments need to be integrated into all operations of CETF. For example, in order to be dedicated to closing the Digital Divide as well as known for focused on outcomes, CETF must adopt widely-accepted metrics for measuring success accompanied by systematic analysis and consistent reports to the public about progress. Also, CETF must insist upon a discipline of documentation and a culture of accountability in order to be both transparent and effective in achieving high returns on investments. This means that CETF must continuously seek out relevant research and effective programs and use that information to facilitate interaction among prospective grantees, partners and investors to reach shared conclusions about best practices that can be incorporated into investments. To optimize effectiveness, CETF must perform several roles:

- Trusted and valued convener.
- Recognized source of useful information and clearinghouse for action.
- Credible voice and educator on broadband policy and Digital Inclusion practice.
- Innovator of effective strategy and collaboration.
- Tough-minded investor.
- Monitor of progress and accepted authority on status of the Digital Divide.
- Respected leader and valued partner.
- Organizer to mobilize for action.

Public-Purpose “Venture Capital” Fund

The above commitments can best be fulfilled if the California Emerging Technology Fund approaches its mission and roles more as a public-purpose “venture capital” fund making investments rather than a traditional charitable foundation making grants. The difference is much more than terminology—it is a totally different mind-set. The venture capital construct begins with the notion of being pro-active in identifying successful or promising ideas and shaping opportunities for investments, not just accepting proposals. And, it recognizes the need to invest in people and to help build the capacity of organizations to implement the program investment, including helping secure essential expertise and develop executive leadership and management skills. The venture capital model also connotes the need for disciplined documentation, underscores the commitment to outcomes, and focuses on returns on investments. It further suggests the need for CETF staff to bring the rigor of a Wall Street analyst in conducting “due diligence” reviews of proposals in recommending investments to the Board of Directors.

Market-Based Strategies and Emerging Markets

The venture capital construct also better aligns with the preference for first pursuing and optimizing market-based approaches to achieve ubiquitous broadband throughout California rather than relying primarily on regulation or legislation. A market-based approach would suggest a program similar to ConnectKentucky that attempts to identify and aggregate demand to attract deployment into rural and remote areas. A market-based approach also would regard underserved and disadvantaged neighborhoods as emerging markets and respect residents as prospective customers.

It is worth noting that Greenlining Institute also has recommended that CETF embrace the public purpose venture capital model and help private-sector providers view underserved neighborhoods and communities as emerging markets, working with community-based organizations to develop consumer demand.

Leverage Seed Funding Four-Fold

Given the magnitude of the challenge to close the Digital Divide in California and to achieve the Mission, it will be essential to leverage the initial \$60 million seed funding. The Board of Directors adopted a working goal to leverage the seed funding by at least four-fold to achieve an impact of about \$250 million through partnerships and co-investments with the private sector, foundations and government. Thus, CETF will be seeking a 3:1 match overall for its grants portfolio.

Priority Consumer Communities

Based on the foundational report, the CETF Board of Directors recognizes that the Digital Divide is a contributing factor to the “Economic Divide” and they identified three priority consumer communities for initial focused attention to close the Digital Divide:

- Rural and Remote Areas
- Urban Disadvantaged Neighborhoods
- People with Disabilities

Basic Approach

Working from the findings and recommendations in the *Filling in the Broadband Gaps* report, the CETF Board adopted a basic approach as shown below. The thrust of this approach is to build on what already is working instead of “reinventing the wheel,” expand and take to scale promising or successful efforts, and foster a culture of disciplined accountability focused on outcomes. This approach also requires a lot of “fact finding” activities and consultation with experts, stakeholders and practitioners.

Basic Approach

- Compile conclusions about best practices from research and results of pilot projects and demonstration programs.
- Consult the most knowledgeable experts and stakeholders in developing a strategic plan.
- Seek out investment opportunities instead of only being a responsive grant maker.
- Identify and invest in strategic opportunities (based on sound research and proven track records) to achieve the highest impacts in closing the Digital Divide.
- Invest in promising or successful projects and programs that can be expanded or taken to scale to increase impacts.
- Facilitate collaboration among existing projects and programs to incorporate best practices and achieve synergy to increase effectiveness in transforming communities.
- Hold funded programs and projects accountable for performance and outcomes.
- Measure the progress quantitatively in terms of status of the Digital Divide and Digital Inclusion statewide for priority communities and populations. Publish an annual report.
- Establish and institutionalize partnerships with civic leadership and community-based organizations.
- Develop regional strategies and collaboratives for closing the Digital Divide. Align and connect investments with regional strategies for economic prosperity.
- Establish a presence throughout California through affiliations and strategic alliances with key institutions and organizations.
- Continue to encourage and monitor research to ensure efforts are directed at the most critical factors to close the Digital Divide.
- Develop a process for ongoing peer review and continuous improvement.

In addition to addressing the “5As” and setting forth the above Basic Approach, CETF also recognizes the value of the “innovation” in helping drive adoption of the technology. Technology innovation can result in better and more cost-effective consumer services and products that help bridge the Digital Divide. And, researchers contend that as a state increases broadband speed and capability, the adoption in the general society tends also to improve. Thus, CETF will continue to monitor trends in broadband technology research and development to determine how to appropriately encourage and support innovation. As a starting point, CETF embraces the goal that California should be a global leader in broadband technology development, deployment and adoption. Depending on the metric, today California is ranked 15th or 16th globally in broadband deployment and adoption—which is an unacceptable position for global competitiveness. CETF will continue to work with policymakers and other stakeholders to identify strategies for California to become a global leader in broadband technology.

As it is with building infrastructure, however, \$60 million does not stretch very far when underwriting basic research or paying for upgrades to the speed of the fiber-optic backbone. And, the Digital Divide exists because there are significant groups of people who do not have the benefit of using even today’s state-of-the-art technology. Thus, CETF will continue to assess opportunities to “strike a constructive balance” between making grants to bridge the Digital Divide and investing in advancing the speed and capability of the technology. CETF is mindful that in order to adequately serve all of California with ubiquitous broadband infrastructure that can improve services and enhance the quality of life for residents—such as for telemedicine, emergency response, or job retention and generation in digital arts—the speed and capabilities of the backbone and connecting infrastructure will have to be upgraded.

In the spirit of advancing “innovation” as a strategy it has been suggested that CETF consider embracing the strategic “Is” to bridge the Digital Divide as a complement to the “5 As”: Innovation, Intelligence, Inclusion.

