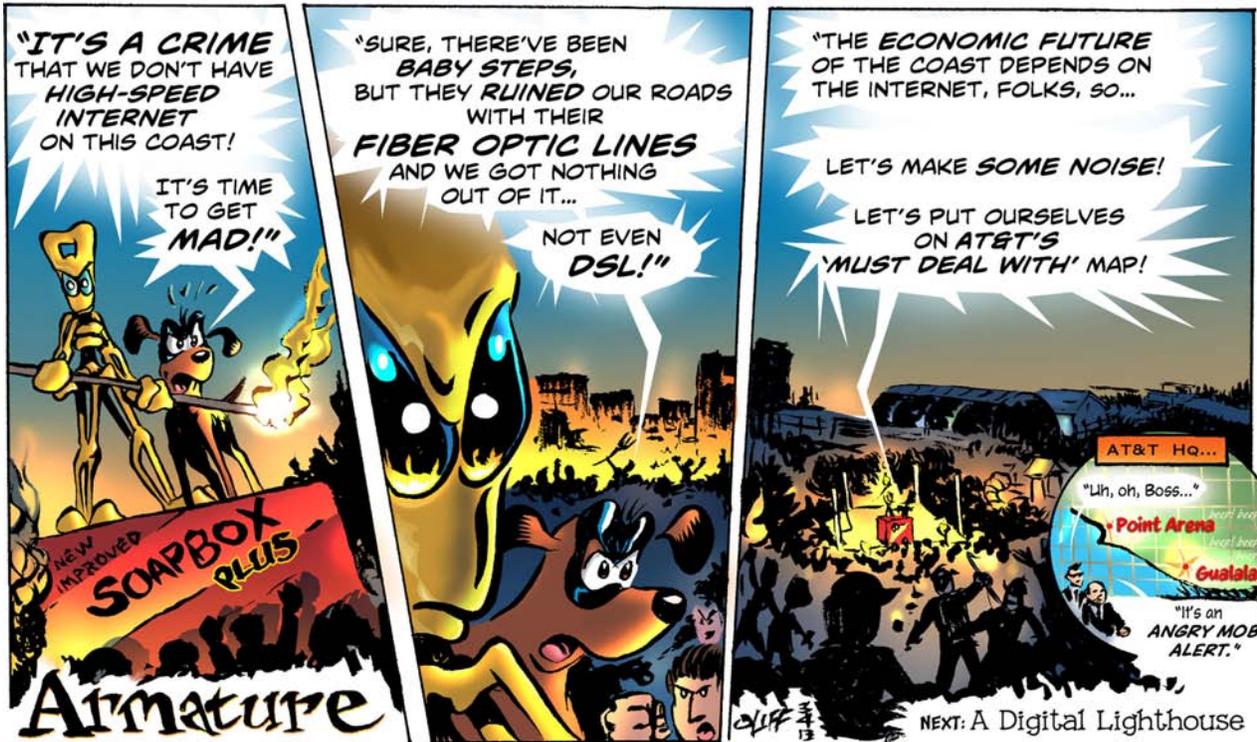
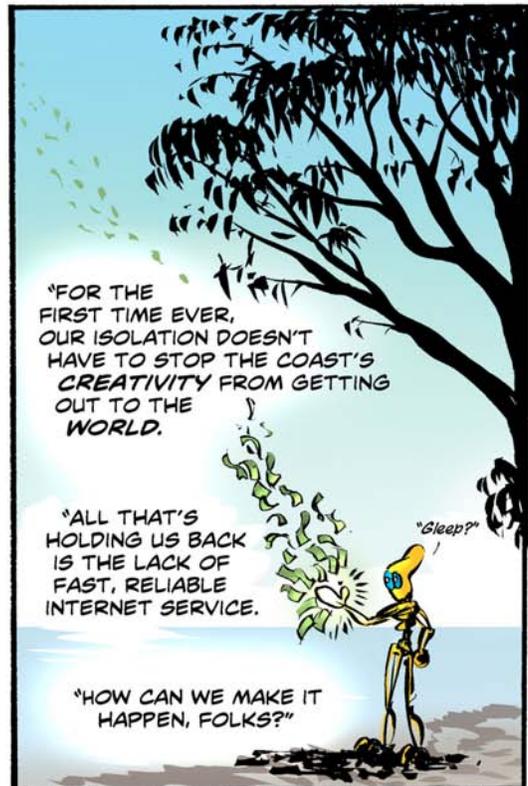


