Local Government Officials Roundtable
Call to Action: Close the Digital Divide in California
October 17-18, 2013
Red Lion Hotel Woodlake Conference Center
500 Leisure Lane, Sacramento, California

SUMMARY

Purpose and Focus

The California Emerging Technology Fund (CETF) convened the Local Government Officials Roundtable in partnership with the California State Association of Counties (CSAC), League of California Cities (LCC), Rural County Representatives of California (RCRC), and Valley Vision (who assisted with the planning, organization and recruitment of participants for the Roundtable). Comcast was a co-sponsor. The goals of the Local Government Officials Roundtable were to:

- Engage a "critical mass" of key Local Government Officials throughout California to become active champions in closing the Digital Divide.
- Explore and exchange information about the key roles of Local Government Officials in closing the Digital Divide: Policy Leader; Planner; Regulator; Consumer; and Service Provider.
- Understand and discuss the challenges facing broadband providers in deploying infrastructure to meet increasing consumer demands: identify options and strategies for addressing concerns, resolving conflicts, and improving outcomes.

The two-day Local Government Officials Roundtable brought together 80 participants, 24 of whom were elected officials from across California. With elected officials and staff, a total of 21 Counties and 9 Cities were represented, along with 9 State Agencies, 5 Regional Broadband Consortia, 4 statewide associations, 2 federal agencies, and 5 telecommunications broadband companies.

The event included six moderated panels with a focus on the unique roles and responsibilities of Local Government Officials in finding solutions to challenges facing Californians on broadband deployment and infrastructure. Panelists addressed 5 key roles: (1) Policy Leader; (2) Planner; (3) Regulator; (4) Consumer; and (5) Service Provider. Time was allocated after each panel presentation for all participants to join the conversation and discuss strategies for transitioning from conflict and challenge to solution. The following presents the key highlights from each session along with conclusions and next steps.

DAY ONE
Welcome and Purpose of the Local Government Officials Roundtable

Sunne Wright McPeak, President and CEO, California Emerging Technology Fund (CETF)
- CETF is very appreciative of the partnership with CSAC, LCC, RCRC and Valley Vision in convening the Local Government Official Roundtable and is grateful for the dedication of time and commitment of leadership from all participants. CETF is mindful of the demands on Local Elected Officials and especially grateful for their willingness to serve as broadband champions. This forum is critically important to closing the Digital Divide in California.
- The original broadband mapping identified a deployment challenge that in scale matches the square miles of Kentucky. The baseline survey on broadband adoption revealed that the number of people not using broadband at home was larger than the population of Illinois and the number of people with disabilities offline was equivalent to the population of New Mexico. No other state has more challenging terrain for broadband deployment or had more people unconnected at home than California.
- Leadership from Local Government Officials will be pivotal in achieving the broadband goals of 98% deployment and 80% adoption by 2017. Local Government Officials have the ability to accelerate broadband deployment and adoption to promote global competitiveness and quality of life throughout the state. There is no substitute for leadership.

David Finigan, President, California State Association of Counties; Supervisor, County of Del Norte
- The experience of residing in Del Norte County and serving as a County Supervisor as well as participating on a Work Group of the Governor's Broadband Task Force underscored the importance of and challenges associated with closing the Digital Divide.
- CSAC represents rural, urban and suburban communities and knows that broadband is critical for a strong economy, public safety, and other benefits.
- Del Norte County is two weeks away from having a redundant broadband network in place. This was accomplished through a partnership with the regional consortium and the Tribes.

Kevin Cann, President, Rural County Representatives of California; Supervisor, County of Mariposa
- Broadband deployment and adoption touches many different policy topics: transportation, public works, infrastructure, facilities, telecommunications, education, health. This is a good time for elected officials to consider how to self-organize to assure communities have the information they need to address this as an important public policy issue.
- RCRC staff and many member counties worked diligently to help with the successful passage of recent legislation that will help close the Digital Divide.
- The Local Government Officials Roundtable is welcomed and supported by RCRC.

Mike Kasperzak, Past President, League of California Cities; Councilmember, City of Mountain View
- As a longtime champion of broadband, he helped make this issue a priority when he served as the President of the League of California Cities.
- The City of Mountain View has been served with free Google wifi, but now the technology is old. And, with the proliferation of smart devices, public officials are thinking about next steps to assure sufficient bandwidth.
- As with all great things, leaders need to look ahead for next steps. The conversation at this Roundtable is important and timely.