Fact Finding Meetings and Conversations

Stakeholders and Prospective Partners

In order to identify promising and successful projects and programs to bridge the Digital Divide and promote Digital Inclusion, CETF is organizing and conducting a series of “Fact Finding” Meetings (with individual organizations) and Conversations (with groups of community-based organizations in engaged in activities to bridge the Digital Divide). The initial round of Fact Finding activities will be conducted during the first half of 2007. The Fact Finding Meetings and Conversations with community-based organizations will be organized regionally to facilitate exchange of information and foster collaboration that can be linked to other regional strategies for economic prosperity.

Fact Finding Meetings also will be convened with statewide stakeholder organizations, foundations and corporations.

In addition, CETF will consult the Community Technology Foundation of California regarding successful programs and will explore opportunities for joint ventures. And, CETF will work closely with the Governor’s Broadband Task Force to coordinate consultation with state government entities.

Community-Based Organization Profiles

CETF has developed a template for preparing a profile of community-based organizations that are practitioners of programs to bridge the Digital Divide which includes overview and impact information. The profiles are being prepared with the assistance of the organizations and shared with all participants in the Fact Finding Conversations in the region. The profiles also will be posted on the CETF website in order to further exchange of information and collaboration among the community organizations. It is intended that this kind of information will be a valuable resource for the practitioners. Please see the website for organization profiles.

Summaries of Fact Finding Conversations

Regional Fact Finding Conversations will be convened among the identified community-based organizations to discuss the following questions:

- What is the most significant challenge to bridging the Digital Divide in your community (or for the population you serve)?
- What is the most significant challenge to bridging the Digital Divide in the region?
- What are the best practices in addressing these challenges?
- What hasn't worked in the past and why?
- How effective do you think current programs and projects are in the region?
- What strategies will be most effective in accelerating deployment of the broadband infrastructure (particularly in rural areas) and in increasing use of the technology (particularly for poor communities and disadvantaged populations)?
- What applications hold the most promise of increasing use of the technology?
- What would it take to expand or "go to scale" with the existing programs that are effective?
- What kind of partners could be attracted and what kind of leveraging could be achieved if there was an investment in your community or in the region to bridge the Digital Divide?

Summaries of all Fact Finding Conversation will be posted on the CETF website.



Strategies to Address Priority Consumer Communities

The challenge of accelerating the deployment of infrastructure into rural and remote California is much different than the challenge of closing the Digital Divide for urban disadvantage neighborhoods. Further, given that people with disabilities reside in both of these kinds of communities, there is a need to incorporate universal design for accessibility into all strategies and investments. The following sets forth the overall working premises and best practices along with the working approach to address the needs of each priority consumer community.

Working Premises for Strategies to Close the Digital Divide

Based on the research compiled and the Fact Finding activities conducted to date, the following “working premises” have been delineated about how to optimize impacts from investments:

- Investments in broadband technology must be a part of a comprehensive integrated set of strategies to transform communities and improve the quality of life of residents. Technology should not be dropped into a program, organization, or neighborhood in isolation of other efforts to improve the well-being of the users.
- Investments to incorporate technology applications into particular program applications—such as education, libraries, workforce preparation, economic development, small business support, telemedicine or housing—must embrace best practices to improve performance and outcomes related to that application and the user population.
- Investments need to be accompanied with efforts to ensure adequate capacity of the implementing organization(s).

Overall Best Practices

Based on the research and the Fact Finding activities to date, the following are the “overall best practices” that should be incorporated into any program or project receiving CETF funding:

- Program strategies and elements are based on sound research.
- Program design has been successful or promising in pilot(s) and demonstration project(s).
- Program incorporates best practices for the program-specific application.
- Technology investment is part of an overall comprehensive effort specific to the program application to improve outcomes, performance or quality of life for the participants.
- Technology investments are not made in isolation of other improvement efforts.
- Technology investments are part of a comprehensive coherent program and integrated strategies to transform communities.
- Program is managed by individuals and organizations who are respected by the participants and community being served.
- Accountability is infused throughout the implementation with monitoring and evaluation accompanied by regular progress reports being part of the management discipline and focus on outcomes.
- Program managers identify synergies with other initiatives and sponsoring organizations seek opportunities to collaborate.
- Program sustainability is achieved through entrepreneurial revenue generation and/or dedicated revenue stream.
- Program managers participate in regular “learning communities” and peer review to identify ways to improve performance and increase impact.

Working Approach for Rural and Remote Areas

The following is the working approach to encourage and accelerate the deployment and adoption of broadband into rural and remote areas:

- Identify and map publicly-owned and public-purpose backbone networks and explore the potential for the networks to serve as a platform for building connections to community facilities, businesses, and residences.
- Organize a process to identify prospective customers and aggregate demand (based on the ConnectKentucky model).
- Using the above information and potential joint venture with existing backbones, invite the private sector to bid on serving the aggregated demand.
- Explore the feasibility of using the development of a telemedicine network as a strategy to help pay for a portion of the infrastructure.
- Explore funding from emergency response and homeland security for infrastructure.
- Determine if federal policy could be changed to allow shared use on a pro-rated basis of infrastructure installed in schools and libraries through eRate.
- Further explore with utilities broadband over power lines (BPL).
- Explore with independent rural telcos (CalCom) their interest and potential to partner.
- Explore emergency response and homeland security as another “anchor tenant” for network.
- Inventory demand for broadband in unserved areas (use website for communities to report).
- Establish a mechanism to track technology innovations for deployment and adoption.

Working Approach for Urban Disadvantaged Neighborhoods

The following is the working approach to increase adoption of broadband technology in urban disadvantaged neighborhoods:

- Identify successful programs and invest in expansion and replication.
- Invest in technology as part of an integrated program to transform communities.
- Promote best practices for program application as condition of investment.
- Facilitate collaboration and synergy.
- Assist with development of CBO capacity.
- Focus on affordability and availability of hardware, software, training and technical support.
- Identify relevant applications for those who “want but do not have.”
- Embrace and engage the youth—get them online first to attract other family members.
- Invest in smart public housing to encourage adoption.
- Consider opportunities to invest in the following program applications
 - Education
 - Libraries
 - Workforce Preparation
 - Economic Development
 - Small Business Growth
 - Housing
 - Telemedicine
 - Governance and Civic Engagement
 - Volunteerism

- Establish a work group to develop business revenue models for sustainability (ranging from public-private partnerships for revenue generation to identification of additional “anchor tenants” with stable revenue).
- Engage grantees as partners in identifying customers or clients as “emerging markets” through community surveys and computerized compilation and reporting.