State of Broadband in Northern California, 2013



"WE NEED FAST INTERNET TO BE LIKE A DIGITAL LIGHTHOUSE TO GUIDE THOSE DOLLARS TO US, SO WE CAN HELP THEM FULFILL THEIR MOST PRIMAL DESIRE: TO BE SPENT SOMEPLACE. AND WHY NOT WITH US?"



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Broadband Alliance
of Mendocino County

Broadband Alliance of Mendocino County

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State of Broadband in Northern California

June, 2013

This document is the result of a multi-year collaboration between Mendocino and Sonoma Counties to assess the state of broadband in Mendocino and Sonoma Counties, and to understand our situation in the regional planning context of Northern California.

Unfortunately, the news is grim – rural areas of both Mendocino and Sonoma County often have a crippling lack of broadband service, and we suspect the same is true in many rural areas of all Northern California counties.

The message is clear. Northern California needs an affordable robust regional middle-mile infrastructure to support last mile deployment in these areas, and additional money must be added to the California Advanced Services Fund broadband infrastructure grant account to fund its deployment.

We encourage all who have an interest in the economic health of Northern California to read this document carefully, and take to heart the plight of our rural population frozen into a permanent digital divide.

Jim Moorehead
Executive Committee Chair, Broadband Alliance of Mendocino County

Mike Nicholls
Chair, Access Sonoma Broadband

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Golden Bear Broadband Endorsements



**Congressman Jared Huffman,
California District 2**

Congressman Huffman supports the sound reasoning behind GBB.



**Congressman Mike Thompson,
California District 2**

Congressman Mike Thompson is keenly aware of the need for universal broadband access, and supports the GBB project.



**California Senator Noreen Evans,
District 2**

Senator Evans has endorsed the GBB project because broadband connectivity is absolutely essential for Northern California counties



**California Assemblyman Marc
Levine, 10th District**

It is time to eliminate the digital divide in rural communities, and I fully support GBB.



**California Assemblyman Wesley
Chesbro, 2nd District**

Assemblyman Chesbro believes GBB will address the broadband needs of rural communities.



**Supervisor Efren Carrillo, Sonoma
County 5th District**

The GBB project is critical to bridging the rural community opportunity gap.



**Supervisor Dan Hamburg,
Mendocino County 5th District**

GBB will be a lifeline to the struggling economies of Northern California.



**Supervisor Mike McGuire, Sonoma
County, 4th District**

GBB has brought together Northern California counties to bridge the digital divide.



**Mendocino County Board of
Supervisors**



**Sonoma County Board of
Supervisors**



**Broadband Alliance of Mendocino
County**

This endorsement represents endorsement by over 100 anchor institutions, businesses, government, and individuals from throughout Mendocino County.