Overview of Challenges in Closing the Digital Divide
Sunne Wright McPeak, CETF

- CETF was directed to be established by the California Public Utilities Commission (CPUC) to close the Digital Divide in California with $60M seed capital contributed by AT&T and Verizon as a result of agreements with the CPUC in approving mergers in 2005.
- Broadband is a generic term for high-speed Internet access and includes both wireline and wireless technologies. CETF set the goals of 98% deployment (98% of all residences having access to high-speed Internet) and 80% adoption (80% of all households using broadband at home) in a decade (by 2017) as the definition of success in closing the Digital Divide in California. In order to achieve the 80% statewide goal for broadband adoption, all regions and demographic groups need to reach at least 70% adoption.
- CETF decided to use all of the seed capital in a decade to get the job done. However, although $60M is a substantial sum, given the size of California and the magnitude of the challenge statewide, in order to accomplish the goals it was clear that the funding had to be leveraged several-fold, beginning with engaging leaders at all levels of government and in existing civic and community organizations. There also had to be regional collaboration to get to scale for deployment, hence the establishment of Broadband Regional Consortia.
- The purpose of the Roundtable is to complete the "leadership infrastructure" for California by engaging participants as a "leadership learning community" to explore key roles and opportunities for Local Government Officials to act and serve as Policy Leaders, Planners, Regulators, Consumers, and Service Provider.
- Broadband is essential 21st century infrastructure, significantly increasing economic productivity. It should be integrated into all policies and programs, such as making teleheath a signature component of healthcare reform in California. And, broadband is a "green strategy" to reduce impacts on the environment—reducing trips that help relieve congestion and decreasing greenhouse gas emissions.
- While great progress has been made in closing the Digital Divide since California began to focus on the broadband issue and CETF was established, there are 225,000 households that still need access to reach the 98% goal. The 2013 Statewide Survey by the Public Policy Institute of California (PPIC) shows that 75% of Californians use the internet at home (including 6% with only a smart phone—69% by other broadband technologies).
- In 2008 low-income household adoption rates were at 33%, Latino families were at 34%, and people with disabilities were at 36%. Those adoption rates have risen to 53%, 52%, and 56% respectively in 2013, but approximately 800,000 more households must subscribe to broadband at home in order to achieve the adoption goals. To reach these adoption goals, new federal and State policies and additional resources are needed.
- CETF is working with the Legislature, Administration, CPUC and California Broadband Council to advance new public policies and secure additional funds, with a focus on reform of the Universal Services Fund (USF) controlled by the Federal Communications Commission (FCC).
- New State legislation enacted this year that will help close the gaps:
  — Senate Bill 740 (Padilla) adds $90M into the California Advanced Services Fund (CASF) with a focus on infrastructure deployment to unserved communities. It also expands eligibility for applicants (including wireless providers and local governments in certain conditions).
  — Assembly Bill 1299 (Bradford) authorizes $25M of the new funds to connect publicly-subsidized multi-unit housing complexes and provide digital literacy training. Of the 300,000 publicly-subsided housing units in California, at least 250,000 have no connectivity. Home connectivity is how children safely do homework and parents apply for jobs.
- Exponential growth in demand for bandwidth (driven by video downloads) will drive the need for broadband infrastructure upgrades throughout the state and in most jurisdictions.

Roundtable Discussion on Leadership in Closing the Digital Divide
Moderator: Sunne Wright McPeak, CETF

The following is a "word cloud" representation of participants' most frequently cited definitions of leadership:

Themes and Comments from Roundtable Discussion:
- o It is helpful to bring people together from different communities to work together and learn from each other as is being done with the Local Government Officials Roundtable.
- o There are many small communities in California that don't want to be forgotten. For example, 80% of Sierra County has no broadband option; every community should have an option.
- o There is a need to consider the impact from lack of broadband on the agriculture industry in light of the changing farming and ranching practices.
- o Broadband is another vital economic development tool. Therefore, Colusa County included broadband in its General Plan as a critical infrastructure element.
- o Rural communities are where the most major fires occur; and without a sufficient broadband network, emergency response personnel lack the ability to communicate with each other.
- o Broadband needs ongoing leadership because there is no end point, unlike other infrastructure. For example, most roads have a shelf life of 20-50 years (with regular maintenance), where as the technology for broadband access if constantly evolving.
- o Vacation communities have huge broadband demand on weekends from visitors and tourists.
- o About 80% of California libraries have less bandwidth than Berkeley residents have at home.
- o The goal should be 1Gbps to each school to enable teachers to fully engage families.
- o Rural county leaders have found through surveys of local businesses that the top economic development issue was broadband availability and speeds. A subsidy is necessary to make broadband in rural areas affordable for business and residential customers.
- o There also is a need to look at the broadband challenge through the lens of the impoverished community members. High-speed Internet access is key to helping disadvantaged residents access critical public services to become self-sufficient.
- o The CPUC recognizes the importance of accurately representing the broadband availability data on the maps, and shared mechanisms to provide feedback and mapping validation.

Local Government Officials as <u>Policy Leaders</u>
Panel Presentation, Moderator: Mike Kasperzak, LCC

<u>Kish Rajan, Director, Governor's Office of Business and Economic Development (GO-Biz)</u>
- Broadband technology is a prerequisite for economic competitiveness, not a "nice to have."
- GO-Biz is focused on bringing state resources in alignment with local priorities.
- A 21st century economy requires broadband infrastructure for competitiveness and a skilled workforce, extending education to where people live, and meeting the needs of employers in a global marketplace.   GO-Biz supports the need for broadband deployment and adoption.
- The mission of the California Infrastructure and Economic Development Bank (I-Bank) is to finance public infrastructure and private development that promote a healthy climate for jobs, contribute to a strong economy, and improve the quality of life in California communities. The I-Bank has broad statutory powers to issue revenue bonds, make loans and provide credit enhancements for a wide variety of infrastructure and economic development projects and other government purposes, which could include broadband deployment.

