



**“Connected Capital Area” Broadband Consortium
March 21, 2011
Sacramento Area Council of Governments Board Room**

MEETING SUMMARY

Participants: (see below)

Outcomes:

The meeting agenda included five sections: an opening **greeting from Lloyd Levine**, a panel discussion on **business outlook from the ISP perspective**, an update on **SB 1040 implementation efforts**, an overview of the **current status of the “Connected Capital Area” Broadband Consortium**, and a **partner roundtable discussion**.

The meeting opened with **greetings from the Honorable Lloyd Levine**, former state assembly member and current board member of the California Emerging Technology Fund (CETF). Key highlights were:

- The goal of the CETF is to close digital divide in California
- Every resource we can engage to reach this goal means we can provide more to the people we are trying to reach
- We need to be sure to provide access to those who can’t afford it, access to those who lack broadband because of where they live, and provide training so once they have access they know how to use it
- To understand policies of the Internet, we must look outside geographical concerns, since the Internet is not inhibited by such boundaries

Next, Tara moderated a **panel of representatives from the area’s four Internet Service Providers (ISP)**: Tim Ray from AT&T, Philip Arndt from Comcast, Brian Peterson from Frontier, and Eric Freund from SureWest. The panel began with five questions from Tara:

- Tell us about the strategies your organization is undertaking to improve broadband access and use in the region?
 - **Tim Ray:** Techniques that AT&T is starting to deploy is to work with communities and being more community friendly. It is important to meet with local planning committees prior to a build and deal with every issue that may happen (radiation, radio frequency, amount that will pass, invisibility of antennas, safety factors, speed enhancements, etc.). Address the “whys” first and maintain an open dialogue throughout the build process

- **Philip Arndt:** We work with groups like CETF & Valley Vision to discuss access, adoption, and how we can work together towards those goals. We are also embarking on projects (both this region & outside) to upgrade rural infrastructure, reaching homes that have never had broadband. Finally, we are working more with schools (Sacramento Educational Cable Consortium). We've added access to high schools, libraries, and middle schools and are now moving on to elementary schools. We are also working with health organizations and other large companies to increase their access.
 - **Brian Peterson:** Frontier prides itself on being on rural provider. We have to look at things on a bigger picture: not just residential customers, but how do we reach last 5%? We need to consider partnerships with every new build we make, potentially combining them with commercial opportunities to justify the build. We also need to look at all opportunities, not just a pocket of residential customers.
 - **Eric Freund:** We are taking advantage of joint-trench opportunities, often before homes are built in the first place, which equals less cost than established or infill areas. We are also taking advantage of symbiotic relationship between business & residential opportunities. We acknowledge that networks are shared networks, and so we must come at the business case from different points of view to justify the cost. Currently, we are focusing on: bonding technology (get higher speeds out farther across existing line) and shortening loop links to provide advanced services (e.g. video) to more customers.
- What 2-3 goals might a regional coalition of broadband stakeholders help you achieve that you can't achieve alone?
 - **Philip Arndt:** One of our challenges is broadband adoption and the way that people are using broadband these days. How we market to a customer is very different than it was five years ago and will be very different in five years. This group must consider what broadband access is: do people want it and how do they want it. We can get access to rural areas and then find out that the end goal wasn't what the people want or will use in the next 2-3 years.
 - **Brian Peterson:** Securing funding (e.g. California Advanced Services Fund) is a challenge that we could use assistance with, the last 5% is a big challenge. Funding allows us to reach out to those customers and provide them with the access they need. The right-of-way process, and whether or not a city has restrictions on the process, is a challenge. The consortium could consider working to streamline this process with municipalities.
 - **Eric Freund:** This has to be looked at from demand and supply perspective. We need to try to understand where it is a supply issue and where it is a demand issue. What would drive adoption of these services would be an important component to get our arms around. Potentially consider prepaid broadband that applies across providers based on providers available in the area.
 - **Tim Ray:** We need to understand what our challenge is and where we need to go to ensure services to the public. Data traffic will increase 8 to 10 times what

it is right now and we are therefore confronted with the challenge that we must grow wireless network to meet the growing broadband demand of the future. The consortium needs to understand these demands and the growth of these demands and become an advocate for the providers. You need to educate yourselves on existing challenges (capacity & growth) and be an advocate to help that growth.