Access Sonoma Broadband

Contents

- A. **State of Broadband in Northern California 2013** – Summary of the current state of broadband in Northern California
- B. ***Mendocino County's Digital Divide*** – Examples of the persistent digital divide in Mendocino County.
- C. ***Sonoma County's Digital Divide*** – Examples of the persistent digital divide in Sonoma County.
- D. ***The Map Problem*** – A short discussion of why the National and California Broadband Maps freeze in the digital divide.
- E. ***Broadband Alliance Data Acquisition, Compilation, and Analysis*** – A summary of three Alliance data acquisition, compilation, and analysis projects. These projects were/are aimed at documenting ground-truth broadband conditions throughout Mendocino and Sonoma Counties.
- F. **Detrimental Provider Practices** – A summary of service provider practices that impede elimination of the digital divide in Mendocino and Sonoma Counties.
- G. **Affordable Middle-Mile Infrastructure** – A short discussion of affordable redundant middle-mile fiber infrastructure.
- H. ***Broadband Alliance of Mendocino County Vision Mission Goals & Strategies/Digital Divide*** – Contains a one-page handout of the 2013 Alliance vision, mission, goals and strategies backed with the Alliance definition of the Digital Divide.
- I. **Endorsements** - The Alliance has been designated endorsement agent by those ninety seven (97) individuals, organizations, and governments summarized in the included table.
- J. **Broadband Access Inventory for Route 1 Corridor Project footprint.** Standard BAI data for the proposed R1CP footprint.
- K. **Roads & Communities.** Special road and community survey compiled by driving the R1CP route, and supplying community knowledge about service.
- L. **Connect Joy Road (Sonoma County) Challenge to Served Status** – Connect Joy Road is a neighborhood group representing over 250 homes in West Sonoma County. They have submitted an official challenge to California Broadband Map data that showed them broadband fully served, while their ground-truth data showed them unserved. (Separate file)
- M. **2012 Interim Report.** This report summarizes Alliance activities during 2012 pursuant to the CASF planning grant through Redwood Coast Connect and the Humboldt State Sponsored Projects Foundation.
- N. **Broadband Crisis in Rural America** – A two page handout summarizing the problem.
- O. **Local Press** – Two articles on broadband from the Independent Coast Observer, Gualala, CA.

A. State of Broadband in Northern California 2013

Thanks to Senator Noreen Evans' office for suggesting that this analysis be presented in the following form.

1. What is the problem?

- a. **Northern California has a persistent digital divide, ignored by incumbent carriers.** Many areas are unserved or underserved, have been for years, and the incumbents refuse to fix the problem. Health, education, public safety, and economic development have been, and continue to be, compromised by inadequate broadband service. The regional economy has been, and continues to be, damaged by this persistent digital divide.
- b. **CASF broadband infrastructure grant applications are evaluated using the wrong data interpreted at the wrong scale.** Grant evaluations are based on service advertised by carriers rather than the service actually provided by carriers. Census block groups are so large that they often hide unserved and underserved areas. Overly optimistic service metrics hide on the ground service deficits.
- c. **Current CASF grant applications exceed current account balance.** The current CASF grant account balance is insufficient to fund all pending grant applications. Without additional CASF funding, those areas whose grant applications aren't funded in this round will be permanently frozen out of a broadband future – this includes Mendocino County and coastal Sonoma County.

2. What is the solution?

- a. **Acknowledge every person's right to fully served broadband, and take quick effective action to eliminate the persistent digital divide in Northern California.** Recognize that being significantly underserved is as economically damaging as being unserved. Unserved is simply the extreme value of underserved – both should be treated uniformly. If carriers choose not to serve an area, then, de facto, they are not competing in that area, so that area is open to publicly subsidized funding.
- b. **CASF broadband infrastructure grant applications should be evaluated using data for service actually provided, and interpreted at an appropriate scale.** Require carriers to provide actual service provided data instead of advertised service data, accurate to the street address level. Carriers already have this data.
- c. **Provide an ongoing funding framework for CASF infrastructure grants, including middle mile, that will ensure timely elimination of the digital divide throughout California.** Through adaptive management, establish regular reviews of improvement of service provided, and corresponding funding plans for subsequent years. Don't stop funding CASF infrastructure grants until 98% of the population is actually *provided* fully served broadband at the national goal level of 100Mbps/50Mbps.