<u>Cecilia Aguiar-Curry, Mayor, City of Winters</u>
- The City of Winters, where 67% of the 6,700 residents are Hispanic, decided to focus on improving the schools in the face of the economic downturn in order to prepare for the future.
- Winters was able to upgrade the technology in the schools and now students use iPads as part of their curriculum, thanks to a grant from the nearby Tribal Council. Winters PTA membership increased from 8 to 180 families, and family members are now often using the technology together at the school library. Winters will be partnering with CETF to implement School2Home in the local middle schools which will provide digital literacy training to parents. The challenge now is providing at-home connectivity (and at affordable rates).
- Yolo County and the other cities in the county are partnering through the Local Area Formation Commission (LAFCO) to engage a consultant to develop a countywide broadband strategic plan. Working through LAFCO is a very innovative approach to collaboration.

<u>Lea Deesing, CIO, City of Riverside; Executive Director, Smart Riverside</u>
- The City of Riverside is located 60 miles east of Los Angeles; 10% of families are low-income. Riverside committed a $1.6 billion infrastructure investment called "Riverside Renaissance" to complete 30 years worth of infrastructure investment in 5 years. One of the results was the establishment of the award-winning non-profit called "Smart Riverside."
- Smart Riverside includes: a free city-wide wifi program; a digital inclusion program funded through an e-waste recycling center that offers free computers to low-income residents upon completion of an eight-hour digital literacy training; and a computer refurbishing program that helps at-risk youth gain lifetime skills.
- This investment in broadband as a right has improved the quality of life in Riverside. The current challenge is meeting the demand for computers and maintaining the wifi network with technology that is now almost obsolete.

<u>Themes from Roundtable Discussion:</u>
- Agriculture is not the same as it used to be in terms of needs for broadband connectivity. Broadband-enabled technology runs equipment, controls water, and links to global trade.
- Local and regional assets need to be identified to more efficiently close coverage gaps.
- A good public-private partnership example is the City of San Leandro which has allowed a private provider to deploy fiber through municipal-controlled conduit.

- Santa Cruz County and the City of Watsonville are building a dark fiber network; 90% of building a broadband system is civil engineering, for which local governments have expertise.

Local Government Officials as <u>Planners and Regulators</u>
Panel Presentation, Moderator: David Finigan, CSAC

<u>Louise Bedsworth, Deputy Director, Governor's Office of Planning and Research (OPR)</u>
- OPR is updating the Environmental Goals and Policy Report (EGPR) for the first time since 1978. This document provides a broad vision and set of metrics for California's environment which will be consistent with the State's planning priorities.
- Broadband is an important infrastructure to implement the State's environmental and planning goals to integrate zero emission vehicles charging infrastructure, energy efficient buildings, and other applications.
- OPR is updating the General Plan Guidelines to be consistent with environmental goals, climate change, and other relevant policy issues. The new document will be online and easier to use with reduced burdens to update.
- OPR is seeking advice on how to articulate broadband goals, key actions needed, metrics to track, primary obstacles cities and counties are facing, and how guidelines and other OPR tools can be most helpful.

<u>Mark Lovelace, Supervisor, County of Humboldt</u>
- Humboldt County faces two major challenges—it is rural and remote. Being 5 hours from urban centers with uncertain roads, broadband helps level the playing field.
- Broadband connectivity was prioritized as a critical 21st century infrastructure following a significant outage when a line was cut. With no ability for credit card transactions, businesses faced a dramatic slowdown in retail; financial service businesses lost $20,000 a day; and flights were cancelled because they couldn't connect with the FAA. This outage was the driver for a redundancy project. The County leveraged funding to gain interest from private providers.
- Humboldt County adopted a Broadband General Plan Element to help stay focused on broadband long-term and stay ahead of the curve.

<u>Patrick Mulhearn, Policy Director, Santa Cruz County Board of Supervisors</u>
- Led by County Supervisor Zach Friend, Santa Cruz County is seeking to influence the planning process to make policies and procedures more conducive to broadband deployment. The County is seeking to treat broadband facilities like a utility and will revise the permitting process for broadband equipment installation to be an encroachment permit rather than a discretionary land use permit, reducing administrative costs. The County also is developing a master lease agreement to offer access to all county facilities (for example, a provider wanting to deploy small cells might be able to consider using county-owned light poles).
- Santa Cruz County is looking ahead to serve needs in the next 40 years and is identifying priority areas for conduit and fiber to support economic development.
- The greatest challenges thus far were the ideas of a "dig-once" ordinance and developing a countywide plan to install county-owned conduit every time someone digs. Originally the County staff didn't want to deal with the extra work, but now the Director of Public Works understands the benefit and is a leading advocate.

<u>Bill McCammon, Vice Chair of the Executive Committee, FirstNet Public Safety Advisory Committee</u>
- In rural areas there are many challenges in communicating among first responders.
- President Obama issued an executive order to build the first nationwide broadband network dedicated to public safety.
- Costs to build a nationwide network will exceed the $7 billion authorized to plan the network; there will be opportunities for public-private partnerships to complete the build.

<u>Themes from Roundtable Discussion:</u>
- The State should include a reference to broadband in all documents focused on protecting the environment and reducing greenhouse gas emissions, such as in the AB 32 Scoping Plan.
- Broadband should be included as an optional, stand-alone element in General Plans, so it is tracked like water and public safety. OPR should prepare a template for a broadband element.
- Local governments officials need to include broadband as an essential necessity and utility.

