CETF

CALIFORNIA EMERGING TECHNOLOGY FUND

Getting Connected for Economic Prosperity and Quality of Life

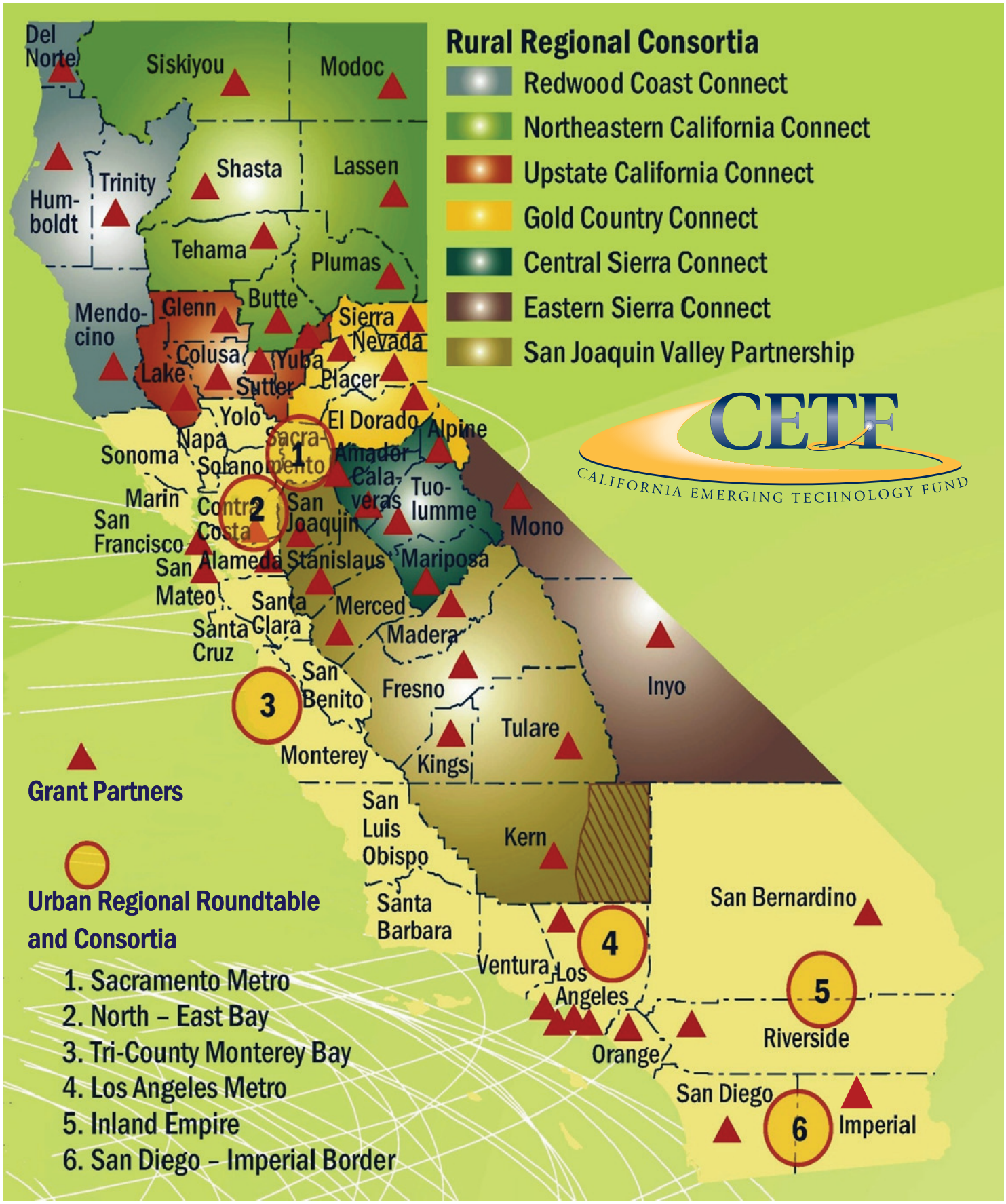
A Resource Guide for

Local and Regional Government Leaders to Promote Broadband Deployment and Adoption

GETCONNECTED!

Your Life Made Easier

Regional Consortia and Civic Leaders Join Forces to Close the Digital Divide



FOREWORD

The California Emerging Technology Fund (CETF) recognizes that local and regional governments can have substantial impact on the deployment and adoption of broadband (high-speed Internet access and use) through many leadership roles. The purpose of *Getting Connected for Economic Prosperity and Quality of Life: A Resource Guide for Local and Regional Government Leaders* is to provide information and examples from local jurisdictions to assist local and regional government officials in the promulgation of policies that will facilitate the deployment and adoption of broadband if they determine that it is a priority for their local communities. This *Resource Guide* is intended to support voluntary leadership of local and regional government officials. It was prepared in partnership with the Center for a New Orange County. CETF is grateful to the California State Association of Counties, League of California Cities, Regional Council of Rural Counties, and the California Redevelopment Association for helping gather information and obtain input.

It is recognized that closing the Digital Divide and achieving ubiquitous broadband in California require a comprehensive, multi-faceted strategy. And, while local and regional governments have direct control over certain functions that impact broadband and can have significant influence on other activities that affect the pace at which California achieves these goals, they cannot do it alone and must have the support of an overall action plan that is pursued by the state and federal governments. The release of the National Broadband Plan makes this *Resource Guide* very timely for local and regional government officials to optimize their leadership roles in closing the Digital Divide.

CETF is implementing a comprehensive Strategic Action Plan in partnership with the State of California, California Public Utilities Commission (CPUC), and other major stakeholders that includes other programs to help close the Digital Divide that will augment leadership from local and regional policymakers, such as: raising public awareness about the benefits of broadband technology (*Get Connected!*); increasing Digital Literacy and getting computers and broadband connections into the hands and homes of all students in low-performing middle schools (School2Home); and assisting Rural and Urban Regional Consortia attract capital investment for broadband infrastructure in unserved and underserved areas (Demand Aggregation Projects and the California Advanced Services Fund established by the CPUC and authorized by the Legislature). CETF also has worked with other partners to analyze and compare government-led wireless projects. Thus, this document does not address those matters. Please visit the CETF website (www.cetfund.org) for additional information.

We appreciate your interest and look forward to working with you to "get connected for economic prosperity and quality of life" in your community and to close the Digital Divide in California.

Sunne Wright McPeak
President and CEO
California Emerging Technology Fund

October 2012

FOREWORD

Welcome to the *Resource Guide for Local and Regional Government Leaders*. This report provides a roadmap for local communities to adopt policies to facilitate broadband deployment for high-speed Internet access. Enhancing broadband connectivity is essential for economic competitiveness and quality of life in the 21st Century. Closing the "Digital Divide"—making broadband available everywhere for businesses and residents and enabling digital technologies to become part of our community's and region's infrastructure—is as important as efficient transportation systems, reliable electric power, and clean tap water. However, the United States has fallen behind international competitors in broadband deployment despite national calls to restore America's place as a technology leader.

The California Emerging Technology Fund partnered with the Center for New Orange County to research the state of broadband deployment and adoption throughout California and to engage a spectrum of experts and stakeholders, including. This resulted in a report available online, from which this *Resource Guide* is derived. Stakeholders agreed that increased broadband deployment and adoption rates were an essential strategy for improving digital literacy that would help people access education tools and government services, improve their health care, and expand businesses.

The Center for a New Orange County's goal is to promote state-of-the-art infrastructure throughout California. The research findings regarding broadband deployment and adoption reveal encouraging progress taking place at local and regional levels. A host of innovations are helping to connect communities with schools, health facilities with patients, and identifying a more thorough understanding of the current and future barriers to broadband infrastructure development. One stumbling block to implementation of such efforts is the lack of understanding about what local and regional governments can do to encourage and facilitate broadband deployment. This *Resource Guide* seeks to address the gap that exists between lofty visions and the current reality for local jurisdictions and regions across California. It presents examples and analyses of what is being done around the state and provides a sample policy that can be adapted and modified to meet the particular needs of any jurisdiction.

The Center for a New Orange County is delighted to have partnered with the California Emerging Technology Fund (CETF) on this project and is grateful to an outstanding advisory group of experts and stakeholders. CETF is dedicated to closing the Digital Divide in California and is pursuing this mission with focus and diligence. The CETF Directors and staff are to be commended for their hard word. But, the goal will be achieved only if local and regional leaders also are strategically engaged. By understanding the broadband best practices and sample policies highlighted in this *Resource Guide*, policymakers and elected officials have the tools to consider how best to help their communities prosper in the digital age.

Wallace Walrod
President and CEO
Center for a New Orange County

October 2012

Getting Connected for Economic Prosperity and Quality of Life
A Resource Guide for Local and Regional Government Leaders

Broadband: Digital Pathway to Economic Prosperity

Our ability to connect through high-speed Internet access—referred to generically as "broadband"—is improving our lives in many ways—helping us share information and images, research and apply for jobs, stay in touch with loved ones, and access entertainment and news. Broadband saves consumers time and money, increases productivity in the economy, and reduces impacts on the environment. Broadband is essential 21st Century infrastructure in a digital world and global economy. It is vital to the economic prosperity of every community and the quality of life for all residents. And, it is a "green" strategy to shrink our carbon footprint.

"Identify where you want to go, get the community buy-in, and drive all action to accomplish the goals. Establish policy that does not allow your jurisdiction to say 'no'."
Supervisor David Finigan, Del Norte County, Past Chairman, Regional Council of Rural Counties

Persistent Digital Divide

A significant Digital Divide persists in California manifested by substantial differences among population groups and regions in the use of broadband. For example, only 49% lower-income households (under $40,000 annually), 50% of Latino families, and 55% people with disabilities have a broadband connection at home compared to 70% of all adults statewide and 94% of all higher-income households ($80,000 or more annually). Many rural and remote communities have no access at all and there are great variations among regions, with 64% of the Central Valley residents having a home broadband connection versus 79% in the Bay Area. This gap among regions and socio-economic segments of the population is referred to as the Digital Divide.