3. Fiscal impact

- a. **Stimulates the floundering Northern California economy** – The Northern California economy has been severely damaged by current economic conditions. Traditional extractive industries are much reduced or extinct, and modern economic drivers, such as tourism and high technology, require provision of fully served broadband access.

This proposal would provide the broadband infrastructure needed to resuscitate the Northern California economy, and would boost tax revenues at all levels of government.

- b. **Maintains ongoing funding of the CASF infrastructure grant account** until 98% of the population of each California County, and 98% of its geographic area, has *fully served* broadband *provided* in their homes, businesses, transportation corridors, and other public places. Fully served means adequately addressing all dimensions of the digital divide (see Attachment G.)

Unknown funding impact, but requires immediate additional \$125,000,000 funding to fund all currently worthy infrastructure grant applications. Funding comes from CASF rate payer tolls, not the California General Fund.

4. Likely positions

- a. **What state agency would implement the solution?** The California Public Utilities Commission (CPUC) would be the responsible agency.
- b. **What is the agency currently doing to solve the problem?** It established the California Emerging Technology Fund and the California Advanced Services Fund to eliminate the digital divide in California.

Incumbent carriers have large staff dedicated to influencing the CPUC.

- c. **What will local officials think?**

On behalf of the Mendocino County officials and government agencies listed in Attachment H, the Alliance represents that those local officials and government agencies endorse the proposed solutions to the problems posed in this document.

There will be widespread support throughout Mendocino and Sonoma Counties for this solution from local governments, public safety, health care providers, schools, and libraries.

Based on experience in Mendocino and Sonoma Counties, the Alliance expects similar conditions throughout Northern California.

- d. **What organizations will support or oppose this solution?**

On behalf of the Mendocino County organizations listed in Attachment 2, the Alliance represents that those organizations endorse the proposed solutions to the problems posed in this document.

There will be widespread support throughout Mendocino and Sonoma Counties for this solution from all organizations.

Based on experience in Mendocino and Sonoma Counties, the Alliance expects similar conditions throughout Northern California.

- e. **What businesses will support or oppose this solution?**

On behalf of the Mendocino County businesses listed in Attachment H, the Alliance represents that those businesses endorse the proposed solutions to the problems posed in this document.

There will be wide-spread business support throughout Mendocino and Sonoma Counties.

Based on experience in Mendocino and Sonoma Counties, the Alliance expects similar conditions throughout Northern California.

Incumbent carriers will strongly oppose this solution.

5. Prior or similar legislation

- a. CASF was established by legislation, and has been modified by subsequent legislation. It is currently the subject of Senate Bill 740 (Padilla).
- b. 2012's Senate Bill 1161 (Padilla) removed regulation of broadband in California from California's authority, compromising the State's ability to address the persistent digital divide using common sense regulation.

6. Urgency

This proposal must be passed this year if Northern California is not to be frozen into permanent digital oblivion.

7. Other comments

- a. The Counties of Mendocino and Sonoma have informally banded together at the supervisorial level to work on broadband issues of mutual interest. This has been a tremendously productive and powerful relationship. Together, the Counties have educated themselves on broadband so that they could plan a unified broadband future.
- b. Collectively, Mendocino and Sonoma Counties have a reasonable informal understanding of the digital divide in each County, but need to do further data acquisition, compilation, and analysis before delivering formally presentable data.
- c. Based on experience in Mendocino and Sonoma Counties, the Alliance expects similar conditions throughout Northern California.

Attachment B - Mendocino County's Digital Divide

Some areas of high population density in Mendocino County have fully served broadband access¹.

But, data gathered over the past three years by the Alliance² indicates that significant portions of the County, its population, visitors, anchor institutions, government services, and transportation corridors are broadband unserved or underserved.

In Mendocino County underserved is a very significant problem. Anchor institutions, including libraries, schools, and city governments are underserved, and such underservice compromises their ability to perform their missions.