Perspectives of Broadband Deployment Challenges and Current Strategies
Moderated Roundtable, Moderator: Kristine Mazzei, Valley Vision

<u>Scott Adams, Director of Government Affairs, Comcast</u>
- CPUC data shows that 96% of California households are served. The geography makes the remaining 4% of unconnected homes increasingly difficult to serve.
- Comcast is focusing on households unable to afford broadband through the Comcast Internet Essentials (CIE) program to offer service at $9.95 per month to low-income families with a child on the free or reduced school lunch program plus and a $150 voucher for a computer coupled with digital training. CIE connected 220,000 households nationwide in 2 years, with an average of four people per household. Surveys found that 98% of participants use the Internet daily, 87% say their children use it for homework, and 57% connect to government services.
- Local officials should use caution in developing "dig-once" policies that include waiting periods that cause undue delays in deployment. The City and County of San Francisco is developing language for 60-90 day waiting period before construction to notify other companies for coordination purposes, but this will cause bid delays in service to customers.
- Comcast wants to work with city governments to find broadband solutions for downtown centers and business parks.

<u>Marc Blakeman, Regional Vice-President, External Affairs, AT&T</u>
- AT&T (like the industry as a whole) is facing capacity issues to keep up with demand on the mobile network; there has been a 20,000% increase in demand since the launch of the iPhone.
- On the wired side, there are new challenges as well: 1/3 of all international calls today are via Skype over AT&T infrastructure; Netflix streaming is 1/3 of all North American Internet traffic.
- To meet the rising mobile broadband demand, AT&T is expanding its LTE footprint, which can provide wireless service at 25Mbps, and 4G network, which offers speeds of 7-12Mbps.
- AT&T has had a successful partnership with Joint Venture Silicon Valley to help with wireless siting issues, including hosting community meetings to explain different wireless technologies.

<u>John Paul, CEO, Spiral Internet</u>
- Spiral Internet provides DSL service in Nevada County, a heavily-forested terrain difficult to serve with wireless technology, but with areas lacking broadband service. A community mobilization for a Google Fiber for Communities application indicated that a fiber-to-the-home

investment could be a worthwhile, so Spiral submitted a CASF application in February 2012 for a fiber optic project deployment that is currently in process.

- AT&T and Verizon essentially are getting out of the DSL wireline market in rural (and some urban) areas with no plan to deploy faster wireline services (fiber), leaving a monopoly of the one cable company offering faster Internet speeds only in small denser footprints and the illusion that cellular wireless infrastructure will serve the rest of the areas. Nationally, the telcos and cable companies are aggressively pushing legislation that prevents municipalities from deploying fiber-to-the-home, but California has not seen this effort come to fruition. And, CASF grants now will be available for non-telephone companies (ISPs and local governments) to deploy broadband into unserved areas.
- In the very near future, consumer demand for the Internet will require ultra-fast symmetrical access speeds, which only fiber-to-the-home makes possible. Making it easier to approve fiber optic network builds will make a community future-ready and economically-sustainable. Spiral recommends partnering with DSL resellers and getting buy-in upfront from local government officials when planning major broadband deployment projects. A helpful free magazine is *Broadband Communities* which also hosts conferences that feature successful model projects.

Louis Fox, President and CEO, CENIC
- The Corporation for Education Network Initiatives in California (CENIC) is a non-profit chartered by the statewide higher education systems to build and manage a network (including fiber backbone) for research and education purposes. CENIC also has a mission to serve K-12 education (beginning by connecting County Offices of Education).
- A challenge is the tremendous demand for broadband in the state, but not enough middle-mile infrastructure. Connectivity beyond County Offices of Education is mixed and is the responsiblility of individual districts. Many schools are still on T1 lines. With hundreds of students using devices for content and testing, it's an untenable situation that will be amplified as testing goes online for Common Core Standards.
- Libraries are the primary point of access for many citizens. A successful bill in the legislature, if funded, will allow libraries to connect to the CENIC network, allowing the funding currently spent by libraries to increase the bandwidth by an order of magnitude.
- CENIC and CETF are partnering with the Governor's Tribal Advisor to convene consultations with Tribal Leaders throughout the state to better understand broadband gaps on Tribal Lands and work collaboratively to improve access.

Rob Volker, CEO, California Broadband Cooperative
- The California Broadband Cooperative (CBC) is a Broadband Technology Opportunities Program (BTOP) grant recipient, funded by CASF and ARRA grants (National Telecommunications and Information Administration) building Digital 395, a 585-mile network from Barstow, California to Reno, Nevada that will serve community anchor institutions along State Route 395.
- Digital 395 will bring 1Gbps into schools, 10Gbps into community colleges and will connect to major east-west Internet routes.
- As a wholesale cooperative, CBC wants to stimulate local demand and investment by flooding the area with bandwidth and Internet capacity so the existing providers will use their networks for connections for the "last mile."
- The cooperative model has been a good public-private partnership structure, as no single entity can dominate the business and it operates independent from any particular customer.