- What are the top challenges your organization is facing in 2011?
 - **Brian Peterson:** We are seeing similar increases to AT&T on our hardline consumption. Our current users are doubling their usage year-over-year, so our costs are doubling year-over-year; we need to find services to accommodate that cost increase. We need to know how we can keep up with their needs, provide that customer what they need, and continue to invest in the network. Also, we have to acknowledge that video is a bigger piece of what are customers are using, which adds to additional bandwidth needs.
 - **Eric Freund:** Margin compression is a challenge for us, as a lot more bits going across the pipe. Right now, the network is more than able to handle it, but there is considerable margin pressure (cost of content). Regulatory uncertainty in Universal Service Fund reform is a concern. We are not sure what the impact will be or how it will affect current services. Finally, the economy in this region is not as stable as in our other service area, which presents a challenge for us as well.
 - **Tim Ray:** The future is wireless broadband and we must keep that in front of us at all times. 27% of homes no longer have wire line and this trend will continue to grow. We need to make sure that we can stay ahead of the curve of broadband need in the United States.
 - **Philip Arndt:** The economy is still top challenge for us. We need to consider how we take our products and fit them into the economy we have today. Typically, our Internet product has been a top-tier product, but in this economy not everyone can afford that. We are now looking at potentially introducing a second-tier product, which would not be as fast and perhaps have less bells & whistles, but would fit everyone's budget. Competition is also a challenge, not just those here, but also companies like Netflix and others, and we need to look for ways to deal with this competition. Finally, we are challenged with broadband adoption, in terms of how people want to use and receive the product.
- What big trends are you seeing that we should pay attention to in the next 5 years?
 - **Eric Freund:** Video (e.g. Netflix) gets a lot of press, so we're looking at what they're doing with their streaming services (adaptive bitrate streaming or ABS). We tend to look at how to get more bandwidth to the device, but we want to get more across less and ABS will help do this as it improves in technology. The notion of machine-to-machine communication (e.g. OnStar, Kindle) has broad ramifications when you consider it with smart grid so the amount of devices connected to the net will explode over time.

- **Tim Ray:** So many technologies are currently running on a wireless network and so many more will follow (healthcare, electric cars, photo frames, etc.). We see the potential for everything being connected.
- **Philip Arndt:** Tim hit it right on. So many systems use wireless technology and are controlled with one of our devices. So many people rely on broadband in their pocket and having everything on one device. As a consortium and as a company, we need to be aware and ahead of the curve.
- **Brian Peterson:** We are trying to get the electronics closer to the customer, but now we also need to get the content closer to the customer. We are caching servers to track how customers are using the Internet, which reduces the distance that information needs to travel to the customer and thus provides better services to our customers. We need to prioritize certain products/services that are important to the customer and have a certain guaranteed quality and service based on customer selections.
- What technology shifts are on the horizon for broadband?
 - **Tim Ray:** 3G, 4G, and Long Term Evolution (LTE). LTE will bring much higher speeds. Having LTE in a neighborhood will drive up real estate property value, as more people will want to be near the access points.
 - **Eric Freund:** There is a greater need for symmetrical bandwidth. Also, we need to consider management of the home network: as we have more devices inside are house, we should be making the experience easier for customers. For us, we need to make it easier to solve customer problems from multiple-device households when they experience an issue

After covering the five questions, Tara **opened it up to the group to ask questions of the panel.**

- **Brent Smith:** Is lack of access to capital limiting your ability expand/upgrade your systems?
 - **Brian Peterson:** Yes. People are doubling usage, so our costs doubling but our revenues not necessarily increasing as quickly.
 - **Tim Ray:** Ditto, and of available capital what bucket do you put the capital in? Customer service? Technicians? Network?
 - **Philip Arndt:** I agree. We look at capital upgrade projects and those get challenged with other projects we have, both as a company and within our region.
 - **Eric Freund:** Access to capital is better today than it was 12-24 months ago, but it is an ongoing challenge and we have to prioritize our capital very closely.
- **Ed Williams:** Speak to how these efforts could help bring small or medium businesses into the information age.
 - **Eric Freund:** Computer processing has come a long way and much better services are now able to provide to businesses better. The challenge is that you then get into quality of service requirements and must be more proactive in managing the customers' business or home network to ensure the services are delivered in an effective manner.