Following are some notable examples of the County's digital divide:

1. The 5 year old **Laytonville High School** depends on a single T1 line³ to service all staff and students, even though there is a fiber-fed central office 2,000 feet away.
2. **FloBeds** is a small company that manufactures high-end organic mattresses in Fort Bragg, and uses the Internet to market its products. FloBeds was founded by Dave Turner, who is also the mayor of Fort Bragg. Dave recently asked AT&T for a quote on a 1 Gbps service for FloBeds, and was told that it would cost \$15,000/month. The same service in San Francisco can be obtained in the \$500-\$1,000/month range.
3. The **Albion School** is forced to depend on two T1 lines, totaling \$800/month, even though there is lit fiber less than two miles away.
4. The historic **Elk Cove Inn** in Elk is forced to pay \$400/month, on a 3-year contract, for a T1 line, because no other broadband service is available, even though a fiber connected central office is less than a half mile away. Tourists demand broadband service.
5. **Coast Community Library (CCL)**, in Point Arena, is forced to depend on an undependable \$99.99/month WiFi connection for public access, and a \$400/month T1 line for County access, because no other broadband service is available, even though there is a fiber-fed central office 100 yards up the street. CCL's broadband public access service has an advertised download speed of 5 Mbps, but whose median value over a one-month period was measured by County staff to be only 0.8 Mbps.
6. The **Point Arena Schools Complex**, in Point Arena, is forced to purchase six T1 lines, totaling \$2,400/month, to service students and staff because no other broadband service is available, even though existing fiber bisects the complex, and the fiber-fed central office is less than a half mile away.
7. The **City of Point Arena** and the **South Coast Senior Center** depend on satellite or tenuous cell data service because there is no other broadband service available, even though lit fiber runs in front of City Hall, and a fiber-lit central office is located less than a mile away.

¹ As defined by current California Advanced Services Fund Broadband Infrastructure Grant Program guidelines.

² Including the Alliance 2011 Broadband Access Survey, 2012 Broadband Access Inventory, and 2013 Broadband Access Database. See subsequent section.

³ Symmetric bandwidth, 1.5 Mbps. Typically available only on a three-year contract at \$400/month.

8. **Redwood Coast Medical Services** in Gualala depends on three T1 lines, totaling \$1,200/month, because no other suitable service is available, even though there is a fiber fed central office a few hundred yards away.
9. **School children in Potter Valley** have a 1 Gbps connection at school, but are often unserved or underserved at home.
10. Anecdotal reports from both Mendocino and Sonoma Counties **correlate broadband service with property values** – Equivalent properties' value is a function of broadband service actually provided at the property, not the service advertised. The Alliance has reports of buyers asking not to be shown broadband deficient properties. The North Bay Association of Realtors (NORBAR) is a donor and endorser of the Alliance for this reason.
11. **Emergency services are compromised** by lack of broadband. In a recent accident on a state beach adjacent to State Highway 1, the ambulance wasted 20 minutes driving to get a cell connection because no cell connection was available on the state highway next to a state beach.