Progress Is Being Made

Overall, the trends are encouraging as evidenced by the changes between 2008 and 2010 in the statewide survey conducted by the Public Policy Institute of California (PPIC) that is co-sponsored by the California Emerging Technology Fund and ZeroDivide. In addition, the California Public Utility Commission (CPUC) has approved broadband infrastructure applications to the California Advanced Services Fund (CASF) that have the potential to reach about half of the currently underserved households in California if federal economic stimulus funds are awarded. The graphs show both the progress to date and the projected timeline paths to success in closing the Digital Divide. The goal is to reach 98% of all residences with broadband and to achieve 80% adoption statewide by 2015 in order to remain globally competitive. Local and regional leadership is needed to achieve the goal.

"We know that broadband is our future and we need to focus our limited resources to get the most benefit for our constituents."
Supervisor Judy Morris, Trinity County

Economic and Environmental Benefits

Broadband has many economic and environment benefits for local jurisdictions and the state overall. Broadband enhances the economy by spurring job generation and improving business efficiencies which attracts capital investment. The use of broadband for telecommuting, teleconferencing, obtaining information, researching products, and avoiding the use of paper significantly reduces impacts to the environment.

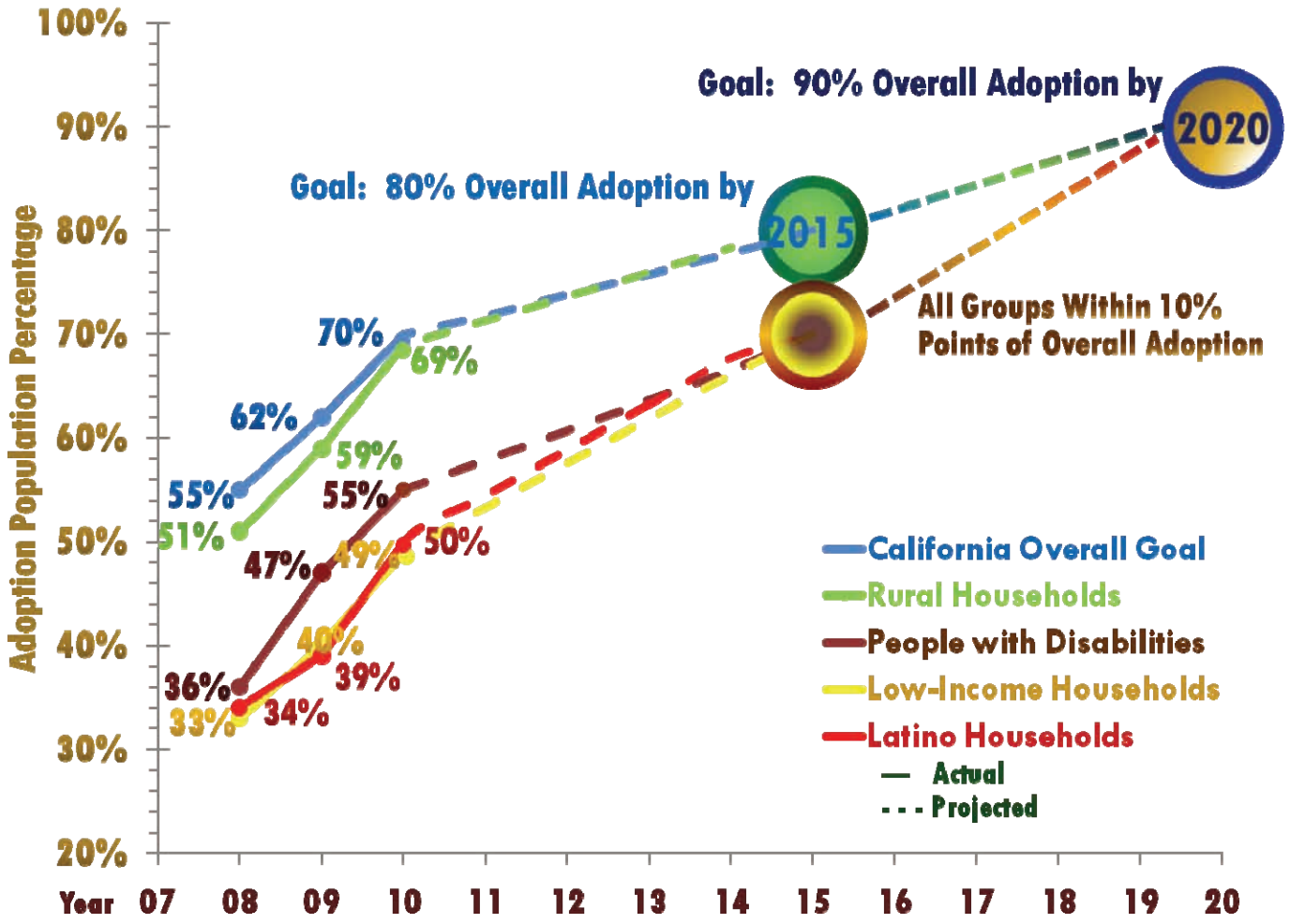
Economic Benefits of Broadband – Quick Facts

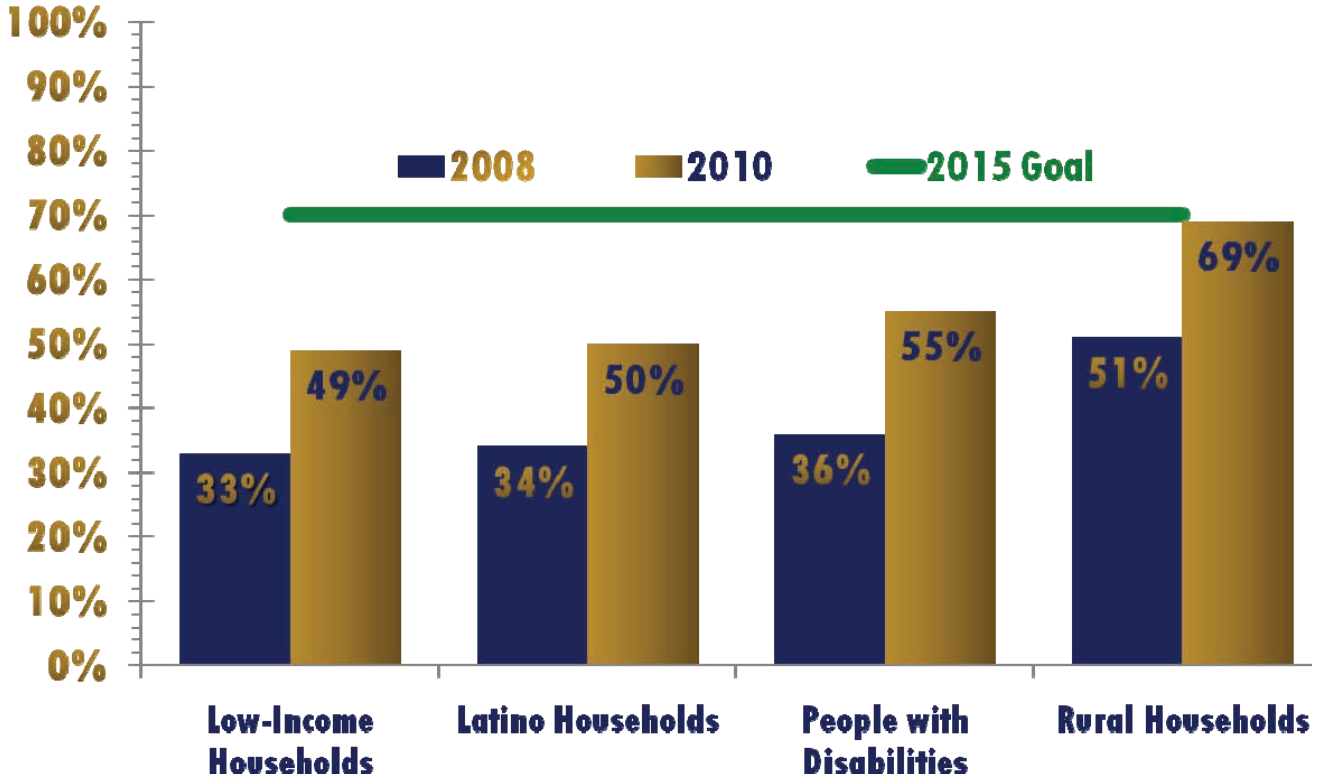
- Communities that gain access to broadband service experience an employment increase of 1-1.4 percentage points and increases in rental value of up to 6 percentage points. [U.S. Department of Commerce, 2006]
- For every $1 U.S. consumers spend online, information available on the Internet influences a further $3.45 spent in stores. Broadband leads to well-informed purchase decisions, travel reduction by pre-locating the product, and facilitating cost comparisons between vendors. [eMarketer, 2008]
- From 1998 to 2002 communities with mass-market broadband service experienced greater growth in overall employment, an increase in the total number of businesses, and more IT-intensive businesses than communities without broadband service. [33rd Research Conference on Communication, Information and Internet Policy, 2006]
- Broadband contributed 198,000 jobs and $11.6 billion to the California economy 2002-2005. Over the next decade, it is estimated that broadband if aggressively deployed and adopted could generate 1.8 million jobs and contribute $132 billion payroll above the baseline. [Sacramento Regional Research Institute, 2008]
- Live videoconferencing at 115 health facilities reduced the cost of follow-up care by 42% and reduced overall costs by 6%. [California HealthCare Foundation, 2008]