- **Brian Peterson:** I know the state has had the similar objective of telecommuting one day a week. I see it as a plus because I see those working from home doing most of their online activity during the day. This could balance out peak jump of “after work” usage that currently causes the systems to slow down at certain times of day.
- **Philip Arndt:** More and more of our call center and account executives are working out of their home. Beyond that we encourage and have ways our employees can work remotely.
- **Tim Ray:** Of 7800 users up in Auburn that will be effective by our new installation, many of them are new businesses. Through this build, we provide more signals at better and faster rates. It is about speed and being able to receive it in business and home.
- **Rob Osborne:** How do you justify continued investment, particularly in network centers?
 - **Brian Peterson:** In the long and short term, we are going to have to look at a pay-per-use scale rather than our current model, as usage is exploding. Two percent of our customers are using 30-40% of the network. There is a small percentage there that needs to pay a little more so we don’t have to raise everyone’s rates.

Following the panel discussion, Gladys Palpallatoc from the California Emerging Technology Fund (CETF) provided an **update on the SB 1040 implementation efforts** (supplemental handouts were provided):

- Last week, the CETF met with California Public Utilities Commission (CPUC) staff to reiterate the recommendations from the consortium. We did not receive much comment back in terms of opposition, which is good news. It seems that it may be smooth sailing from here, but that remains to be seen.
- The funding timeline remains a challenge. It was extended by a week, but then was extended out until end of this year. We are meeting with CPUC staff to push the timeline so funding could happen as soon as July of this year. We are hoping to get in front of the CPUC for a decision by May. Also, we are going to try to get retroactive funding from July 1st and on if the funding is not applied until later in the year.

Tara then provided a **brief update on the status of the “Connected Capital Area” Broadband Consortium:**

- AT&T & Comcast have provided additional sponsorship to get additional staff time to create events like this and continue building the regional coalition.
- One of our immediate action areas is positioning this group to go after the SB 1040 CASF funding.
- We are consistently looking at what is our next step and how can we work together to improve digital literacy to those who are not adopting. We invited Joe Gross here

today to tell us about an event we would like to host in Sacramento, that can help bring awareness and tools to the benefits of adopting broadband.

Joe Gross from Sustainable Systems, Inc. discussed **the Get Connected Sacramento event** that is currently in the planning stages:

- Get Connected Sacramento will take place on a Saturday from 10-2PM
 - Very family-oriented and family friendly event
 - Similar events have been done all over the state, extensively in Southern California, with attendance low as 400 and high as several thousand
 - The event focuses on people that have not connected to give them a “hands-on” experience of how to use the internet and, once connected, how they should utilize that connection (healthcare, employment, educational services)
 - The event is comprised of four parts:
 - Workshops – e.g. intro to broadband and the internet, how to find employment online (presented by EDD), how to work with your healthcare provider online (presented by a local healthcare provider)
 - Booths – showing attendees the types of things they can do once connected, like how to see their kid’s school scores online
 - Tech Support – attendees can bring their technology and trained technicians will examine, give diagnostics, and potentially repair the device
 - Once an hour a free computer will be given away. Entry is done in the form of a raffle and, in order to participate in the raffle, attendees have to qualify by attending a certain number workshops and/or booths.
 - It will include the entire 6-county region, probably located in Sacramento
 - It will benefit the consortium because it improves the public safety net in the area, as we can collect info on broadband infrastructure and potentially meet new partners
 - First organizing committee meeting within the next two weeks; connect with Joe if you are interested in being a part of this event
 - Comment from **Ron Cooper**: We would love to work with you. Access Sacramento held similar event and had about 200 people attend, including a great press turnout. It is important to address issue of families having computer but lacking use at the home, especially homes without youth

Tara then initiated a **partner roundtable discussion**, asking each person in the room to answer one or both of the following questions: what is the key broadband-related issue you are struggling with, and do you have an underutilized asset?