Working Approach for People with Disabilities

The following is the working approach to encourage and accelerate use of broadband technology by people with disabilities:

- Integrate universal design and accessibility into all investments.
- Work with industry to improve accessibility of hardware and software.
- Identify successful models and expand or replicate.
- Explore joint ventures with financial institutions to assist hardware acquisition.
- Work with website designers for accessibility.
- Support information outreach to people with disabilities about existing resources (perhaps work with In-Home Support Services).
- Work more closely with the California Communications Access Foundation and Department of Rehabilitation to explore opportunities for collaboration.

In addition, CETF will work with interested local jurisdictions and associations to compile and publish best practices for WiFi requests for proposals (RFPs) and contracts for vendors, with a particular attention to best practices for Digital Inclusion compatible with market-based strategies.

CETF also will explore with industry leaders, such as in film and digital arts, the feasibility of working together to link employer-driven workforce development using broadband technology to existing employment training programs.

CETF will work with public agencies to promote e-government to significantly improve the efficiency of public services—encourage residents to “get out of line by getting online”—which, in turn, will increase the demand for deployment of the infrastructure. CETF also will work existing resources to encourage “e-community” and other opportunities to foster civic engagement and mobilize volunteers. Broadband technology has the potential to substantially tap into the creativity and energy of the citizenry and significantly engage residents in governing themselves. Such an effort could be launched with a “next generation Net Day” event to capture the interest and imagination of the public and engage them in activity that demonstrates the power of broadband.

Attached is the “Strategic Matrix to Guide Grantmaking” which organizes and details the above information according to prospective program applications, best practices, and strategic approaches to address the three priority consumer communities. This matrix will be used by the CETF Board to evaluate the relevance and impact of proposals for grants. It also will be used to pro-actively reach out to experienced, successful community organizations and institutions to invite proposals to implement the strategies.

Approach to Investments and Grants

As stated above, CETF has an adopted goal of leveraging the original seed funding by four-fold through partnerships and co-investments with private-sector corporations, foundations and government. This means attracting a 3:1 cash match for a CETF grant, whereby the applicant is expected to generate matching funds in an amount that is three times the size of the CETF investment. Prospective investments and partners are being identified through the Fact Finding Meetings and Conversations.

CETF will invite Investment Proposals through an open Request for Proposals (RFP) process launched in May to allow the Board to make investments decisions in January 2008. The RFP process will involve first submission of a short Concept Proposal followed by a Full Investment Proposal if the CETF Board so invites. Further, CETF will proactively invite Investment Proposals based on the Fact Finding process and consistent with this Strategic Action Plan in order to allow the Board to make initial investment decisions by mid-2007.

Grants generally will not exceed \$250,000 per year, \$500,000 over 2 years and \$750,000 over 3 years, depending on the maturity of the program and capacity of the implementing organization. Smaller grants will be considered if sufficient impact can be demonstrated. Larger investments will be considered on a limited basis pursuant to: (a) submission of a preliminary concept proposal which clearly articulates the demonstrated success of the proposed program and the cost-effectiveness of the larger investment with quantified expected impacts and outcomes; and (b) approval by the Board to invite a Full Investment Proposal. All proposals will be required to have substantial additional cash match.

As a condition of investments, all grantees will be required to submit quarterly and annual reports reporting progress and achievement of milestones in order to continue to receive periodic payments of the approved investment.

CETF will further consider whether or not to develop and release an RFP for "Big Ideas" to accelerate deployment of broadband infrastructure throughout California, particularly to rural and remote communities, that encourages and optimizes market forces.

Grantees preferably will be a 501(c)(3) organization, although partnerships may include other partners that are not non-profit organizations. Proposals from public-private partnership consortia involving 501(c)(3) organization(s) with a 501(c)(4) or (6) partner as fiscal agent will be considered only if there is a compelling reason to ensure management capacity and a neutral forum for the consortium. If a grant is made to a 501(c)(3) engaged in a public-private partnership involving private-sector for-profit funders or partners, none of the grant funds may benefit the for-profit entity. Proposals from a government entity as fiscal agent on behalf of a public-private partnership with a (501)(c)(3) organization or consortium of 501(c)(3) organizations will be considered if there is compelling reason to ensure management capacity and a public forum. Absolutely no grants will be made to for-profit entities. With all grants, funds will be restricted by contract to the intended use and accounted for consistent with IRS regulations for non-profit organizations.

The CETF Board of Directors approved the following criteria to be used in evaluating the Investment Proposals:

Criteria for Investment Proposals

- Consistency with the CETF Strategic Action Plan.
- Ability to meet the goal of leveraging CETF funds four-fold by securing a 3:1 cash match.
- Sponsorship and management by civic organization(s) that are well rooted and respected in the community being served.
- Demonstrated track record with implementing and managing successful programs, particularly bridging the Digital Divide by promoting and/or using broadband technology.
- Ability to articulate the theory and research that supports the proposed program or project approach, strategy and design as likely to succeed.
- Ability to delineate the incorporation of best practices into program or project design.
- Ability to integrate technology into a coherent program to transform communities.
- Quality of a detailed work plan with monthly activities and quarterly deliverables.
- Ability to articulate specific quantified outcomes as a result of the investment.
- Ability to address the needs of people with disabilities, ranging from an accessible website, to programs, to accessible facilities.
- Ability to analyze and articulate the “order of magnitude” of the challenge in the community or region and ability to put program impact into context of overall challenge.
- Budget and cost-effectiveness on per unit cost outcomes.
- Demonstrated collaboration with other organizations and programs to optimize impact through partnerships and synergy.
- Documented support from key ally community and regional organizations that recognize broadband technology as a key component of economic prosperity strategy (in some formal, official and written manner).
- Ability to articulate for a coherent monitoring and evaluation plan.
- Ability to set forth a viable plan for sustainability of the program.
- Willingness to participate in “learning communities” to share lessons learned.