Environmental Benefits of Broadband – Quick Facts

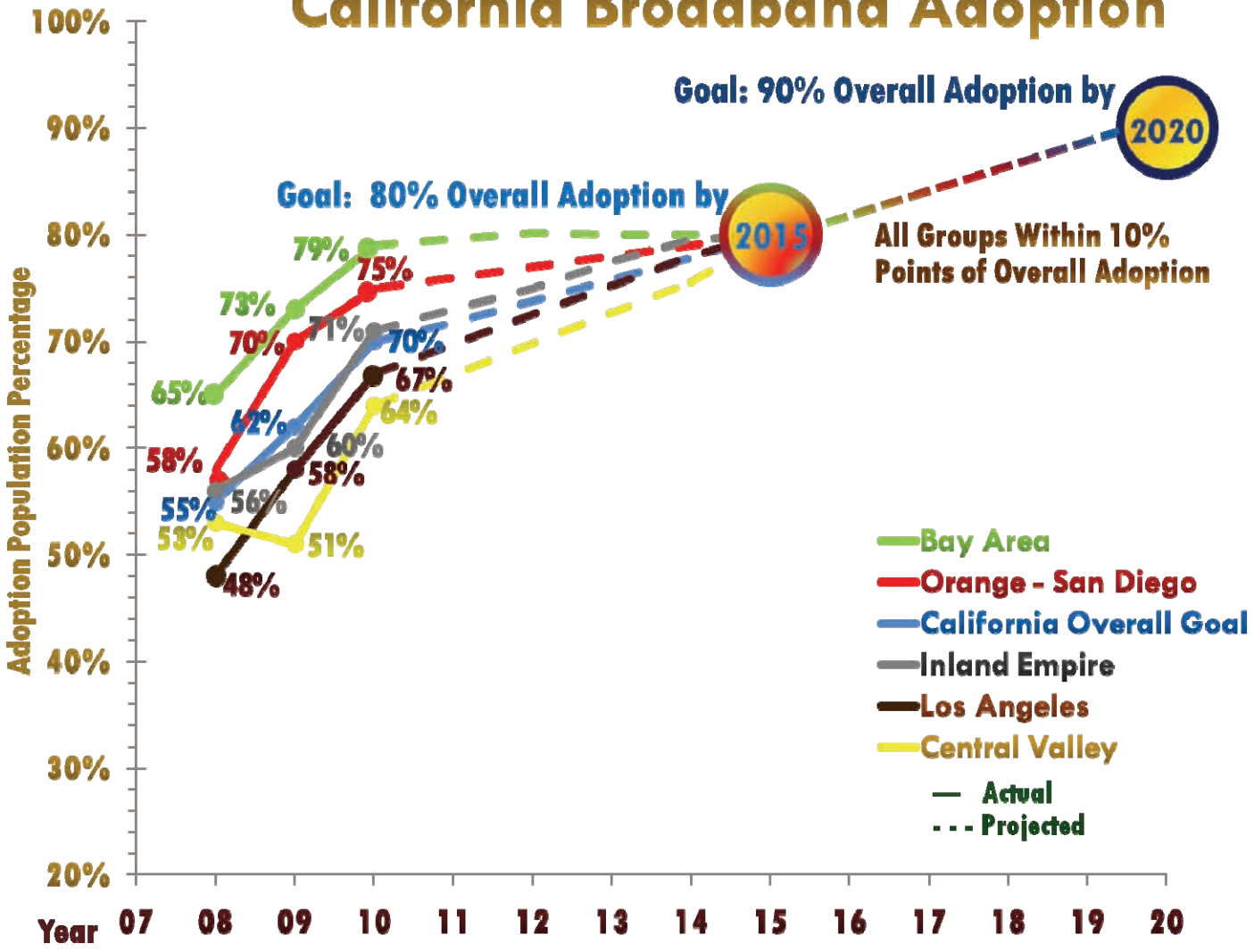
- Broadband deployment and adoption has the potential to reduce greenhouse gas emissions by more than 1.1 billion tons over the next 10 years. Of these reductions, 60% was a direct result of telecommuting efficiencies, 18% from electronic commerce simplifying business processes and distribution, 17% from teleconferencing replacing meetings, and 5% from electronic media replacing paper and/or plastic products. The potential greenhouse gas reduction is equivalent in emission savings to a decrease of 11% of U.S. oil imports. [The American Consumer Institute, 2007]
- Electronic commerce, as compared to conventional shopping, generates 36% less air pollutants, 23% less hazardous waste, and 9% less greenhouse gases. [Institute of Electrical and Electronics Engineers, 2001 International Symposium on Electronics and the Environment]
- Electronic grocery shopping with e-delivery generates 18% to 87% less greenhouse gases than conventional grocery shopping. [Institute of Electrical and Electronics Engineers, 2001 International Symposium on Electronics and the Environment]

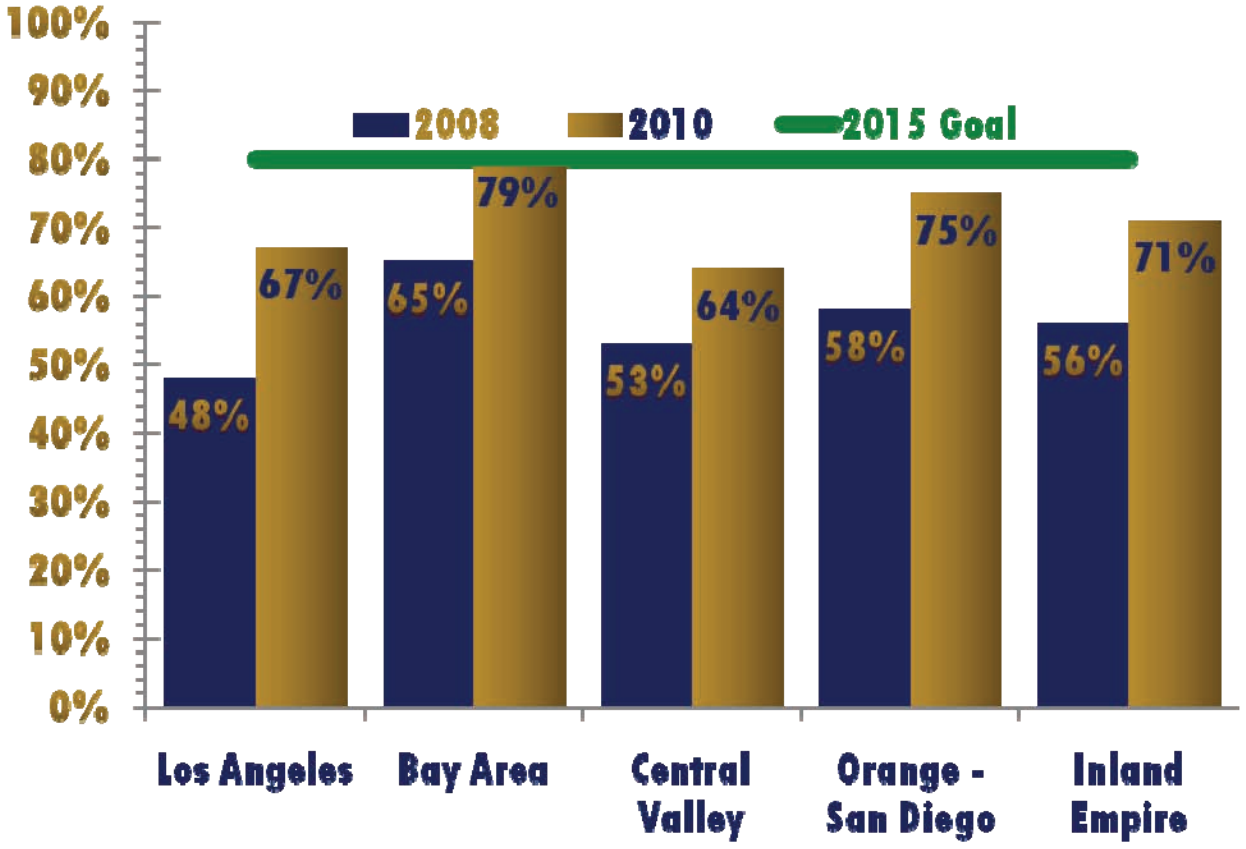
California Broadband Adoption





California Broadband Adoption





Roles of Local and Regional Governments

Local and regional government officials can have substantial impact on the deployment and adoption of broadband (high-speed Internet access and use) through their many leadership roles: (1) policy leaders; (2) planners; (3) regulators (particularly of land use); (4) consumers; and (5) service providers. These roles are embedded in the elected governing city councils and boards of supervisors, whether or not the jurisdictions appoint specific staff to function in these roles.

"In our community, adopting policies and programs which provide access to the Internet and broadband technology is not only a priority, but a necessity to our current and future socio-economic survivability."
Councilmember Deborah Robertson, City of Rialto, League of California Cities Committee Chair

"This is the wave of the future. Broadband services are vital to the economic well-being of Lake County going forward. Highspeed internet access enables our citizens to create our local economy and grow our community well-being by connecting us with each other. It also provides our lifeline to critical markets, information and services outside our area."
Supervisor Denise Rushing, Lake County

As policy leaders, local and regional governments drive the promulgation of policies and ordinances, responding to and protecting the public interest as expressed by constituents. They also implement the laws adopted by state and national governments, thus, defining the mindset regarding whether or not a local jurisdiction welcomes and facilitates investment in broadband. As planners, they prepare land use and other related plans that guide the development in their communities, thus determining "how smart" growth will be and defining the quality of life for the future. As regulators, they study and approve land uses and are in a pivotal position to require "smart" infrastructure and facilities as they approve land use projects. As consumers, local and regional governments purchase technology which, in turn, drives demand for broadband technology and services. And, as service providers, they direct whether or not broadband is integrated into government functions and used to provide information and access to public services online, thus encouraging broadband adoption. Local and regional governments in each of these roles have significant impacts on the deployment and adoption of broadband technology; each role presents an opportunity to encourage or inhibit consumer behavior regarding broadband and private-sector investment in the technology. The actions in each role determine whether or not their local community, region and California as a whole will be a global leader.