Themes from Roundtable Discussion:
- The State needs a policy that enforces connectivity to rural communities to level the playing field for educational attainment, public safety, and quality of life.
- Regulatory streamlining by the State would help, such as uniformity, reducing complexity, and reducing federal and State discrepancies.
- Small communities have different economic models that may require subsidies, or innovative solutions to support the tourism industry which has statewide benefits.
- Deploying infrastructure such as fiber requires building utility boxes and several jurisdictions oppose installation of that kind of necessary equipment on an esthetic basis.
- Some portion of education funding needs to go towards broadband infrastructure and integration of technology into teaching and learning, including parent engagement, especially in low-performing schools in disadvantaged neighborhoods.

DAY TWO
Check-In: Facilitated Group Sharing of Day One Takeaways
Moderator: Tara Thronson

Take-Aways from Day One
- There is a need to facilitate partnerships among jurisdictions to achieve scale in deployment.
- Broadband should be elevated as a policy priority by CSAC, LCC and RCRC to facilitate collaboration among jurisdictions and to promote appropriate public policy.
- It is helpful to know about and be able to work with GO-Biz and OPR as key partners. The State has a major role in supporting and assisting local governments and regions.
- Shared broadband objectives across policy-program topics are needed with integration of efforts when applicable, which requires leadership at all levels of government.
- Specific examples from local jurisdictions are helpful, underscoring the value of the Roundtable and the opportunity for Local Government Officials to share experiences.
- It is useful to hear directly from broadband providers and it was clear that reforming policies and streamlining permitting processes are important to private industry.
- There is a need for government to start quantifying costs of regulation, so people understand the tradeoffs and costs of environmental regulations and other policies. Digital 395 took 2 years to complete the permitting process with 48 jurisdictions; too much cost goes into administering instead of actually doing the infrastructure deployment work.

Local Government Officials as Consumers
Panel Presentation, Moderator: Kevin Cann, RCRC

Karen Wong, Assistant Director of Public Safety Communications, Governor's Office of Emergency Services, California Emergency Management Agency (CalEMA)
- First responders need enhanced communication and interoperability of radios. FirstNet is the governance body to build the first nationwide broadband network dedicated to public safety.
- The FirstNet board has been established for about 1 year and is still gathering information, obtaining input, and developing the program before launching in California.
- FirstNet as a national broadband network will fill a major gap and allow many enhancements, such as: firefighters can get real-time data on floor plans; emergency managers will have real-time information to support evacuations; sensors on law enforcement vehicles can provide

license plate information before a stop or relay accident data, among other applications. It will be sustained ultimately with user fees, so it must be relevant to customers.

<u>Anne Neville, State Broadband Initiative Director, National Telecommunications and Information Administration (NTIA), U.S. Department of Commerce</u>
- The Chattanooga municipal utility built their "gig" network to enable smart grid, but they had a larger vision of the benefits of fiber-to-the-premises. Almost immediately, Chattanooga began seeing the impact of the investment with new technology start-up companies, 7,000 new jobs, and the in-sourcing of manufacturing. In 2011 they had a series of tornadoes and the gig network allowed them to re-route power so businesses had no downtime; they have a mesh network throughout the city that provides interoperability for public safety that has cut costs.
- Successful "gig city" projects were strongly supported by residents, chambers of commerce, and local governments. It was clear to these organizations that building broadband infrastructure is a chance to rebrand and rebuild their jurisdictions.
- New Mexico faces high rates of poverty, and the children rank last in child welfare. It is difficult to convince people that broadband is important when so many kids are getting left behind.   However, New Mexico has been successful by integrating broadband into other conversations. They have a great community broadband planning book available online.
- Demand is the other side of the equation on building a network. A lot of data explains why people are not adopting broadband, particularly low-income household. The NTIA Broadband Adoption Toolkit Report shares best practices from throughout the United States.

<u>Carolyn Hogg, Chief Information Officer, City of Fresno</u>
- The City of Fresno is the 5th largest city in California and, with over 350 types of crops, is the top agriculture-producing county in the nation.
- With the growing global food demand, crop production will need to double by 2050, driving the need for more smart farming solutions, such as in-the-field water sensor technology and automated tractors. Fresno seeks to be a center for agriculture research firms, recently hosting an Agriculture Technology Showcase where top scientists demonstrated products to venture capitalists. Also, Fresno partnered with existing infrastructure such as CENIC and Lawrence Livermore Labs to be competitive in rural areas for grant applications.
- The City of Fresno partnered with the federal government through the "Strong Cities Strong Communities" initiative providing access to multiple federal departments. This multi-agency effort received support from the "IBM Smarter Cities Challenge" has attracted attention from around the world. One of mayor's main initiatives is to focus on downtown revitalization, and she challenged the group to focus on agriculture technology. Fresno found that broadband adoption in the downtown corridor was low, with most businesses lacking a digital presence. Studies have found that businesses with a website gain $8,000 more annually in revenue; therefore, they are focusing on digital literacy for small businesses in downtown.

<u>Steve Monaghan, Chief Information Officer, County of Nevada</u>
- The greatest challenge from a county I.T. perspective has been having only a single provider. A county needs robust broadband to support moving electronic health records, probation systems, and other services to the cloud. Broadband increases efficiencies in government.
- The CVIN middle-mile project is in progress and soon there will be four major providers feeding into Nevada County. It will bring 1Gbps service to the library. With a grant Nevada County built a collaborative technology center with a variety of computing devices and digital equipment that can be checked out.