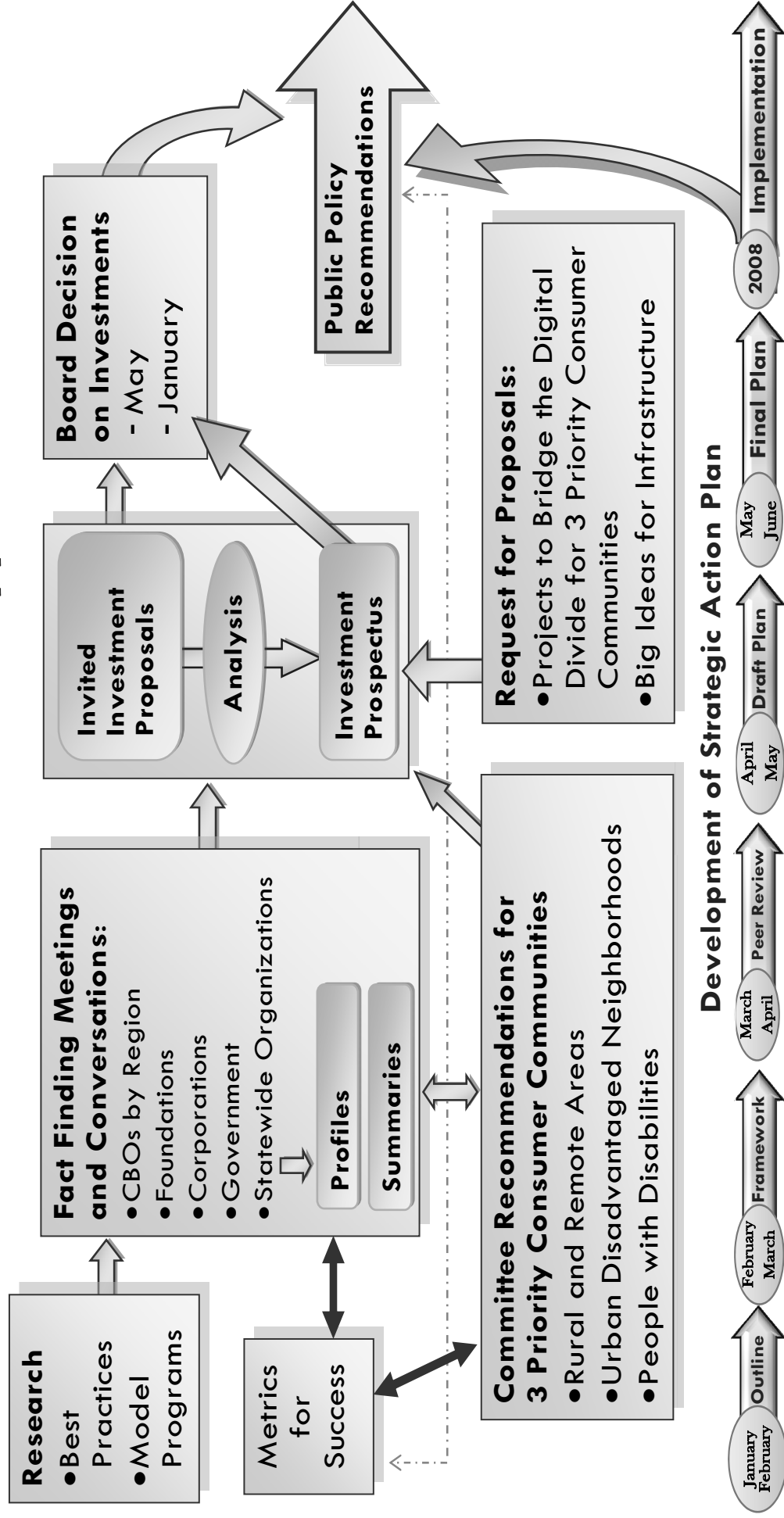
The strategic planning and investment process is set forth in the following diagram. A detailed Work Plan has been prepared and adopted to implement the steps shown in the diagram.



CALIFORNIA EMERGING TECHNOLOGY FUND

Steps in the Strategic Planning Process and Decisions for Initial Investments Mission

Provide leadership statewide to minimize the Digital Divide by accelerating the deployment and adoption of broadband and other advanced communication services to underserved communities and populations.



Academic Advisors and Expert Peer Review

A panel of Academic Advisors from higher education and research institutions will be organized to provide regular input to the work of the California Emerging Technology Fund and to assist in mobilizing resources for achieving the Mission. It is anticipated that the Academic Advisors also will help CETF engage students in helping implement the Strategic Action Plan.

In addition, other experts will be identified to participate in periodic peer review of the Strategic Action Plan and the results to provide for a process of continuous improvement.

Policy Formulation and Promotion

The process and experience with implementing the Strategic Action Plan, identifying best practices, and evaluating the impact of investments will be valuable in informing public policy formulation. CETF will publish an Annual Report and convene key stakeholders and policy makers to discuss the findings. The Annual Report is intended to become a reliable document to assist public officials in formulating policy to ensure that California becomes and remains globally competitive in the use of broadband technology.

Communications

CETF must develop a robust Communications Plan as recommended in the *Filling in the Broadband Gaps* report. Elements of the Communications Plan will include:

- Website
- Public Outreach and Education
- Annual Report (Deployment and Adoption)
- e-Newsletter
- e-Inclusion and Digital Community

The Communications Plan needs to reflect and reinforce the Mission, values and commitment of CETF. The Website is being developed as the image foundation consistent with the brand identify for CETF such that it will be the symbolic and functional reflection of the organization.

The Website will be user-friendly and robust in providing relevant information for the audiences. It will be multiple languages and is being designed for accessibility. It also will be engaging of Internet users—for example, there will be as much focus on “About You” as there is on “About Us”. It is being designed to foster and facilitate “community” through connections—the “Digital Community” or “Connected Community” concept. This will be done in part by linking visitors to other websites with this kind of purpose and expertise rather than CETF developing it.

CETF also intends to develop a program that will appropriately honor Don and Rosemary Vial. Examples of possible programs include fellowships or competitive grants. The program will be developed and announced in 2008. Don Vial served as Chairman of the California Public Utilities Commission during the 1980s and was a dedicated champion for consumers while embracing market-based strategies. Rosemary Vial was his life partner in all his endeavors.

Metrics for Progress

The goal for deployment of broadband infrastructure is to bring high-speed communications to the homes of Californians and measuring progress towards that goal has to be a part of the metrics for success. However, it is recognized that an effective strategy for accomplishing that goal can be to first deploy the infrastructure to community locations (such as schools, libraries, and community centers) and businesses. Further, closing the Digital Divide means ensuring that all Californians have access to and increase their use of broadband technology to minimize differential rates of use by socio-economic group. Thus, metrics for progress must track both the “supply” and “demand” aspects of the challenge and there must be an established methodology and process for reliably and consistently tracking deployment and adoption for several years. The following summarizes the adopted framework for metrics:

Supply-Side Methodology and Metrics

- Report on the availability of broadband technology throughout California at the census tract level (evaluation of change year to year overall, statewide, by region and by county) by:
 - Technology
 - Speed
 - Affordability (cost and comparison to income)
- Data compiled and evaluated by CPUC and BTH on a set schedule.
- Comparison of California to other states and countries globally (“Broadband Index”).
- Assessment of economic impact from technology infrastructure deployment.
- Evaluation of status of Universal Design in technology for accessibility.