"The Internet is a way of life. In order to get a job, information about education, or important information from government, you need to be online with high speed Internet."
Councilmember José Huizar, City of Los Angeles

"It is important to include broadband as a policy priority in discussing other issues with state and federal elected representatives. It is strategic to integrate broadband deployment into all infrastructure projects."
Supervisor Jim Cook, Siskiyou County

"Prior to Mono County integrating broadband into our General Plan and tract map requirements, there were concerns expressed that the private sector might resist our efforts. As it turns out, our developers embraced it and used high-speed Internet access as a valuable marketing tool."
Supervisor Duane "Hap" Hazard, Mono County

Prospective Roles of Local Government Related to Broadband Deployment and Adoption

- Policy Leader: Promulgate policies that determine the jurisdiction's attention and attitude about broadband technology and defines the approach to facilitating or discouraging capital investment in deployment and adoption by residents.
  - Declare broadband as essential 21st century infrastructure to enhance economic global competitiveness, improve productivity, decrease impacts on the environment, increase opportunities for residents, and augment quality of life.
  - Commit to helping close the Digital Divide and promote Digital Inclusion.
  - Set an example for other agencies and employers, such as developing a program for telecommuting employees or recycling computers for non-profits or low-income families.
  - Designate a responsible person or agency for implementing the jurisdiction's policies, plans and ordinances related to broadband deployment and adoption.
  - Appoint as appropriate residents to advise the elected officials and policymakers.
- Planner: Prepare land use and other related plans (such as for economic development) that guide the development in their jurisdiction, thus determining "how smart" growth will be and defining quality of life for residents.
  - Incorporate the need and preference for broadband into general plans as a separate element and/or into all the relevant elements, such as economic development, circulation (transportation and mobility), housing and environment.
  - Promote broadband as part of "smart" (anti-dumb) growth and facilities and develop specific implementation plans.
  - Monitor broadband deployment and adoption in the local jurisdiction and update relevant plans to ensure infrastructure is adequate for future applications and consumer demand.
- Regulator: Adopt implementing ordinances for policies and plans that promote "smart" infrastructure and facilities.
  - Adopt ordinances to facilitate and streamline the approval of permits to use rights of way or public facilities consistent with principles of fairness and competition.
  - Analyze and approve land uses and construction permits that require "smart" infrastructure and facilities.
- Consumer: Purchase and utilize technology which can enable residents to access information and services, increasing demand for the technology and encouraging innovation and competition to develop new applications that will increase productivity.
  - Develop and adopt a technology plan for the jurisdiction that utilizes state-of-art equipment and software to improve internal government functions and to enable residents to use broadband.
  - Establish a process to monitor technology innovations and application trends along with a process to regularly update the technology plan.
  - Consider joint ventures or collaborative with other local governments in purchasing equipment and utilizing broadband technology.
- Service Provider: Provide information and services online through broadband that increases the relevance of the technology to consumers, which encourages adoption and reduces impacts on the environment.
  - Provide online all policies, plans, ordinances, and information about the jurisdiction.
  - Facilitate real-time online participation of residents in all public meetings.
  - Establish online public forums and mechanisms (email, surveys, exchange of views) to increase civic engagement and participation.
  - Report online data about the jurisdiction to inform the public and increase transparency.
  - Deliver online as many public services as possible to decrease trips and reduce impacts on the environment.

Leadership is Key

Leadership is key to closing the Digital Divide in California. In a few short years, California has emerged as a national leader in promoting the deployment and adoption of broadband. To be sure, there have been visionary government, community, business and labor leaders who have been trailblazers for ubiquitous connectivity harnessing telecommunications and information technology to improve economic competitiveness and quality of life. Their efforts provided a foundation for the convergence of several actions that have given rise to California's recent prominence: the Governor with the support of the Legislature appointed the California Broadband Task Force in 2007 which issued a Final Report in 2008 titled *The State of Connectivity: Building Innovation Through Broadband*; the California Public Utilities Commission (CPUC) in 2005 directed the founding of the California Emerging Technology Fund (CETF) which became operational in 2007; the CPUC with the support of the Legislature created the California Advanced Services Fund (CASF) in 2008 to assist in the deployment of broadband to unserved and underserved communities; the Governor issued an Executive Order on Digital Literacy in 2009; and the Legislature approved legislation in 2010 to extend and expand the CASF and to establish the California Broadband Council to ensure continued focus and leadership for broadband. It is now pivotal that local and regional officials embrace a larger leadership role to accelerate the deployment and adoption of broadband.

Local Leaders Provide Valuable Experience

Several local governments have been pioneers in adopting policies and ordinances to plan for and promote broadband. The experience of 8 jurisdictions—2 counties and 6 cities—was examined as case studies to identify: (a) purposes and justifications; and (b) key objectives and implementation strategies. The most frequently cited purposes are listed below along with an explanation. Attached is a Summary of the Case Studies. Also included is a Summary of Example Policies and Ordinances from California Local Governments.

Local Government Frequently Cited Purposes for Adoption of Broadband Policy

Purpose	Explanation
Critical Infrastructure	Plan for and facilitate deployment of broadband as vital 21st century infrastructure, comparable with other essential infrastructure such as water, sewer, and transportation needed for economic development.
Economic Development and Prosperity	Increase capital investment and job generation by harnessing the increased productivity derived from broadband.
Telecommuting and Quality of Life	Reduce the environmental impact of transportation, improve quality of life, and gain associated economic benefits.
Public Security and Safety	Increase the effectiveness of emergency response, law enforcement, and other public security and safety services.
Public Services	Promote online access to government services and functions.
Public Interest and Education	Enable educational institutions to take full advantage of the teaching and learning benefits of broadband.
Digital Inclusion	Provide all residents the means and opportunity to access broadband infrastructure and enjoy the benefits of increased connectivity.

Examples of Policy Components

The matrix below describes possible key components for a broadband policy (with appropriate implementing ordinance provisions) as a framework to invite and organize public and stakeholder input and feedback. One way to consider the difference between policies and ordinances is to think of a policy as setting forth the "what and why" and an ordinance as delineating the "how, when and who" of a governmental law or regulation. Of course, a local government may rely solely upon policies to guide the jurisdiction's actions without an accompanying ordinance(s).

Policy Component (What, Why)	**Ordinance Implementing Provision** (How, When, Who)
Preface	***Introduction***
State Importance of Broadband Connectivity to Global Competitiveness (Economic Prosperity, Environmental Quality and Quality of Life)	Reaffirm Importance of Broadband Connectivity to Global Competitiveness (Economic Prosperity, Environmental Quality and Quality of Life)
Delineate Roles and Responsibilities of Local (or Regional) Government: Policy Leader; Planner; Regulator; Consumer; and Service Provider	Acknowledge the inter-relationships of the Roles and Responsibilities and a description of the context and focus of the ordinance.
Components	***Provisions***
1. Broadband Connectivity as Vital to 21st Century Competitiveness, Economic Prosperity and Quality of Life	1. State how the jurisdiction will set forth the policy and into which existing other policies, rules, regulations it will be incorporated.
2. Broadband as a Strategy to Promote and Protect Environmental Quality (reduction of carbon emissions and saving energy)	2. Identify the opportunities for improving environmental quality through broadband. Perhaps reference responsibility for laws to promote sustainability, decrease air pollution and greenhouse gas emissions, and minimize the carbon footprint.
3. Facilitation of Infrastructure Development	3. Set forth the process and procedures for incorporating broadband into all infrastructure projects. Delineate timetables and deadlines.
4. Support for Smart Infrastructure and Connected Communities	4. Specify "smart building" requirements for land use and construction permits for all projects (public, commercial, residential, industrial).
5. Protection for Environmental Quality and Visual Aesthetics	5. Set forth the process and procedures for preventing and/or mitigating environmental impacts and protecting and/or preserving visual integrity of jurisdiction.
6. Commitment to Fairness and Competition	6. Delineate the process for ensuring fairness and competition, including transparency, public notice and timetables and deadlines for timely review of any required local permits.
7. Adequate Capacity and Transmission Speeds for Increasing Consumer Demand	7. Articulate the interest of the jurisdiction in monitoring the reliability and quality of broadband connectivity in the local jurisdiction and ensuring appropriate speed availability.
8. Efficiency of Government Operations and Delivery of Services	8. Direct how government operations and services are to be provided online and how the jurisdiction is to notify the public.

9. Public Safety and Emergency Communications	9. Delineate actions to optimize the use of broadband for public safety and emergency communications.
10. Commitment to Digital Inclusion	10. Set forth steps to promote Digital Inclusion, especially for unserved, underserved, and disadvantaged neighborhoods.
11. Civic Engagement and Citizen Involvement (Education about Services)	11. Direct how government information and meetings will optimize the use of broadband.
12. Designation of Responsible Leadership and Management	12. Appoint a Broadband and Information Technology Coordinator.
13. Requirements for Data and Accountability	13. Delineate the requirements for data and how information is to be compiled for use by the government and public.
14. Inter-Agency Collaboration and Inter-Jurisdictional Cooperation	14. Outline the process for ensuring inter-agency and inter-jurisdictional cooperation.
15. Other	15. Related implementation action.

"We are extremely proud of Riverside's Digital Inclusion program which, under the leadership of Steve Reneker and SmartRiverside, has already provided free computers, training, and internet access for 5,000 low income families. And we know that so many cities across the state also strive to provide high speed internet access and services to help bridge the Digital Divide for their residents; it cannot be overstated how important it is to provide best practice models for others to follow."
Mayor Ronald O. Loveridge, City of Riverside

Opportunities for Policy Adoption

A local or regional government may decide to initiative a leadership role in closing the Digital Divide with the adoption of a resolution (such as the enclosed sample *Get Connected!* resolution and "call to action") or it may adopt a stand-alone policy to promote broadband deployment and adoption (such as the enclose sample policy). The adoption of a resolution or policy may be followed by the promulgation of an implementing ordinance(s).

A local jurisdiction also may decide to incorporate broadband policy into other foundational governing and planning documents, such as the General Plan, Specific Plan(s), Redevelopment Agency Plan(s), Community Sustainability Plans, and Emergency Response Plan(s). The enclosed sample policy is suitable for incorporation into all of these kinds of documents. The effectiveness of policy can be enhanced by ensuring that all foundational governing documents are aligned to the jurisdiction's priorities and consistent with one another.

"Broadband was once considered an optional amenity, but it has become an essential and indispensable necessity. Every aspect of our lives is increasingly dependent upon a reliable internet backbone, including our businesses, schools, libraries, health care and public safety. Humboldt County is including a Telecommunications Element in our new General Plan to treat broadband as essential infrastructure, just like roads, sewer, water or electricity."
Supervisor Mark Lovelace, Humboldt County

"Local leaders have done an excellent job in building critical community infrastructures such as roads, water, sewer and electricity. They need to take this same approach and responsibility with their community's digital "highway" broadband infrastructure. Today's modern, vibrant, and economically sustainable communities need broadband infrastructure as much as they need other core infrastructures. Broadband fosters economic, cultural, educational and civic engagement opportunities. Local leaders need to actively and passionately pursue broadband development in their communities; else their communities will feel a similar effect as when new highway construction bypassed towns in the past, leaving them to wither away as the new highway took economic and quality of life opportunities elsewhere. There is much local leaders can do to promote broadband infrastructure in their community and the CETF's model policies report is a great resource to get started with."
Stephen T. Monaghan, Chief Information Officer, Nevada County

Public Awareness and Education: *Get Connected!*

The California Emerging Technology Fund developed and launched *Get Connected!* to raise overall awareness about the benefits of broadband as a foundation and support for all other strategic actions. The initial 2-year goal was to increase adoption among low-income and Latino households statewide by 10 percentage points. That goal was met and exceeded. But, there is much more work to be done to close the Digital Divide. Local and regional government leaders can take action to raise public awareness and educate constituents: convene forums to discuss the importance of broadband and digital literacy; organize a Community Connect Fair to bring resources to residents; and sponsor public service announcements on the local government or community access channels (pre-produced *Get Connected!* radio and television spots are available in multiple languages ready for adding a sponsor's name and tagline). The *Get Connected!* website (GetConnectedToday.com) is an excellent resource in multiple languages (especially for libraries, community computer centers, and school activities for parents) to help non-users learn the basics about computers and broadband. It also provides additional public information tools for policymakers and civic leaders.