- It is important to have multiple paths out of a community to provide redundancy and be resilient in the case of emergencies. Once there was an accident on Highway 49 where a cable fell onto the highway. When the cable was cut to remove it from highway there were many local impacts: all phone and cell service went down, access to 9-1-1 was lost, ATMs didn't function impacting the ability to purchase gas and groceries.
- Government officials and organizations such as CSAC, LCC and RCRC can bring planners from multiple jurisdictions together to work with providers.
- By 2016, mobile smart devices will be the preferred way by most consumers to access the Internet, so the wireless network is important to get right now.

Themes from Roundtable Discussion:
- The U.S. is lagging the world in speed, rated approximately 15th globally.
- Redundancy is a luxury when you are still on dial-up (as is the case for many rural areas).
- There is a concern that 700MHz spectrum is not enough space for FirstNet and existing users.

Local Government Officials as <u>Service Providers</u>
Panel Presentation, Moderator: Tara Thronson, Valley Vision

Norma Santiago, Supervisor, County of El Dorado
- Public engagement and how government is run is changing. There is a need to consider how telemedicine will be delivered in remote rural areas, how farmers become successful, and at the same time generate revenue for the local jurisdiction.
- There is a need to go across county lines and work together to improve overall efficiencies and eliminate duplication. County infrastructure is antiquated. Local Officials need to look at broadband to save money and make those systems more efficient, such as with water usage. Austin, Texas is a digital community with great ideas on their website to engage the public.
- The Lake Tahoe Basin Prosperity Plan identified broadband as an essential infrastructure platform for economic success. There is a need to develop a financial model for a mutual benefit as had been established for transportation and energy.

Barrie Hathaway, Executive Director, Reliatech
- The Stride Center is focused on reducing poverty through training that leads to well paying jobs. Its social enterprise, Reliatech, hires Stride Center graduates from the Information Communications Technology (ICT) programs to refurbish computers and provides work experience to help the new graduates launch a career.
- The Stride Center has placed over 600 people into better-paying jobs and delivered about 2,000 computers into low-income households.
- The Stride Center now operates a call center offering statewide service to help direct low-income households to low-cost broadband solutions and providing technical support.

Denise Jurca, Director of Operations, CA Telehealth Network
- The California Telehealth Network (CTN) is deploying broadband to bring telehealth to rural areas and medically-underserved urban communities. By enabling secure video-conferencing, CTN helps keep patients in their communities so they don't have to miss work and travel long distances to see a specialist. Registered CTN sites receive a discounted dedicated Internet line. CTN is now offering a variety of different products, including an encrypted cloud-based service that allows physicians to connect via smart device, and Eceptionist, an electronic referral tool.

- Previously AT&T was the sole provider for CTN selected by the University of California through an open "request for proposals" (RFP) process. A new RFP was issued by CTN to encourage vendor competition to ensure the best possible pricing.
- Data shows an economic savings of about $300 per patient with avoided transportation costs and lost wages through use of the CTN.

Jarrid Keller, Acting Deputy State Librarian, California State Library
- Libraries are the great equalizer of economic disparities and have long served as "hot spots."
- In partnership with other organizations, the State Library deployed JobScout, a digital literacy training tool that teaches users how to apply for a job online using a game-based environment.
- Libraries don't have sufficient bandwidth according to a recent statewide survey.
- Over 1,100 branches could have the opportunity for 1Gbps service through a partnership with CENIC and would be poised also to provide community wifi up to a one-mile radius. Currently over 40% of the library branches statewide only have a T1 line, and often around 3PM (when students are out of school) the Internet service slows to a stop as it reaches capacity.

Adelina Zendejas, Broadband and Digital Literacy Deputy Director, Department of Technology
- The California Department of Technology fosters and promotes statewide broadband policies.
- The Department is facilitating collaboration among State agencies and departments to help accelerate broadband deployment and adoption.
- The Department is developing an inventory map of State properties available for co-location for broadband deployment and preparing informational videos to guide a provider through the co-location process. Secure and sensitive locations will not be on the map.

Themes from Roundtable Discussion:
- Co-location applications can cost up to $5,000 which may not be justifiable for a small ISP.
- The City of Fresno would like to draw more business to the local airport with high-speed broadband and is look at cooling technologies to keep produce shipments local.
- Orange County has sufficient broadband infrastructure, but finds that there still is a need to teach people how to use it. Digital literacy and access to a device is essential for adoption.
- There is a need to think about "communities within communities", such as the foster system. Data shows that 1 in 11 children will spend time in the foster system and less than 50% have access to a computer, leaving these kids progressively behind. Half of foster children become homeless after emancipation and 70% have to rely on some form of public assistance.
- County Fair sites (and State Fair property) could be connected with broadband for emergency responses when needed and also serve as digital hubs for community access most of the time.

Call to Action and Next Steps
Facilitated Wrap-Up of Top Takeaways, Moderator: Sunne Wright McPeak, CETF

Themes from Roundtable Discussion:
- As CSAC focuses more on economic development policy, broadband should be included in the discussion with County Supervisors taking a more active leadership role.
- Library access is important to positively impact communities. Libraries can be digital hubs to facilitate collaboration among several partners.
- There is great potential for increased connectivity among public facilities, including county health departments, hospitals, and library districts.