Demand-Side Methodology and Metrics

- Annual survey of Californians (plus possible interim polls) about technology use with standardized questions to obtain following data (explore expanding existing polls such as Field, PPIC, Pew):
 - Use of a personal computer at home, work, school, other.
 - Use of the Internet (hours by week).
 - Possession of an e-mail address.
 - Purpose of on-line use of Internet (research, shopping, news, entertainment, job search).
 - Posting of information to Internet (own blog or webpage, work blog or webpage, sharing content).
 - Kind of technology for use of Internet.
 - Reasons for using or not using broadband.
 - Change in use of Internet because of broadband availability.
- Report on annual survey results by regions and socio-economic and demographic categories:
 - Gender
 - Age
 - Education
 - Income
 - Ethnicity
 - English Proficiency
 - Employment Status
- Assessment of accessibility for disabled (process methodology needs to be selected).
- Self-assessment tools for local jurisdictions and communities.
- Other focused consumer and customer surveys (conducted by community and neighborhood organizations).

California Public Utilities Commission Order: Transaction Will Benefit Californians

California Emerging Technology Fund (CETF)

As part of applicants' commitment to ensure that this transaction is beneficial on an overall basis; to enhance the Broadband Connectivity section of the Greenlining Agreement, and to ensure that this transaction is consistent with statutory objectives to make advanced telecommunications services available to underserved communities, we order that applicants commit \$9 million per year for 5 years in charitable contributions (\$45 million total), to a non-profit corporation, the California Emerging Technology Fund (CETF), to be established by the Commission for the purpose of achieving ubiquitous access to broadband and advanced services in California, particularly in underserved communities, through the use of emerging technologies by 2010. No more than half of Applicant's total commitment of \$45 million to the CETF may be counted toward satisfaction of the Greenlining Agreement to increase charitable contributions by \$47 million over 5 years.

The CETF will be organized under the Nonprofit Public Benefit Corporation Law for charitable and public purposes as a nonprofit public benefit corporation, and not organized for the private gain of any person or entity.

In addition to the goal of providing ubiquitous access to broadband and advanced services in California, the CETF should also have the goals should be expanded to include adoption and usage. We note that the Greenlining Agreement and SB 909, proposed legislation sponsored by Senator Escutia, included these components in the broader vision for addressing the Digital Divide and believe that we should do so as well.¹

Consistent with the diverse needs of California's low income, ethnically diverse, rural and disabled communities, the members of the Governing Board should have a broad array of backgrounds, experiences and expertise. SB 909 proposed the establishment of a California Broadband Access Council, and we will use this as a guide in constituting the Governing Board of CETF.²

The governing board of the CETF will be composed as follows: The Commission will select four appointees. Assuming that this proposal is also adopted in the pending Verizon and MCI proceeding, SBC shall nominate three appointees and Verizon shall nominate one appointee. We encourage SBC to appoint members with a diverse set of skills, backgrounds, and strengths. Therefore, SBC can appoint no more than one SBC employee among its three appointees.

These eight appointees shall determine the remaining four appointees to the governing board. We encourage the board to make the final four appointments based upon the goal of making broadband as ubiquitous as possible in California.

The Commission will bring together representatives of this Commission, authors of the Broadband Task Force concept and the Broadband Access Council proposal, and CETF to work collaboratively from the outset to maximize effectiveness. In order to facilitate implementation of this program, our Telecommunications Division will assist in the logistics of

¹ We understand that without computers and computer literacy neither availability nor access will ensure use. It is low use that is at the heart of the digital divide. CETF should consider the possibility of private/public partnerships to develop community broadband access points that provide both.

² Consistent with the vision of SB 909, the governing board should consist of representatives of a broad range of interests. In particular, the composition of the governing board should include, to the extent possible consistent with the size limitations of the governing board, representatives of this Commission, the Legislature, SBC-AT&T, Verizon-MCI, Greenlining, Latino Issues Forum, consumer advocates, groups supporting rural economic development (such as the Great Valley Center), the small business community (such as the California Small Business Association), the disability community (such as the World Institute on Disability), computer and equipment manufacturing, high-technology corporations, Broadband Institute of California, California Telemedicine and ehealth Center ("CTEC"), the Corporation for Education Network Initiatives in California ("CENIC"), the California Business, Housing and Transportation Agency ("BTH"), as well as individuals with experience in grant making and non-profit management.

collecting the names of the appointees and arranging the initial meeting. The Applicants should forward the list of appointees and their availability to the Director of the Telecommunications Division. There is no additional role for the Telecommunications Division after the initial meeting occurs.

Funds dedicated to the CETF will be used to attract matching funds in like amounts from other non-profit public benefit corporations, corporate entities or government agencies. It is anticipated that initial funding provided by the applicants in this proceeding (\$45 million) will be combined with funds from other sources for a total initial endowment for the CETF of \$60 million over 5 years. It is further anticipated that a majority of CETF funds will be matched by other private, non-profit, or government entities for specific projects to reach a total goal of at least \$100 million in funding over 5 years.

The CETF should earmark at least \$5 million to fund telemedicine applications that serve California's underserved communities, particularly those that serve rural areas of the state or serve a large number of indigent patients. Grants for telemedicine applications may be made directly to health care providers that operate under a not-for-profit structure or not-for-profit public charities that provide telecommunications or technology grants. Such grants shall be used to provide telemedicine applications for the direct benefit of underserved communities and may not be used for policy advocacy work in any area including telecommunications or health care policy. Consistent with the federal telemedicine program, the funds earmarked for telemedicine applications should not be used to construct broadband transmission facilities outside of the consumer's premise, although the CETF may fund such investments with other funds.

The Articles of Incorporation, Bylaws and Charter for the CETF will be established by the governing board. The Charter will specify that the purpose of the CETF is to fund deployment of broadband facilities and advanced services to underserved communities. "Underserved communities" is defined as communities with access to no more than two broadband service providers, including satellite, or broadband adoption rates below a statewide average. Communities with below average broadband adoption rates primarily include: low-income households, ethnic minority communities, disabled citizens, seniors, small businesses and rural or high-cost geographic areas.

The CETF will form advisory groups on deployment of broadband facilities and access to critical advanced services, such as online education and telemedicine, in rural and high-cost areas. The CETF will work with these advisory groups as well as organizations and agencies such as, the California Telemedicine and eHealth Center (CTEC), the Corporation for Education Network Initiatives in California (CENIC), the California Business and Transportation Agency (BTH), the Broadband Institute of California, Greenlining Institute, and other organizations representing underserved, minority or disabled communities, to identify ways in which the CETF can coordinate and fund projects to link primary care health clinics and educational facilities in rural and high-cost areas to high-speed broadband networks, and promote economic development in underserved communities.