"In Riverside we started to work on the Digital Inclusion Program by providing residents with computer-literacy training, a refurbished computer, and Internet at home. There is a need to gather and share best practices to develop Digital Inclusion programs that help reach scale statewide."
Steve Reneker, Chief Information Officer, City of Riverside (Smart Riverside)

"Broadband access is extremely important to the future of our local economy. It's particularly important to those of us in rural areas who are working hard to create new jobs without negatively impacting our natural environment or quality of life. It truly is the key to our economic future. It's also an important tool used by County government in our delivery of services to the public—everything from our County libraries to public health programs can benefit from broadband."
Kelly Cox, County Administrative Officer, Lake County

"Local elected officials have become visionary trailblazers in advocating for broadband. That makes a big difference in elevating the needs of our residents to get high-speed Internet service."
Gregg Jacob, IT Manager, Tuolumne County

SAMPLE RESOLUTION

[Name of Local Government]

Get Connected!

Declaration of Support for *Get Connected!* and a Call to Action

WHEREAS, closing the Digital Divide is vital to the economic prosperity and quality of life for residents in [Name of Local Government] and throughout California.

WHEREAS, [Name of Local Government] finds and declares that high-speed Internet access—referred to generically as "broadband" and including both wireline and wireless technologies—is essential 21st Century infrastructure in a digital world and global economy.

WHEREAS, [Name of Local Government] recognizes that California is home to a wellspring of innovation that has given rise to the evolution of broadband and other information technologies, however Californians' adoption and use of broadband technology is only approximately equivalent to the national average.

WHEREAS, [Name of Local Government] acknowledges that in 2010 that 30% of all Californians, 51% of low-income households, 50% of Latino families, 45% of people with disabilities, [and estimated percentage of residents in local jurisdiction or region] are not connected to the Internet with broadband, leaving more than 10 million Californians without high-speed Internet access at home.

WHEREAS, [Name of Local Government] is committed to helping families and children be healthy, productive and self-sufficient and realizes that the use of broadband can save both time and money for residents while helping them bridge the economic divide.

WHEREAS, [Name of Local Government] is committed to helping students obtain the highest-quality education possible incorporating digital literacy and understands that high-speed Internet connectivity and the availability of computing devices both at school and at home are critical teaching and learning tools for academic achievement.

WHEREAS, [Name of Local Government] is committed to reducing its carbon footprint and recognizes that broadband is a strategic "green" technology that decreases greenhouse gas emissions and dependence on foreign oil by enabling e-government and the provision of more services online.

WHEREAS, [Name of Local Government] is committed to Digital Inclusion and increasing citizen participation in the public process through expanded engagement using broadband.

WHEREAS, [Name of Local Government] recognizes that it has the opportunity to impact broadband deployment and adoption in its several local government roles and responsibilities, including as a policy leader, planning body, land use approval agency, purchaser-consumer of communications equipment and information technology, and a service provider.

WHEREAS, [Name of Local Government] welcomes the opportunity to partner with the California Emerging Technology Fund along with the Governor, Legislature, other local governments, civic leaders, community organizations, employers, labor representatives, educators, and policymakers to encourage adoption of broadband technology.

NOW, THEREFORE, BE IT RESOLVED that [Name of Local Government] hereby joins with the California Emerging Technology Fund in promoting ***Get Connected!*** —a public awareness program to close the Digital Divide in California—and embraces the goal to achieve broadband Internet access at home for 80% of all Californians statewide by 2015.

BE IT FURTHER RESOLVED that the [Name of Local Government] [Board of Supervisors or City Council] requests all of their departments and agencies to review scopes of responsibilities, work plans, and services to identify and report back to the [Board of Supervisors or City Council] within six (6) months on the strategic actions that will remove barriers to and promote the deployment and adoption of broadband among residents, customers, and recipients of public services.

BE IT FURTHER RESOLVED that the [Name of Local Government] [Board of Supervisors or City Council] directs that appropriate policies promoting and supporting the deployment and adoption of broadband be promulgated and incorporated into the General Plan and other appropriate land use and economic development plans.

BE IT FURTHER RESOLVED that the [Name of Local Government] [Board of Supervisors or City Council] directs the [County Administrative Officer or City Manager] and other appropriate departments to determine how to optimize the use of broadband technology to inform and engage residents to increase citizen participation in the public processes of governance and expand Digital Inclusion.

BE IT FURTHER RESOLVED that the [Name of Local Government] [Board of Supervisors or City Council] will seek to cooperate and share the results of ***Get Connected!*** with neighboring jurisdictions and other public agencies and shall post this resolution on the [county or city] website and send a copy to the [regional Council of Governments] for appropriate distribution to other local governments.

BE IT FURTHER RESOLVED that the [Name of Local Government] [Board of Supervisors or City Council] authorize the use of their names as champions of ***Get Connected!*** on the websites of the California Emerging Technology Fund (www.CETFund.org and www.GetConnectedToday.com) and in printed materials pertaining to ***Get Connected!***

APPROVED AND ADOPTED this _____ day of _____, 2010.

California Emerging Technology Fund
Broadband Sample Policy for Use by Local Governments

Findings and Declarations

The [Name of Local Government] hereby finds and declares that high-speed Internet access—referred to generically as "broadband" (which includes both wireline and wireless technologies)—is essential 21st Century infrastructure in a digital world and global economy. It is vital to the economic prosperity and quality of life for residents in [Name of Local Government] and throughout California. And, it can enable [Name of Local Government] to operate more efficiently and provide services to the public more cost-effectively.

The ability to be "connected" instantly through the Internet to information, services and digital tools is increasingly critical for access to and success in education, jobs, and economic opportunities. The deployment and adoption of broadband is a major strategy to spur economic development because it improves productivity, which attracts more capital investment and generates jobs, while saving both time and money for consumers.

In addition, broadband is a "green technology" that can significantly reduce impacts on the environment, shrink the carbon footprint, and decrease dependence on foreign oil by offsetting vehicle trips, decreasing the use of resources, and saving energy.

However, although California is home to a wellspring of innovation that has given rise to the evolution of information technologies and broadband, the use of broadband technology by California residents is only approximately equivalent to the national average and there is a significant Digital Divide that must be closed to remain globally competitive.

[Name of Local Government] is committed to operating government functions as cost-efficiently as possible and recognizes that information technologies and broadband can greatly assist in achieving that goal. And, [Name of Local Government] is dedicated to providing public information and making services available online for the convenience and benefit of residents as well as to reduce impacts on the environment. Residents should be able to use high-speed Internet access to transact business with our local government agencies, such as obtaining and paying for building permits or business licenses, paying utility bills, or accessing official documents and maps. Broadband is a key strategy for "greening" the services and operations of [Name of Local Government].

[Name of Local Government] is committed to helping families and children be healthy, productive and self-sufficient. And, it is recognized that the use of broadband can save both time and money for residents while helping them bridge the economic divide. Therefore, it is important that all residents within [Name of Local Government] have high-speed Internet access, particularly those living in lower-income households and publicly-supported housing.

[Name of Local Government] also is committed to helping students obtain the highest-quality education possible and understands that the ability to learn and prepare for higher education is significantly enhanced if schools incorporate digital literacy and high-speed Internet connectivity into curriculum. The availability of computing devices both at school and at home are critical teaching and learning tools for academic achievement.

[Name of Local Government] is committed to Digital Inclusion and increasing citizen participation in the public process through expanded engagement using broadband.

Therefore, it shall be the policy of the [Name of Local Government] to facilitate the deployment and adoption of broadband to provide our residents with opportunities, quality of life, and convenience. Further, it is recognized that the speed of data and image transmission capability of the broadband infrastructure is vital to drive adoption: higher speeds enable more applications that consumers perceive as relevant to their daily lives. Thus, it also shall be the policy of the [Name of Local Government] to encourage and facilitate upgrades to existing broadband infrastructure to ensure that the public and private sectors have access to sufficient broadband speeds to support consumer demand for new and evolving applications that save time, money and resources.

Responsibilities and Roles: Opportunities to Promote Broadband

The [Name of Local Government] recognizes that it has many responsibilities that affect deployment (supply) and adoption (demand) of broadband technologies and applications, including the following roles: (1) policy leader; (2) planner; (3) regulator (of land use); (4) consumer; and (5) service provider. As a policy leader, [Name of Local Government] may promulgate policies and ordinances to advance and protect the public interest or implement state and national laws that promote and accommodate high-speed Internet access. As a planner, [Name of Local Government] prepares and adopts a general plan and other land use plans that guide the development in our jurisdiction, thus determining "how smart" growth will be and defining the quality of life for the future. As a regulator, [Name of Local Government] approves land uses and building permits which can encourage, promote and/or require "smart" infrastructure and facilities within our jurisdiction. As a consumer, [Name of Local Government] purchases telecommunications and information technology equipment and services which, in turn, drives demand and improvements in these technologies and services. And, as a service provider, [Name of Local Government] has the ability to expand e-government functions by providing more information and access to public services online, thus encouraging broadband adoption. It shall be the policy of [Name of Local Government] in all of its roles and responsibilities to actively identify opportunities to implement policies, programs and actions to encourage broadband deployment and adoption.

Implementation

[Name of Local Government] shall incorporate these findings and declarations into the General Plan and all relevant elements [and Specific Plan(s), Redevelopment Agency Master Plan(s), and Community Sustainability Plan if existing and/or when prepared] and shall adopt the following implementation strategies and actions:

Land Use and Smart Infrastructure

- Promote the provision of broadband infrastructure in all public buildings, major transportation and other infrastructure projects, commercial developments, and residential neighborhoods.