- **Cathy Emerson**: Our current challenge figuring out how to use broadband subscription data from CPUC. When it is at the census track level it is difficult to navigate, so we are trying to eliminate or black out census track where know people live so we can see where the usage really is happening.
- **Stephen Blum**: We’re focused on trying to expand middle-mile availability. Our underutilized asset is a grant from CASF and our desire to convert it to smaller project.

- **Harold Galicer:** Our challenge is as part of the statewide smart grid center we're trying to figure out how to develop a business case to low-income communities to have smart grid.
- **Brent Smith:** Terrain in low population densities. Our focus was entirely outside the Sacramento area, out where it is hard to make the business case or present a return on investment. We are too much a well-kept secret; not enough people know about what we are doing. We have money to loan, but lack a presence in Sacramento, so it would help for members of the consortium to pass on information to increase awareness of those funds.
- **Jim Cline:** Uncertainty of the economy, as our largest customers in Elk Grove are government agencies, schools, and hospitals. Job reduction & foreclosures in the area are concerning to us. Regardless of competition, nature of business climate right now is challenging.
- **Ron Cooper:** Please extend invitation to youth to send project to Youth Media Forum for Social Change (see handout). Also, we are learning to work with existing, trusted organizations in South Sacramento to assist with outreach and adoption.
- **Amy Williamson:** We help residents with access and adoption for things like employment, education, and other resources to help them get ahead. Our underutilized asset is that we have computer labs at several sites and had agreements to have educational services, but due to the economy lack partnerships to provide instruction. We are seeking volunteers and partners to help with this.
- **Dean Peckham:** The state budget crisis is having ripple effect in confidence in local economy and is affecting our ability to deliver services.
- **Darby Patterson:** Our challenges are access to broadband in areas specifically that Eric (Freund) spoke about, educational opportunities for parents and people in underserved areas to show them the value of the internet and how to work with their kids on a home computer.
- **Ed Williams:** Small businesses are the largest employer in the state, so we see our underutilized asset as small businesses.
- **Rob Osborne:** Organizing community at the community level to get house-by-house broadband data, mapping effort (where is coverage), challenges of early startup
- **Greg Chamberlain:** Getting broadband to south sites. Fiber to the home: would like to see use go up in this area.
- **Bill Mueller:** We look for issues just like broadband because in order to address the issues we have, it takes a consortia (a network of organizations that have a stake in this) and we believe by working together we'll be strong and more formidable and able to look for opportunities. Our interest is to provide a container or platform where we can come together and speak of shared actions and goals. The challenge is to prepare ourselves for funding that would allow this group to formalize itself and allow for more strategic action to help close digital divide.
- **Helen Schaubmayer:** We would like to help where we can.

- **Trish Kelly:** Our challenge is learning what we're all doing and how we can support each other across the various regions. Any ideas and opportunities of how we can work better with providers in the East Bay would be helpful.
- **Philip Arndt:** Wave of business challenges in extending our plan for broadband. If we survey an area and we cannot provide the services, it would be nice to be able to coordinate with the consortia and find a provider that can provide those services.

Tara concluded the meeting thanking the panel again, and thanking those who attended.

Participants:

Philip Arndt – Comcast
 Stephen Blum – Tellus Venture Associates
 Peter Carruth – Integra Telecom
 Greg Chamberlain – SureWest
 Jim Cline – Frontier
 Ron Cooper – Access Sacramento
 Cathy Emerson – Center for Economic Development
 Eric Freund – SureWest
 Harold Galicer – SeaKay
 Joe Gross – Sustainable Systems
 Trish Kelly – Applied Development Economics
 Adriane Lepage – Valley Vision
 Lloyd Levine – California Emerging Technology Fund
 Christine Martin – California Telemedicine & eHealth Center
 Bill Mueller – Valley Vision
 Gladys Palpallatoc – California Emerging Technology Fund
 Darby Patterson – Stride Center Sacramento
 Dean Peckham – City of Sacramento Economic Development Department
 Brian Peterson – Frontier
 Tim Ray – AT&T
 Helen Schaubmayer – Center for Strategic Economic Research
 Dave Snyder – Placer County Office of Economic Development
 Tara Thronson – Valley Vision (Facilitator)
 Ed Williams – American Web
 Amy Williamson – Sacramento Mutual Housing Association