It is the intent of this Commission that broadband facilities funded by the CETF will be owned and operated by private corporations, non-governmental organizations (such as universities or health facilities) and/or local governments, or some public-private partnerships involving a combination of these entities, and not owned and operated by the CETF. Any remuneration for CETF facilities transferred to other entities will be returned to the CETF fund for use in future projects.



**California Emerging Technology Funds
Strategic Action Plan
Strategic Matrix to Guide Grantmaking**

“Prospective Program Applications, Best Practices and Strategic Approach to Address Priority Consumer Communities”

Prospective Program Application	Best Practices To Be Incorporated	Strategic Approach to Foster Collaboration
Rural and Remote Areas		
Aggregation of Demand	<ul style="list-style-type: none"> Prospective larger government and other institutional users are systematically identified as possible “anchor tenants” in order to project potential aggregated demand to attract investment in infrastructure. Identification of potential users is conducted by inter-disciplinary teams with support from public and private partners. Prospective aggregated demand is presented to private providers to encourage bidding providing services through a competitive process. A monitoring and evaluation process is established at the beginning of the program. 	<ul style="list-style-type: none"> Select a pilot region(s) with significant interest from prospective partners in order to prototype the approach in California. Initiate a focused planning phase to develop the program with partners (including all identification, interviewing and documentation procedures and forms). Determine implementation organization(s) and recruit and train personnel. Implement the planned program to identify prospective anchor tenants and subscribers. Assist region in presenting results to private providers.
Telemedicine	<ul style="list-style-type: none"> Rural clinics and hospitals in a given medically- underserved region (including tribal lands) are identified as sites that could benefit from specialized diagnostic and treatment services offered by medical centers. This should include institutions in the region that will be key to the regional medical services system in the future. All elements of the program are developed: (a) identification of requisite broadband connections and equipment for specific telemedicine services; (b) development of service protocols; (c) training of personnel at both rural facilities and medical centers; (d) operation of network operations; and (e) management of the medical services. A business model is developed to generate revenue to ensure long-term sustainability. 	<ul style="list-style-type: none"> Work with key stakeholders to develop proposal for FCC, including identification of initial pilot region(s) for statewide network. Work with interested regions with adopted strategic plans, such as the San Joaquin Valley through the California Partnership for the San Joaquin Valley, to plan and develop a regional telemedicine network and integrate with statewide network. This will include development of all program elements, including a sustainable business model, set forth under best practices. Facilitate optimal coordination and leverage between the FCC proposal and partnership region(s), including the San Joaquin Valley, to plan and implement telemedicine program.
Emergency Response and Homeland Security	<ul style="list-style-type: none"> All public safety and emergency responders are connected through broadband to a robust fiber-optic network to ensure real-time video-conferencing and webcasting during emergencies, disasters and pandemics. 	<ul style="list-style-type: none"> Meet with all statewide public safety and emergency response agencies to identify plans and potential for broadband connections. Coordinate this effort with Broadband Task Force.

	<ul style="list-style-type: none"> Rural and remote communities are connected through broadband so that these areas can be used for population evacuations and surge capacity in emergency responses. 	<ul style="list-style-type: none"> Support the State in developing a plan for an emergency response broadband network connected to a fiber-optic backbone, including an assessment of the revenues that could be identified to support the network. Ensure that emergency response agencies are a key part of the “aggregation of demand” methodology in the pilot project and in similar efforts in other regions. If feasible, encourage state to invite competitive bids to a statewide broadband network for emergency response.
Urban Disadvantaged Neighborhoods		
Education Pre-School	<ul style="list-style-type: none"> Learning is aligned with brain development of both motor skills and cognitive abilities. Parents are engaged in supporting learning. Individual child development and overall school performance are tracked and results are used to guide and adjust curriculum. Impact of pre-school learning experience is monitored and evaluated through K-12. Parents are engaged in supporting learning. 	<ul style="list-style-type: none"> Organize peer review(s) of curriculum to validate alignment with learning and education research. Require and support incorporation of long-term longitudinal evaluation of impact on educational performance over time and adoption of technology by families of pre-schoolers. Encourage additional program components involving parent engagement and training, low-cost or free computers for home use for students and parents completing an age-appropriate curriculum access, and availability of tech support from trained neighborhood residents. Explore aligning funding for preschools with other place-based initiatives and investments.
Education K-12	<ul style="list-style-type: none"> The principal is an exemplary executive leader—inspiring the faculty and staff, and mobilizing their collective energies to help every student learn. Executive leadership by the principal is pivotal to turning around low performing schools. There is an explicit vision and articulated commitment for high performance that engages and energizes the entire organization. The vision and commitment are supported by the school district administration and governance. There are clear-stated and widely-understood outcomes for students and the school accompanied by accountability metrics. Teachers are committed to academic excellence and are valued by the administration. Innovation to credentialing is developed to ensure qualified teachers are recruited and retained. Parents are engaged in helping children learn and in supporting the school. Technology complements and augments a sound program of 	<ul style="list-style-type: none"> Identify major jurisdictions and/or regions where general-purpose local government(s) and school district(s) have reached agreement about coordinated efforts to improve educational performance with a coherent strategy rooted in best practices. Develop a model computer and Internet literacy program and integrate into strategies and curriculum for improving education performance. Complement classroom learning about computers and Internet literacy with career technical education experience and training opportunities for students. Encourage additional program components involving parent engagement and training, low-cost or free computers for home use for students and parents completing an age-appropriate curriculum, and availability of tech support from trained neighborhood residents.