- Require new or renovated residential and commercial development projects to provide broadband connectivity and include the infrastructure components necessary to support broadband and other state-of-art information and communication technologies, such as conduit space within joint utility trenches for future high speed data transmission systems. Incorporate into conditional use permits the requirements to ensure continuity of broadband service and periodic upgrades (such as every 10 years) to state-of-art broadband technologies.

- Identify local public rights-of-way and public facilities that can be used for broadband deployment and promulgate procedures to streamline the approval of easement encroachment permits consistent with principles of fairness and competition for all providers.

- Ensure a level playing field for all broadband providers—private and public (or government-led), wireline and wireless—making the use of public assets available to all providers on a competitive basis, commensurate with adopted policies regarding public benefits.

- Maintain consistency and comparability for protection of visual aesthetics as it pertains to broadband facilities with requirements for other infrastructure such as street lighting, traffic light control equipment, and power generation.

- Encourage broadband providers to size underground and overhead facilities to accommodate future expansion, changes in technology, and where possible the facilities of other telecommunications and utility providers.

- Allow for upgrades and expansions of existing broadband infrastructure and appurtenance facilities to the extent that it is adequately justified through radio frequency propagation (wireless service coverage area) maps and other means, and to the extent that the construction does not unduly impact nearby residential and historically significant areas. Consider authorizing longer-term "evergreen" permits that provide a right to providers to enter specified easements to upgrade their infrastructure for an indefinite or significant period of time (such as 20 years) to upgrade the broadband service consistent with the adopted policies.

- Locate and operate broadband infrastructure and appurtenant facilities to protect cultural and scenic resources. Site facilities at the lowest possible point along ridge lines in order to minimize visual and aesthetic impacts. Minimize the size and extent of appurtenant facilities, such as antennas, dishes, and equipment buildings, while still providing room for growth and co-location of future providers. Require, as part of a special use permit, that the top-most position of a monopole or tower be occupied with antennas to ensure that the ultimate structure height is justified. Use "stealth" technology solutions for masking views of antennas. Use a muted earth-tone colors that match the natural background setting. Landscape appropriately around the perimeter of facilities to be compatible with the surrounding vegetation.

- Require commitments for sharing new monopole or tower sites as a condition of approval if appropriate and feasible.

- Submit notification and information about all major infrastructure and construction projects, including transportation projects and new residential subdivisions, to a shared regional and/or statewide web-based data base (such as the prototype developed by the California Department of Transportation) so that broadband and other utility providers have the opportunity to coordinate infrastructure deployment in shared trenches, conduit, poles and towers, and other appurtenances to facilitate cost and time savings and minimize duplicative construction.

- Require as a condition of approval the timely removal of broadband and other advanced telecommunications towers and equipment when they are no longer needed.

Telecommuting

- Develop a program to allow and facilitate employee telecommuting (compatible with maintaining high-quality local government operations.

- Encourage and assist local employers to develop and offer telecommuting to their employees to reduce traffic congestion and environmental impacts.

Public Services and Digital Inclusion

- Prepare and implement a Technology Plan that uses state-of-art broadband and other information technologies to support the local government operations in the most cost-efficient manner possible and provide online all vital public information and critical services.

- Continue to improve the [county's] [city's] website both to (a) support the provision online of public information and critical services and (b) engage and increase citizen participation. Request [direct] all [county] [city] departments and programs to provide online all policies, plans, ordinances and key information. Request [direct] the chief executive officer [County Administrative Officer or City Manager] explore the feasibility and implement to the extent possible the opportunity for residents to participate online in all public meetings real-time and to provide input and feedback on key issues.

- Develop and provide online a comprehensive and standardized geographic information system that can be used by all public agencies to aid in the provision of public services.

- Promote the use of public buildings, such as libraries, parks and convention centers, as broadband "hot spots" to allow residents affordable [or free] high-speed Internet access.

- Ensure that public safety and emergency response agencies are capable of providing real-time information via broadband to facilitate efficient and efficient management of emergencies and natural disasters to protect lives and property.

Smart Housing

- Require all new residential subdivisions to be served with state-of-art broadband infrastructure with sufficient transmission rates to support applications relevant to residential consumers (for most commonly-used and available applications today the practical required transmission rates are in the range of at least three (3) Mbps downstream and one (1) Mbps upstream).

- Require all publicly-subsidized housing development projects to provide an independent "advanced communications network" to drive economies of scale that can result in a significantly-reduced cost basis for the lower-income residents. An "advanced communications network" is broadband infrastructure that, at a minimum, makes available affordable market-comparable high-speed Internet access service to all units via the aggregation and consolidation of service across the property. It is infrastructure in addition to the standard cables, wiring and other infrastructure required for power, television and telephone service. (If multiple services are offered, residents should be offered both "bundled" and "a la carte" options.)

- Request the local redevelopment agency (agencies) and housing authority (authorities) to adopt policies to promote and support smart affordable housing with advanced communications networks whenever their public funds are used to subsidize the construction and provision of housing for lower-income residents.

Digital Literacy and Workforce Development

- Integrate digital literacy training into all workforce development programs.

- Provide digital literacy (and computer / Internet skills upgrades) training for all employees.

Designation of Broadband Leader

- Direct the chief executive officer [County Administrative Officer or City Manager] to identify and designate an appropriate individual within management as a coordinator to be responsible for implementing policies related to broadband, information technologies, and Digital Inclusion. This designated leader shall develop a plan of action to increase and sustain the use of broadband and information technologies within the [Name of Local Government]. The broadband action plan shall set forth specific goals, objectives, activities and metrics for success for all the relevant responsibilities and roles delineated above. It shall include the promulgation of a technology plan for the operations and functions with the [county] [city] government or the incorporation and regular update of the existing technology plan. The coordinator shall prepare and submit a progress report annually to the [Board of Supervisors] [City Council].

- Direct the broadband coordinator to monitor broadband deployment and adoption within the jurisdiction of [Name of Local Government] and report rates and trends to the [Board of Supervisors] [City Council].

Interagency Cooperation

- Request that the chief executive officer [County Administrative Officer or City Manager] outline a process for ensuring inter-agency and inter-jurisdictional cooperation which shall include: sharing this policy with other jurisdictions in the region; meeting with them to explore common needs for infrastructure (including backhaul and middle mile needs); exploring opportunities to collaborate on broadband applications, such as telemedicine, or regional projects, such as library networks; and notifying neighboring jurisdictions about major infrastructure projects, such as transportation improvements along shared corridors.

- Explore opportunities to work with other public and private entities, such as schools, special districts, utilities, and private health and medical providers, to cooperate and joint-venture on broadband deployment projects and adoption programs.

Other Local Priorities

- Add other local priorities and considerations.

Please Note: For the convenience of local and regional governments, all background information and sample policies are available electronically from the California Emerging Technology Fund (www.CETFund.org).

Broadband Definition

Broadband is a generic term that refers to high-speed access to the Internet in contrast to a dial-up connection. It is described in terms of rate of transmission of data, with sufficient speeds to support applications relevant to the end user.

Broadband Technology

Broadband is technology-neutral and includes both wireline and wireless mediums, such as:

- Digital Subscriber Line (DSL)
- Cable Modem
- Fiber Optic
- WiFi
- WiMax
- Satellite

Local factors, such as population density, existing infrastructure, and terrain, will determine the technology best suited for a community or region.

California Emerging Technology Fund
Model Policies for Broadband
Summary of Case Studies

Jurisdiction	Purposes and Justifications	Key Objectives and Implementation Strategies
Humboldt County	• Economic Development and Prosperity • Critical Infrastructure • Digital Inclusion	• Assess the use of broadband to get Internet access outside of urban areas. • Establish a relationship with private Internet Service Providers. • Make telecommunications planning a fundamental aspect of future county planning.
Nevada County	• Critical Infrastructure • Digital Inclusion • Telecommuting and Quality of Life	• Develop a telecommunication program that ensures community access. • Develop easements to accommodate telecommunication systems. • Develop standards for telecommunications facilities. • Develop a telecommunication program that ensures community access. • Develop easements to accommodate telecommunication systems. • Develop standards for telecommunications facilities.
Davis	• Economic Development and Prosperity • Digital Inclusion • Telecommuting and Quality of Life	• Develop standards clearly outlining policies on telecommunications and broadband. • Encourage development of infrastructure. • Encourage a diversity of technology. • Encourage technology-related education and skills acquisition.
Foster City	• Digital Inclusion • Economic Development and Prosperity • Public Services • Public Security and Safety • Telecommuting and Quality of Life	• Retain regulatory oversight of public property. • Promote Digital Inclusion. • Promote the use of telecommunications technology. • Advance the development of state-of-the-art infrastructure.
Los Angeles	• Telecommuting and Quality of Life • Economic Development and Prosperity • Public Security and Safety	• Encourage telecommuting to reduce total vehicle miles traveled. • Utilize telecommunications technology to connect the city library system with other agencies. • Amend or revise the Infrastructure Systems Element of the General Plan to incorporate telecommunications.

Petaluma	• Digital Inclusion • Economic Development and Prosperity • Public Interest and Education • Public Services	• Combine existing infrastructure with opportunities to deploy telecommunications systems. • Encourage new development to accommodate infrastructure upgrades.
Redwood City	• Telecommuting and Quality of Life • Public Interest and Education • Critical Infrastructure • Public Security and Safety	• Address telecommunications infrastructure in an updated General Plan through the Infrastructure Element. • Mandate that new buildings include space for telecommunications equipment.
Riverside	• Digital Inclusion • Economic Development and Prosperity	• Encourage that new development accommodates telecommunications infrastructure. • Run key city programs utilizing telecommunications technology. • Offer use of network capacity to private companies, extending service where it otherwise might not be economically feasible.