- It is clear that local governments, particularly in low-income and rural communities, will need to work more collaboratively to close the gaps where the market isn't driving deployment.
- This is the time is right for RCRC, CSAC and LCC to help spread the message and develop policy guidelines and initiatives to improve broadband access. These organizations have several policy committees that could incorporate broadband deployment and adoption.
- The pioneering work being done by many local governments is inspiring and should be shared more widely with others jurisdictions.
- There must be continued efforts to seek funding for broadband deployment to rural areas for economic development (including smart farming), education and healthcare.
- The City of Fresno will reach out to Fresno County for better collaboration.
- The County of Nevada is updating their General Plan, gathering as much information as they can from Humboldt County, and will share what is developed.
- The Santa Cruz County model of building a conduit infrastructure network to fill in service gaps and lease out as a revenue stream should be considered by other jurisdictions.
- Transforming fair grounds into connected centers and digital hubs is a great idea.
- Local Government Officials request help from CETF to approach Google to develop a California model or pilot, such as connecting libraries with 1-mile radius of free wifi.
- A White House blog announced in September 2013 a new initiative that might open federal rooftops for wireless co-location.
- CPUC staff strongly requests input from Local Officials about unserved areas so the broadband availability maps can be refined. This is important for both State and federal policy because the CPUC maps are submitted to the FCC. The time for accurate data is now.

Closing Remarks

The Local Government Officials Roundtable concluded with the following closing remarks:

David Finigan, President, California State Association of Counties; Supervisor, County of Del Norte
- The Local Government Officials Roundtable was a very positive experience and he is requesting CSAC staff to hold Supervisors accountable for advancing broadband policy.
- He is looking forward to conducting local asset mapping and will review existing policies to assure appropriate "dig-once: and other best practices are included.
- He will connect with the local Regional Consortium to forge other partnerships, to such as with Tribal Leaders, schools, foster parent associations, and other community organizations.

Kevin Cann, President, Rural County Representatives of California; Supervisor, County of Mariposa
- The Local Government Officials Roundtable was successful with so many rural representatives participating along with the RCRC professional executive staff.
- He will make broadband deployment and adoption a significant focus for RCRC, specifically within economic development efforts.

Cecilia Aguiar-Curry, League of California Cities; Mayor, City of Winters
- The next Local Government Officials Roundtable should include Tribal Leaders, Department of General Services, California Department of Education, and County Offices of Education.
- She will be turning city officials and the council of governments into "broadband evangelists" to help raise the awareness and prioritize closing gaps in the Digital Divide.

<u>Mark Wheetley, League of California Cities; Vice Mayor, City of Arcata</u>

- The Local Government Officials Roundtable was excellent and the speakers helped paint a picture of the challenge and potential solutions.
- County and city borders aren't always the best boundaries to facilitate a solution for providers. There is a need to explore legal structures such as a joint-powers authority or cooperative.
- There is an imperative to expedite broadband deployment while leveraging existing assets and maintaining a focus on the equity issues.
- He will urge the League of California Cities to take action to close the Digital Divide.

Conclusion

The Local Government Officials Roundtable, through both facilitated discussions and networking opportunities, built bridges over the Digital Divide that all participants agree is a barrier to economic prosperity and quality of life. Passionate voices were heard around the table and a dynamic relationship was born between representatives of communities that are facing similar challenges. The Roundtable concluded with a positive response and energized broadband champions across the state, with a commitment to follow up within their own communities and organizations, as well as together and in collaboration with State and federal partners, statewide associations, broadband providers, and other key stakeholders.

Successful Outcomes

The following summarizes the successful outcomes of the Local Government Officials Roundtable:

- Local Government Officials engaged in dynamic and energizing conversations.
- Good representation from 21 Counties, 9 Cities, 9 state agencies, 5 Consortia, 4 Statewide Associations, 2 federal agencies and 5 telecommunications firms, representing many unserved and underserved areas of California.
- Appreciation by Local Government Officials for GO-Biz, OPR, Department of Technology, State Libraries, and CalEMA First Net with opened communications for future collaboration.
- Raised awareness and readiness by CSAC, LCC, and RCRC leaders to take action regarding broadband deployment and adoption.
- Recognition by Local Government Officials that follow up and ongoing collaboration will be required to elevate broadband issues in appropriate policy committees and other venues.
- New "broadband champions" emerged and stepped forward.
- A network or "leadership learning community" evolved and coalesced for continued communications and collaboration.
- Understanding by Local Government Officials of the opportunities for integrating broadband and information technologies into all policies and service programs.
- Individual responsibility articulated by Local Government Officials for specific actions within local jurisdictions.
- Commitment to continued participation in the Local Government Officials Roundtable to work together in 2014 and convene again in 2015, bringing additional stakeholders into the conversation and "leadership learning community."