	<p>improving education performance.</p> <ul style="list-style-type: none"> • There is an understanding of the multitude of challenges and dynamics that can be present at home with an effort by the school to address them or facilitate intervention so as to enable learning. • Human services provided by county and city agencies are organized into multi-disciplinary teams around school attendance areas to provide family and neighborhood interventions. Teams work in partnership with neighborhood leaders and the school; and teams are held accountable for improving children and family outcomes • There is a support mechanism or “coaching” program that assists principals in developing executive leadership and management skills. This can be augmented with a peer learning group, such as an “academy” for principals in which business executives are a core part of the faculty. • Employers are engaged with the school in career experiences to augment classroom learning. 	<ul style="list-style-type: none"> • Consider identifying model K-5 schools (in disadvantaged neighborhoods) significantly improving educational performance and engaging them in the development of computer and Internet literacy program for K-5 curriculum. • Align technology investments in education with community transformation and economic development initiatives.
<p>Education After-School</p>	<ul style="list-style-type: none"> • The program provides a safe environment for students after formal school day. • The after-school program complements and augments classroom learning, providing an academic curriculum component along with recreation. • Computer and Internet navigation literacy is a key learning opportunity and integrated into the curriculum component. • The program has broadband connection and service. • There is a nutrition component, providing the students with healthy snacks. • The program aligns with other interventions and investments in the community. 	<ul style="list-style-type: none"> • In major jurisdictions and/or regions where the general-purpose local government(s) and school district(s) have reached agreement about coordinated efforts to improve education performance, identify viable after-school organizations interested in integrating computer and Internet literacy into their program elements. • Encourage interested after-school organizations to develop a model program element for computer and Internet literacy. • Develop and integrate into the program curriculum an evaluation component that incorporates longitudinal tracking of participants’ academic performance in school. • Facilitate sharing of the model program element and “lessons learned” statewide among other after-school organizations.
<p>Libraries</p>	<ul style="list-style-type: none"> • Libraries throughout the state, particularly in underserved communities, are connected through broadband to the Internet. • Computers with broadband access to the Internet are provided for public use in sufficient quantities to meet increasing demand. • Training in use of computers and Internet navigation is provided on-site. • Classes are available to teach access on-line to information that 	<ul style="list-style-type: none"> • Explore with the State Librarian and interested foundations the development of a statewide program to increase the availability of computers with broadband Internet access in libraries. • Ensure that libraries are a key part of the “aggregation of demand” methodology in the pilot project and in similar efforts in other regions.

	complements library resources.	<ul style="list-style-type: none"> Integrate augmented broadband services in libraries located in communities in which other investments are being made. Identify successful workforce preparation training programs and determine opportunity for collaboration and synergy with each other. As major local government jurisdictions or regions target resources into specified geographic area for economic revitalization, work with local officials and civic leaders to integrate computer and broadband technology training into the initiative. Incorporate job skills training program for local residents to provide technical support for local small businesses and households. Facilitate partnership with consortia of employers to link trained residents to job opportunities.
Workforce Preparation and Training	<ul style="list-style-type: none"> Computer and Internet navigation training (in curriculum modules aligned with school and workforce training standards) are available to youth and adults in underserved neighborhoods. There is an opportunity to acquire a computer for the home at no or reduced cost for participants completing a specified training program. Computer refurbishing is coordinated with the training program. Job opportunities are posted or referrals are made at training location. Interested participants are trained to provide tech support for residents. Trained residents are linked to job opportunities through a consortium of employers. 	<ul style="list-style-type: none"> As major local government jurisdictions or regions target resources into specified geographic area for economic revitalization, work with economic development leaders (local officials and civic leaders) to integrate computer and broadband technology training into the initiative. Assist economic development leaders in developing strategies to integrate deployment of broadband into major infrastructure construction projects. Assist economic development leaders in aligning workforce preparation and other broadband strategies and best practices in the target areas.
Economic Development	<ul style="list-style-type: none"> Broadband technology is an integral component of infrastructure and deployment is facilitated with all major construction projects or programs. Employers, particularly small businesses, have access to broadband service and tech support. Workforce training for computer and Internet navigation literacy are integrated into strategies. 	<ul style="list-style-type: none"> Prepare an overview concept document which sets forth rationale, vision, strategy and magnitude of challenge. Develop and implement an outreach program to small businesses in targeted communities or in selected networks to determine potential demand. Monitor and evaluate results of small businesses being connected to broadband service.
Small Business Growth	<ul style="list-style-type: none"> Small business are encouraged by their associations to access broadband technology. Small business associations provide training and facilitate tech support. Affordable computers and broadband service are secured by associations for their members through joint ventures with companies or programs. 	<ul style="list-style-type: none"> As a leading strategy for increasing use of broadband technology in urban disadvantaged neighborhoods, housing first will be approached as a statewide initiative (see below). Develop a regional roll-out plan after completing steps below. In collaboration with partners: (a) work with companies to
Housing	<ul style="list-style-type: none"> See statewide approach below. 	

		secure donations of equipment; (b) develop community-driven websites; and (c) coordinate with skills-training program for tech support.
Emerging Markets	<ul style="list-style-type: none"> See statewide approach below. 	<ul style="list-style-type: none"> Explore with community-based organizations the feasibility of prototyping this approach to “emerging markets” in key disadvantaged neighborhoods within regions in which civic leaders are committed to facilitating broadband deployment and adoption. Form a learning community among the neighborhood leaders. Facilitate interaction and collaboration with civic leadership organizations and industry.
People with Disabilities		
Universal Design	<ul style="list-style-type: none"> IT companies and broadband providers have official adopted policy to incorporate universal design into all products. Website designers are fully aware of the issues and adequately trained to optimize accessibility for websites. Private sector regularly consults experts on disabilities and leaders in the disabled communities about new product design. Studies are conducted to evaluate results. 	<ul style="list-style-type: none"> Explore with established statewide organizations (serving people with disabilities) the feasibility of co-sponsoring yearly(<3 years) roundtable summits with leading companies to discuss and demonstrate universal design, with special attention to website design. Develop a public outreach and education program. Design, conduct and evaluation program to determine market impacts.
Loans for Assistive Technology	<ul style="list-style-type: none"> Low-interest loans are made available to disabled persons for acquiring assistive technology to become more self-sufficient. Training and tech support are provided to participants. Participants are connected to social networks. 	<ul style="list-style-type: none"> Continue to explore with interested financial institutions the feasibility of developing a low-interest loan program for assistive technology. Work with established organizations (serving people with disabilities) to design an education and marketing program.
Statewide (Could be launched region by region.)		
Emerging Markets	<ul style="list-style-type: none"> Community-based organizations are engaged in convening neighborhood leaders and residents to determine interest in computers and broadband technology. Civic leadership organizations and industry representatives are involved in the process. Interests of residents regarding applications and potential subscription are documented. Neighborhood representatives in a region are part of a “learning community” to compare and analyze results and determine 	<ul style="list-style-type: none"> Explore with coalitions or consortia of community-based organizations options for identifying and fostering emerging markets in urban disadvantaged neighborhoods. Design an exploration pilot to consult neighborhood leaders, key stakeholders, and industry. Prepare a report on the pilot and develop an action plan for statewide implementation on a region-by-region approach. Determine how to develop a business revenue model that can make program self-sustaining.