"Broadband deployment and adoption stimulate economic development while enhancing the quality of life in rural communities. Broadband can serve as a catalyst for green, sustainable businesses. Employer, civic and government leadership are key to leveraging limited resources and public assets to help make the business case to expand broadband into rural areas."
Supervisor Norma Santiago, El Dorado County

"Broadband is clearly a priority for Tuolumne County and the surrounding Central Sierra Connect five-county region. Civic, community and government leaders came together in an unprecedented coalition to discuss and prioritize broadband-related issues, challenges and barriers Public-private partnerships were built in an attempt to bring new and added connectivity to rural Central Sierra communities. It will take these kinds of efforts to retain the rural quality of life we are accustomed to, but also remain economically viable and competitive, especially in challenging times."
Supervisor Teri Murrison, Tuolumne County

"California's rural communities are especially challenged to retain and grow local businesses. The availability of broadband service is increasingly critical to meeting that challenge. Local governments, partnering with local business and community service organizations, have to do all we can to encourage the expansion of broadband infrastructure."
Mayor Bridget Powers, City of Auburn

CALIFORNIA EMERGING TECHNOLOGY FUND
SUMMARY OF EXAMPLE POLICIES AND ORDINANCES FROM CALIFORNIA LOCAL GOVERNMENTS

This table summarizes existing policies regarding broadband (high-speed Internet access) and advanced telecommunications from California local governments to serve as a resource for public officials and policymakers in formulating policies for their own jurisdictions.

Jurisdiction	Source Document	Adopted Policies or Ordinances
Cities		
Davis	***General Plan*** Adopted May 2001; Amended through January 2007 (Section V: Community Facilities and Services; Chapter 8: Computers and Technology)	• Sets forth: Background (Purpose); Goals, Policies and Actions. • States: "Telecommunications infrastructure and services have been identified as important community resources, which are likely to be as important to continuing economic development of the community as basic infrastructure such as water, sewer and road systems." • Establishes the following Goals: 1. Encourage development of infrastructure and services to allow all who live work and study in the city to utilize new technologies to communicate with individuals locally, regionally, nationally and globally. (Policies: Implement a program of technology, planning installation and education. Make information regarding city government and decision-making, local services and opportunities to participate in city governance available to residents in electronic form.) 2. Pursue telecommunications as a means to reduce transportation impacts that can improve air quality and personal convenience and reduce dependence on non-renewable resources. (Policies: Encourage telecommuting for the city government, community and major employers). 3. Develop an awareness that the city that understands and supports high-technology communications. (Policy: Convey through the city's promotional documents that the city government and community understand and use modern communications technologies.)
	Municipal Code Chapter 40, Zoning 40.29.180	• Addresses location and siting of telecommunications facilities, especially aesthetic considerations. • Proscribes an external provider's investment to conform to current community standards (minimization of visual impacts, prohibition of certain types of antennas and towers).
Dublin	***Capital Improvement Plan*** Approved funding for DubLink	• Supports development and maintenance of DubLink, an underground fiber-optic network to provide high-speed voice, data and video communications to businesses. The network saves employers time and money by providing an existing "telecommunications pathway" within the city's business district on which businesses can lease space rather than construct their own lines. • Approves funds as part of the 2005-2009 Capital Improvements Plan, to expand DubLink from a broadband fiber optic network to include wireless components. The vision is to have the entire city be a "hotspot" as a tool for enhancing economic development.

Foster City	***Telecommunications Policy*** Adopted February 2000	• Outlines how the city will maintain infrastructure, identifies who is responsible for administrating telecommunications policy, and sets forth the guiding principles for the policy. • Assigns the City Manager specific duties, such as negotiating with providers for the use of city facilities and monitoring compliance with the use of rights-of-way. • Directs the city to maintain control of public facilities in leasing agreements. • Promotes Digital Inclusion and the use of advanced telecommunications.
Fremont	***Municipal Code*** Section 8-2199.7.3	• Sets forth a comprehensive set of codes addressing telecommunication issues with the following definition: "Telecommunication facility" shall mean a facility that transmits and/or receives electromagnetic signals for the following technologies: cellular technology, personal communications services, enhanced specialized mobile services and paging systems. It includes antennas and all other types of equipment used in the transmission or receipt of such signals; telecommunication towers or similar structures supporting said equipment; associated equipment cabinets and/or buildings; and all other accessory development. It does not include radio towers, television towers and public safety networks." • Focuses on the location and deployment of telecommunication towers and structures.
Irwindale	***Municipal Code*** Chapter 17.90 Wireless Communications Facility Ordinance 529 §1(part) 1998	• Sets forth a comprehensive set of codes addressing telecommunications issues, including the statements: "It is the intent of the city that the regulations contained in this chapter shall apply to all wireless communication facilities within the city to accomplish the following: A. Ensure against the creation of visual blight within the city; B. Protect the inhabitants from the possible adverse health effects associated with exposure to levels of NIER (non-ionizing electromagnetic radiation) in excess of recognized national standards; C. Ensure that a competitive and broad range of telecommunications services and high quality telecommunications infrastructure are provided to serve the community, as well as serve as an important and effective part of the city's emergency response network; and D. Simplify and shorten the process for obtaining necessary permits for telecommunication facilities while at the same time protecting the legitimate interests of the citizens. (Ord. 529 §1(part), 1998). • Focuses on the location and deployment of telecommunications towers and facilities.
Laguna Hills	***Municipal Code*** Section 9-58	• Delineates aesthetic considerations to guide providers' investments to be consistent with current community standards (such as minimizing visual impact through a prohibition of certain types of antennas and towers).
Los Angeles	***General Plan Infrastructure Systems and Public Facilities and Services Element***	• Identifies the opportunity to develop an "integrated network serving as the regional hub for public and private users" to take advantage of the benefits of broadband. • Provides guidance to city departments to promote broadband.

Malibu	***Municipal Code*** Chapter 17.46 Wireless Telecommunications Antennas and Facilities	• Recognizes the importance and rapidly-changing nature of telecommunications technology and finds that it is in the public interest to facilitate equipment upgrades, including the following statement: "The city finds that the technology associated with telecommunications equipment is subject to rapid changes and upgrades as a result of industry competition and customer demands, and anticipate that telecommunications antennas and related equipment with reduced visual impacts will be available from time to time with comparable or improved coverage and capacity capabilities. The city further finds that it is in the interest of the public health, safety, and welfare that telecommunications providers be required to replace older facilities with newer equipment of equal or greater capabilities and reduced visual impacts as technological improvements become available. Therefore, any modifications requested to an existing facility for which a permit issued pursuant to this title authorizing establishment of a wireless telecommunications facility shall permit the planning manager to review the carrier's existing facility to determine whether requiring newer equipment or applying new screening techniques that reduce visual impacts is appropriate if technically feasible." • Focuses on siting and deployment of telecommunications towers and facilities and emphasizes reductions of visual impacts and deployment of antennas to existing facilities, such as light poles.
Petaluma	***General Plan*** 2008	• Promotes Digital Inclusion by: 1. Assessing city infrastructure. 2. Developing a telecommunications infrastructure including multiple technologies. • Encourages development of telecommunications as a means for increased civic participation in government.
Redwood City	***Draft General Plan*** Draft Infrastructure Element	• Allows efficient and affordable communications. • Supports efforts to provide affordable infrastructure. • Mandates that the city keep current with technological developments in telecommunications to pursue innovative solutions.
Riverside	***General Plan*** Public Facilities and Infrastructure Element (2007)	• Sets forth the following declaration and finding: "Well-designed and maintained infrastructure systems are critical to a community's economic development goals, and they enhance the quality of neighborhoods. Infrastructure such as sewer and water lines, broadband communication networks and solid waste collection and disposal must be sufficient to accommodate the present and future needs the community. As infrastructure ages or growth outpaces capacity, isolated failures represent a real potential. Providing quality public facilities such as libraries, hospitals and community centers are also of vital importance, as they contribute to the health, education and quality of life for all residents."

		• Equates telecommunications infrastructure with other basic city infrastructure. • Ensures access to state-of-the-art Internet and modern telecommunications technology. • Directs the Public Works Department to own and operate an extensive network of fiber-optic cable. • Directs the city to partner with telecommunications companies to deploy broadband throughout the city. • Integrates broadband into public safety and education.
	Municipal Code Chapter 19.530 Wireless Telecommunications Facilities and Related Structures	• Specifies approach to location and deployment of telecommunications towers and structure.
San Diego	***Information Technology Strategic Plan (ISTP)*** 2000 **San Diego Broadband Initiative Version 2.0** –ISTP (2008)	• Sets forth the city's vision of the future and serves as a plan for setting direction and development of information technology • Recommends guidelines for integrated city-wide action for promoting information technology as part of the General Plan with encouragement of city staff to utilize information technology, developers to pre-wire residential structures, emergency telecommunication upgrades and the facilitation of standards for economic development. • Encourages utilities to implement policies as a part of their own plans for upgrading and transformation into 21st Century organizations. • Articulates improvements in information technology utilization over previous decade (referencing broadband) and sets forth plans for future deployment (ISTP 2008).
San Bruno	***Municipal Code*** Title 12 Land Use Article III Zoning Chapter 12.220 Wireless Telecommunications Facilities	• Provisions include the following passage: "The purpose of this chapter is to provide uniform standards for the design, placement, and permitting of wireless telecommunication facilities consistent with applicable federal requirements. The regulations contained herein are designed to protect and to promote public health, safety, community welfare, and the aesthetic quality of the city while at the same time providing for the managed development of wireless communication facilities. (Ord. 1711 § 1 (part), 2006)"
Counties		
Del Norte County	***Policy of Community Resolution*** August 1999	• Sets forth 10 goals for economically prosperous, safe and healthy community which is the foundation for public-sector support and promotion of broadband. • Directs that everything possible should be done to ensure that the public is provided with adequate and sufficient infrastructure (including cable, which is interpreted to encompass broadband). • Provides the imperative and basis for staff action.