<p align="center">**LOCAL GOVERNMENT OFFICIALS ROUNDTABLE**
PARTICIPANTS</p>

Elected Officials

Name	Affiliation	Title
Lori Acton	City of Ridgecrest	Councilmember
Lee Adams	County of Sierra, Board of Supervisors	Supervisor
Cecilia Aguiar-Curry	City of Winters	Mayor
Carre Brown	County of Mendocino, Board of Supervisors	Supervisor
Merita Callaway	County of Calaveras, Board of Supervisors	Supervisor
Kevin Cann	County of Mariposa, Board of Supervisors	Supervisor, District 4
Efren Carrillo	County of Sonoma, Board of Supervisors	Supervisor, District 5
Kim Dolbow Vann	County of Colusa, Board of Supervisors	Supervisor
David Finigan	County of Del Norte, Board of Supervisors	Supervisor, District 5
Dennis Garton	County of Tehama, Board of Supervisors	Supervisor
Dan Hamburg	County of Mendocino, Board of Supervisors	Supervisor
Chip Holloway	City of Ridgecrest	Vice Mayor
Mike Kasperzak	City of Mountain View	Councilmember
Jon Kennedy	County of Plumas, Board of Supervisors	Supervisor
Mark Lovelace	County of Humboldt, Board of Supervisors	Supervisor, District 3
Judy Morris	County of Trinity, Board of Supervisors	Supervisor
Scott Nelson	City of Placentia	Mayor
Don Saylor	County of Yolo, Board of Supervisors	Supervisor
Angela Swanson	City of South Lake Tahoe	Councilmember
Doug Teeter	County of Butte, Board of Supervisors	Supervisor, District 5
John K Viegas	County of Glenn, Board of Supervisors	Supervisor
Mark Wheetley	City of Arcata	Vice Mayor
Terry Woodrow	County of Alpine, Board of Supervisors	Supervisor

Other Government Officials, Civic Leaders and Stakeholders

Name	Affiliation	Title
Scott Adams	Comcast	Director of Government Affairs
Philip Arndt	Comcast	Director of Government Affairs
Luis Arteaga	California Emerging Technology Fund	Director, Emerging Markets
William Bayne, P. E.	Inland Empire Regional Broadband Consortium	Consulting Engineer
Louise Bedsworth	Governor's Office of Planning and Research	Deputy Director
Marc Blakeman	AT&T	Regional Vice- President, External Affairs
Stephen Blum	Tellus Venture Associates	President
Reid Cox	iFoster	CFO / Co-Founder
Christine Crawford	Yolo LAFCO	Executive Officer
Lea Deesing	City of Riverside	Chief Innovation Officer
Christina DiCaro	Michael F. Dillon & Associates	Lobbyist

Name	Affiliation	Title
Michael Dillon	Michael F. Dillon & Associates	President
Beverly Ducey	Tahoe Prosperity Center	Consultant
Louis Fox	CENIC	President & CEO
Darrene Hackler	UC Davis	Executive Director, IR & Strategic Initiatives
Anthony Halstead	County of Napa	Assistant Director of Library Services
Barrie Hathaway	The Stride Center	Executive Director
Staci Heaton	Rural County Representatives of California	Regulatory Affairs Advocate
Carolyn Hogg	City of Fresno	Chief Information Officer
John Jefferson	AT&T	Executive Director
Ana Maria Johnson	California Public Utilities Commission	Regulatory Analyst, California Advanced Services Fund (CASF)
Denise Jurca	California Telehealth Network	Director of Operations
Jarrid Keller	California State Library	Acting Deputy State Librarian
Trish Kelly	Applied Development Economics	Principal
Julie Langou	Eastern Sierra Connect Regional Broadband Consortium	Project Manager
Kimberly Lewis	HR Dowden & Associates	Consultant
Christina Lokke	California Special Districts Association	Legislative Representative
Christy Lopez	Aleshire & Wynder LLP	Attorney
Kristine Mazzei	Valley Vision	Managing Partner
Bill McCammon	FirstNet Public Safety Advisory Committee	Vice Chair of the Executive Committee
Sean McLaughlin	Access Humboldt	Executive Director
Laurie Miller	AT&T	Director Construction & Engineering
Steve Monaghan	County of Nevada	Chief Information Officer
Patrick Mulhearn	County of Santa Cruz	Policy Analyst
Jodi Mulligan	Valley Vision	Project Fellow
Geoffrey Neill	California State Association of Counties	Senior Legislative Analyst
Anne Neville	National Telecommunications & Information Administration	State Broadband Initiative Director
Martin Nichols	County of Lassen	CAO
Greg Norton	Rural County Representatives of California	President and CEO
Alana O'Brien	California Emerging Technology Fund	Vice President of Operations
Mary Anne Ostrom	California Emerging Technology Fund	Director, Communications
Gladys Palpallatoc	California Emerging Technology Fund	Associate Vice President
John Paul	Spiral Internet	CEO
Kish Rajan	GO-Biz	Director
Kirsten Rowe	City of Eastvale	Management Analyst
Norma Santiago	County of El Dorado, Board of Supervisors	Supervisor
Heidi Smith	California Department of Technology	
Tara Thronson	Valley Vision	Project Manager
Robert Tse	USDA, Rural Development	Community Planning and Development Specialist

Name	Affiliation	Title
Martha Van Rooijen	Inland Empire Regional Broadband Consortium	Consortium Director
Rob Volker	California Broadband Cooperative	CEO
Jennifer Whiting	League of California Cities	Legislative Representative
Patty Wong	County of Yolo	County Librarian
Karen Wong	Cal OES, Public Safety Communications	Assistant Director
Sunne Wright McPeak	California Emerging Technology Fund	President and CEO
Adelina Zendejas	California Department of Technology	Deputy Director, Broadband and Digital Literacy