	<p>nature of emerging markets.</p> <ul style="list-style-type: none"> • Results are compiled in a report and presented to broadband providers and IT companies. • New community-business partnerships are fostered. 	<ul style="list-style-type: none"> • Implement the action plan for statewide roll-out. • Monitor and evaluate results on consumer demand and user adoption in urban disadvantaged neighborhoods to quantify the potential of “emerging markets.” • Connect community-based organizations to industry partners.
Housing	<ul style="list-style-type: none"> • Housing supported by public resources is built with broadband infrastructure. • Computers are available to residents (either in a computer lab and/or through a program to provide computers in the home). • Residents are provided with free or low-cost broadband service. • Residents are trained to provide technical support for other residents (adding job skills development to program). • Residents are engaged in an e-community, such as the Beehive, to provide information to assist with self-sufficiency. 	<ul style="list-style-type: none"> • Prepare an overview concept document which sets forth the rationale, vision, strategy, and magnitude of challenge. • Develop a model policy for State Agencies to encourage and/or require broadband deployment in construction or renovation of affordable housing supported by State funds, including meeting with and engaging State Agencies in the process to reach consensus (such as Treasurer, TCAC, BTH, HCD, CalHFA, I-Bank). • Develop a model policy and ordinance for local governments, including meeting with and engaging statewide organizations in the process to reach consensus (CSAC, LCC, LGC, RDA, APA, CalAFCO, CalCOG). • Engage homebuilders (non-profit and for-profit) in development of the policies. • Develop briefing materials and conduct workshops for builders and local government officials to facilitate policy implementation. • Establish monitoring processes and evaluation methods to track progress. • Publish regular reports on results.
Education	<ul style="list-style-type: none"> • See education best practices above. • Impact is leveraged and credibility of effort is enhanced by working through coalitions or consortia of educational organizations and programs. 	<ul style="list-style-type: none"> • Meet with statewide organizations and foundations to determine the opportunities for statewide collaboration to integrate broadband into education improvement initiatives. • Develop a collaborative joint-venture if appropriate.
Computer Literacy	<ul style="list-style-type: none"> • A standardized computer and Internet navigation literacy curriculum program (with discrete modules related to specific skills) is developed in consultation with employers. • The standardized program is recognized and/or adopted by education authorities. • The standardized program is promoted to educators, parents and students for incorporation into curriculum. • Employers require certification in the standardized program for relevant job positions. 	<ul style="list-style-type: none"> • Confer with Community College System (CC) and computer and Internet literacy programs (such as the International Computer Drivers License—ICDL) to determine the status of the previous collaboration and other related efforts. • Work with CC and State education officials to reaffirm support for a standardized curriculum in general and the ICDL in particular. • Convene statewide and regional business organizations to introduce ICDL. Consider a launch with the San Joaquin Valley

		Partnership based on their Strategic Action Proposal. <ul style="list-style-type: none"> Engage industry partners to promote and support a standardized computer and Internet navigation program. Develop and integrate into the program curriculum an evaluation component that incorporates longitudinal tracking of participants' academic performance in school. Explore with Health and Human Services Agency, CSAC and LCC the feasibility of developing a statewide program. Develop a program template and training materials, including an inventory of resources. Recruit business partners to assist with computers and training. Organize and convene training program for interested jurisdictions.
Foster Care	<ul style="list-style-type: none"> Foster homes (parent and children) are connected to the Internet and to one another and other resources through broadband technology. County and city computers are recycled with an established refurbishing and workforce training program. Refurbished computers are provided to foster parents both to connect parents in a support community and to provide a computer in the home for the foster child. Foster families are provided affordable broadband service. Experts are convened and consulted to help define best practices for municipal WiFi RFPs and contracts, with a special focus on Digital Inclusion. A substantive sample of WiFi RFPs and contracts in California and across the nation are analyzed and compared. A summary of best practices for RFPs and contracts is compiled with input from local government officials and industry representatives. The summary report is used to brief local officials about best practices. 	<ul style="list-style-type: none"> Identify 3-5 respected experts to provide input and counsel. Obtain information from Benton Foundation and other resources about their assessment, analyses and summaries regarding best practices. Explore with coalitions or consortia of community-based organizations and industry associations the feasibility of joint venturing on the project and developing a work plan. Gather and analyze RFPs and contracts from key jurisdictions. Engage CSAC, LCC and local government officials to obtain input and feedback in completing the analysis and preparing the report. Prepare a report on best practices for RFPs and contracts. Organize and convene briefings for local government organizations and officials.
Municipal WiFi	<ul style="list-style-type: none"> Broadband technology results in people being more informed and engaged in civic affairs, including voting. Broadband technology significantly improves efficiency of government services and customer (public) satisfaction with government in general. Effectiveness and impact of government initiatives is increased because of promulgation of public-private partnerships and engagement of the public and volunteers. Civic and industry leaders collaborate to increase access to 	<ul style="list-style-type: none"> Convene conversations with interested higher education institutions and statewide civic organizations to determine status of existing initiatives or programs. Explore opportunities for collaboration. Develop and implement an action plan for a joint venture initiative if appropriate. Launch the initiative with a major civic and volunteer engagement and mobilization event (such as Net Day). Organize and convene a planning committee to brainstorm
Civic Engagement (and eGovernment)		
Volunteerism		

	<p>broadband through a signature event that captures public attention and mobilizes resources.</p> <ul style="list-style-type: none"> • Engagement of volunteers on a signature event illuminates possibilities of mobilizing volunteers to tackle other challenges. • Volunteer and service organizations mobilize volunteers using broadband technology. 	<p>about and plan a next generation “Net Day” event.</p> <ul style="list-style-type: none"> • In the planning phase, give special attention to determining how traditional service clubs can be energized and become more effective through broadband technology. • Sponsor and co-manage the signature event. • Develop and implement a volunteer engagement initiative.
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Overall Best Practices

- Program strategies and elements are based on sound research.
- Program design has been successful or promising in pilot(s) and demonstration project(s).
- Program incorporates best practices for the program-specific application.
- Technology investment is part of an overall comprehensive effort specific to the program application to improve outcomes, performance or quality of life for the participants. Technology investments are not made in a vacuum or in isolation of other improvement efforts.
- Technology investments are part of a comprehensive coherent program and integrated strategies to transform communities.
- Program is managed by individuals and organizations who are respected by the participants and community being served.
- Accountability is infused throughout the implementation with monitoring and evaluation accompanied by regular progress reports being part of the management discipline and focus on outcomes.
- Program managers identify synergies with other initiatives and sponsoring organizations seek opportunities to collaborate.
- Program sustainability is achieved through entrepreneurial revenue generation and/or dedicated revenue stream.
- Program managers participate in regular “learning communities” and peer review to identify ways to improve performance and increase impact.