Humboldt County	***Report: Living in a Networked World*** 2004 ***Draft General Plan Telecommunications Element*** 2008	• Provides information on the benefits and availability of broadband infrastructure and technology. • Incorporates into the General Plan a separate element on Telecommunications (including broadband) and provides long-term guidance for county policymakers to facilitate deployment of broadband and respond to changes in technology. • Sets forth 2 goals: (1) Ubiquitous Availability: A regional economy and quality of life strengthened by maximizing the use of telecommunications technology by ensuring availability to every resident, business and institution. (2) Broadband Reliability: A reliable broadband Internet infrastructure that distributes a choice of economically accessible broadband services into our most rural communities, and is not vulnerable to disruption, with broadband service capability integrated into new buildings and developments and broadband access in remove or rural communities and available to low-income and disadvantaged residents. • Encourages development of telecommunications infrastructure and services to facilitate the use of the best available technology for business, households and government. • Delineates additional specific policies and actions related to: Service Continuity; Government Infrastructure; Telecommunications Facilities Within County Rights-of-Way; Telecommuting; Broadband Internet; Workforce Development; Subdivision Improvement Requirements; Joint Telecom Planning; E-911; Cable Franchise Ordinance; Wireless "Hot Spots"; Reduction (reduce transportation impacts and improve air quality); Public Broadband Telecommunications Service Providers; and Technology Awareness. • Supports the development and management of an alternative fiber optic line that connects to the fiber backbone running along the U.S. 5 corridor: "The County shall support the expansion and delivery of broadband Internet in the rural or remote communities in the county through all appropriate technologies." • Specifies standards for siting telecommunications and broadband facilities, including: Site Sharing (when feasible to allow affordable co-location); Public Health and Safety; Minimize Tower Height and Size; Scenic and Culture Resources; Landscaping: Masking Structures; Expansion of Existing Facilities (that do not unduly impact nearby residential and historically significant areas); Removal of Un-used Facilities; and Shared Facility Requirement (requires commitments for sharing a new monopole or tower sites as a condition of approval). • Directs prepare of a Telecommunications Facilities Ordinance that: ensures compatibility of telecommunications facilities with nearby land uses; is proactive in the design and siting of wireless telecommunications facilities; provides incentives for unobtrusive and compatible wireless antennas; and establishes clear standards for such facilities.
Nevada County	***General Plan*** 1996	• Addresses need for easements to provide telecommunications access. • Highlights need to undertake telecommunications studies. • Mandates that telecommunications facilities be included in the Comprehensive Site Development Standards. • Instructs the County to look for opportunities to combine upgrades of telecommunications infrastructure with upgrades of other infrastructure.

	Resolution March 2009	• Declares continuing support for the Nevada County Community Broadband Leadership Council (working group of Nevada County Economic Resource Council) to promote local broadband initiatives and requires a comprehensive report on recommendations to take advantage of opportunities for and to eliminate barriers to improved broadband access and wider adoption. • Directs the Information and General Services Department (IGS) to continue to coordinate broadband initiatives, pursue available state and federal resources, and engage the private sector. • Requires all public works projects in include broadband conduit to be used by multiple government agencies. • Directs the Community Development Agency to review policies and procedures with local broadband providers and recommend changes to streamline right-of-way, tower and antenna permitting. • Encourages IGS to facilitate free wireless Internet access in county facilities most used by the public and encourages other local public and private entities to do that same. • Encourages an economic development alliance of public, private and non-profit technology-based sectors to achieve maximum accessibility of broadband services with highest possible bandwidth at lowest cost.
Stanislaus County	***Connecting Stanislaus: Community and Technology Together*** ***Strategic Plan(s)*** 1999, 2003, 2005, 2008	• Establishes and reaffirms support for *Connecting Stanislaus* as a public-private consortium that includes government, business, education, agriculture, and community-based organizations. • Declares broadband connectivity as a priority for economic development. • Sets forth formal strategies and initiatives that have been sustaining for more than a decade. • Articulates strategies and actions for telecommunications awareness, access, education and digital inclusion, including the following: — Targeted Technology Training (T3) offers 200 classes annually throughout the community: 4 hour courses on 12 topics, community-based curriculum, English and Spanish language, pre/post course evaluation, K-12 education, cities and business sector partners. — Community Web Portal (connectingstanislaus.com) established 2003. Web 2.0 upgrade January 2009. Community volunteers from seven sectors maintain data and all resources: community pages, youth pages, regional tourism, public information—a community celebration in technology access. — Annual Technology Summit (X2Annually) was an annual technology fair through first 7 years and is now targeted half-day technology summits. Seven sectors will be targeted ongoing: Small Business Tech Summit May 2008; Ag Tech Summit January 2009 (Chambers of Commerce, Farm Bureau, Agricultural Commissioner, plus business sponsor/partners). — A Technology Closet (Pilot Sprint 2010) will focus on refurbishing recycled technologies by ROP students for non-profit and faith-based organizations, linking technology recycling and reuse, education and skills training, business networking and community organizations.

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Leadership Action Check List

Getting Connected for Economic Prosperity and Quality of Life

The following Check List provides a spectrum of possible actions that local and regional leaders may want to consider for "Getting Connected for Economic Prosperity and Quality of Life" by promoting the deployment and adoption of broadband. It is intended only as a tool to jumpstart action and is neither prescriptive nor exhaustive. Local and regional leaders will have to determine what works best within their own jurisdictions. It is anticipated that local and regional leaders will be innovative and creative beyond this Check List in developing an action plan.

Action	Target Date	Accomplished ✓
Adopt a *Get Connected!* Resolution and Post on Your Website		
Convene Community Forums to Listen to the Public's Views on a Policy		
Hold a Public Hearing to Gather Input from Experts and Citizens on a Policy		
Adopt a Policy to Promote Broadband Deployment and Adoption		
Incorporate the Policy into the General Plan and Other Key Documents		
Provide All Essential Government Information and Public Services Online		
Develop a Telecommuting Program for Employees and Encourage Others		
Encourage All Health Providers to Join the California Telehealth Network		
Encourage Schools to Implement School2Home or a Similar Program		
Equip and Designate Libraries as Community Wireless "Hot Spots"		
Establish a Computer Refurbishing Program to Help Lower-Income Families		
Collaborate with Other Jurisdictions in a Regional Consortium		

Please send copies of your resolution, policies and updates on your action plan to:
California Emerging Technology Fund
The Hearst Building
5 Third Street, Suite 320
San Francisco, California 94103-3206 www.CETFund.org
An inventory of actions and resources will be posted on the CETF website.

Careers in Information Technology for Residents of Disadvantaged Communities

EmpowerNet California is a non-profit collaboration among community-based organizations (CBOs) to train residents in lower-income, disadvantaged communities for good-paying jobs in information technology (IT). EmpowerNet delivers the collective experience of successful CBOs to assist communities and Workforce Investment Boards (WIBs) build IT career ladders, especially for entry-level and transitioning workers. EmpowerNet is a web-based Toolkit of resources to help establish or expand IT skills preparation and job-placement services, including best practices, curriculum, instructional manuals, consultation and referrals.

Entry-level jobs in IT pay more, have better upward mobility, and have a greater potential for wage gains. In addition, IT workers are needed across all employment sectors and all labor markets. Further, the ability to use a computer and navigate the Internet—referred to as "digital literacy"—is a vital component of all jobs in the 21st century and a skilled required and valued by most employers. Thus, developing training programs for IT careers pathways that are targeted to lower-income entry-level and transitioning workers also is a powerful strategy to tackle poverty and promote economic development.

WHAT YOU CAN DO AS A LOCAL LEADER

- ✓ ***Find out what your local WIB is doing to offer training for IT career ladders and make sure this service is available in your community.***
- ✓ ***Advocate for and ensure that all workforce preparation programs include training for digital literacy and IT skills.***
- ✓ ***Encourage your local WIB and community training programs to take advantage of the resources provided by EmpowerNet California.***

EmpowerNet provides services for WIBs and CBOs looking to augment an existing training program or wanting to assess readiness for initiating a new program. EmpowerNet assists WIBs and CBOs quickly deploy effective IT workforce development programs for their underserved constituents. For more information: www.empowernetca.org

"Organizations like EmpowerNet provide a proven model of success for Technology Training programs throughout California that travel down a similar pathway to digital inclusion. Through use of the EmpowerNet Toolkit, organizations can leverage resources to maximize their impact on the individuals and communities they serve."
Supervisor John Gioia, Contra Costa County

Computer Recycling and Refurbishing for Public Benefit

One of the biggest barriers to closing the Digital Divide is the affordability of computers and broadband service for lower-income families. Although computing devices are increasingly more affordable and broadband providers offer a variety of entry-level subscription packages, cost still is a major hurdle for many Californians. And, having a computer in the household usually is a pre-requisite for subscribing to broadband service. Further, although mobile devices with Internet connectivity for access to vital information are becoming increasingly prevalent among lower-income consumers, workforce preparation requires keyboarding skills to compose written documents and create spreadsheets—tasks which today are not easily performed on mobile devices. Thus, for students and workers to acquire 21st century skills, it is important for them to become proficient in using computers.

As local governments seek ways to reduce environmental impacts and "green" their practices, public officials are considering strategies to keep used computers and electronic waste out of landfills both at home and abroad. Although it is a reasonable financial management practice for public agencies to use computers until the value is fully depreciated and then contract with a firm to dispose of them, often it is not known publicly where the used components end up.

In order to address these challenges, some local governments have adopted a policy and established a program for recycling their used computers, having them refurbished through workforce training programs, and making them available at no or low cost to local non-profit organizations and/or low-income families. For example, the San Diego Futures Foundation has an agreement with San Diego County and the Northrop Grumman Corporation to recycle their old computers, train workers to refurbish them, and make them available to the community. Since 1999, more than 23,000 computers have been refurbished and donated or sold at a very low price to San Diego non-profit organizations, schools, and needy families. In Northern California, Napa County has established a computer recycling program. Relia Tech, a social-benefit enterprise associated with Stride Center, hires and trains underemployed individuals to refurbish recycled computers. And, TechSoup.org, provides extensive information about lower-cost computers and broadband service throughout California.

WHAT YOU CAN DO AS A LOCAL LEADER

- ✓ ***Find out what your jurisdiction does with used computers and where they end up when replaced. Ask for a copy of your jurisdiction's written policy.***
- ✓ ***Request a simple assessment of feasibility and cost-benefit analysis of a computer recycling and refurbishing program for your jurisdiction.***
- ✓ ***Encourage other government agencies and private-sector employers to join you in establishing a computer recycling and refurbishing program.***

"In San Diego County we strongly believe that computers and broadband access are vital tools for a community. That is why we make certain that our surplus computers are refurbished with the support of San Diego Futures Foundation and then provided for free or at reduced cost to those in San Diego County who may otherwise be without access."
Supervisor Pam Slater-Price, San Diego County

Provide leadership statewide to close the "Digital Divide" by accelerating the deployment and adoption of broadband to unserved and underserved communities and populations.

Ensure that California is a global leader in the availability and use of broadband technology.

CETF
CALIFORNIA EMERGING TECHNOLOGY FUND

www.cetfund.org

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