Attachment C - Sonoma County's Digital Divide



Examples of Sonoma County Digital Divide

1. **El Molino High School**, with a pupil enrollment of 650, serving Western Sonoma County from Forestville to Timber Cove is served by one T1 line costing \$400 per month providing limited bandwidth. The school's network slows to a crawl due to the number of users – Comcast's service area falls less than three blocks short of the school.
2. Three T1 lines and one Ethernet over copper connection serve **Horicon School** in Annapolis with 67 students at a cost of \$1,600 per month. Connectivity is necessary to provide connectivity to 20 iPads recently purchased on a grant award program.
3. The community of **Bodega Bay**, with broadband service supplied by Comcast and ATT has little or no wireless cell phone connectivity.
4. **Timber Cove Inn** has requested high-speed internet service for several years to no avail. There is no cell connectivity along the coast from Jenner to Sea Ranch – 45 miles of scenic but hazardous highway.
5. Business enterprises in **Jenner** are splitting T1 service at \$400 per month to provide limited bandwidth to customers (WiFi) as there is no cell connectivity in the community. There is no high-speed internet service to the community even though there is an abandoned cable TV infrastructure in place.
6. The community of **Valley Ford** relies on either dial up or satellite for individual connectivity – yet ATT supplies their Central Office with fiber.
7. The **Kashia Band of Pomo's** has one T1 line at \$400 per month supplying their Rancheria Headquarters and one T1 line at \$400 per month servicing a school with 9 students. Satellite service is unavailable due to trees and mountains obstructing a window to the sky.
8. **Fort Ross School**, with a pupil enrollment of 29 students is served with a T1 line at \$400 per month. When students return home generally there is no connectivity unless measured satellite service is available and affordable to the parents.
9. Numerous wineries and businesses in the **Dry Creek Valley and Alexander Valley** (Northern Sonoma County) are required to have T1 lines or satellite service for broadband in order to conduct business. ATT has installed closed fiber along Dry Creek Road for their internal needs, however public DSL or access to fiber is not offered.
10. **Joy Road Homeowners Association**, consisting of approximately 350 residences in Western Sonoma County relies upon a WISP (2 mbps) for line of sight service. Those without line of sight rely on satellite (if window to sky is available), expensive cell phone tethering (if signal is adequate) or dial up. This area on maps shows as being served, but is not.

- 11.** Similar situations abound for residents and businesses in the **Sonoma Valley**. Comcast may not have expanded service commensurate with population growth in conformance with franchise agreements.
- 12. Cell phone connectivity** in Western Sonoma County is problematic – Verizon service is available in some areas, ATT in others. Carriers cannot claim seamless universal service to West County. ATT has been petitioned for over 10 years since the migration from analog to digital service to erect towers to provide cell connectivity. To date only Verizon has built towers and extended their coverage footprint.
- 13. 911 Failure** experienced in West County last week due to a lack of redundancy in the telephone network connecting to a fiber ring. An eight-mile fiber interconnection between Verizon and ATT exchanges at Sea Ranch and Gualala would solve the problem for 3,000 households and first responders impacted by the outage.

Attachment D – The Map Problem

Looking at the National and California Broadband Maps, one might assume that most residents, visitors, and businesses of rural Northern California are provided full broadband service. Based on incumbent service provider advertising, these maps show that broadband has already been fully deployed in rural California - claiming 100Mbps service delivered to 60.6% of households in Mendocino County and 92.1% in Sonoma County.

Living, visiting, and doing business in Northern California show such service to be unreasonably overstated.⁴

Northern California has a persistent digital divide, hidden by these maps, because the maps show service *advertised* by broadband service providers, rather than service *actually provided* to consumers. Mapping advertised service for 98% of Californians isn't the same as documenting that 98% of California consumers are actually provided with full service broadband.

Even though Federal and State governments have chosen to believe providers' advertised service, most Americans don't. The latest American Consumer Satisfaction Index, from the University of Michigan, ranks broadband service providers the worst of all 43 industries in the index.⁵

ACSI claims that broadband service providers are "prone to frequent customer service problems", have "high monthly costs and problems with both reliability and speed", have little competition, and "have little incentive to improve service" – all completely contradictory to service provider advertising. The index also claims that the wireless telephone provider industry is "well below the national ACSI average" for similar reasons.

At the same time, the government evaluates grant applications for broadband infrastructure deployment based on the service advertised by providers, rather than the service actually provided to consumers. The grant funding that could eliminate the digital divide in rural Northern California can be denied because grant evaluations are not based upon ground truth reality, but misleading advertising.

To truly eliminate the digital divide, it must be measured using meaningful metrics of the broadband service actually provided to the consumer, at a scale meaningful to the consumer, and broadband infrastructure grant funding must be based on these metrics.

The root problem is that the incumbent broadband service providers have abandoned many areas of Northern California, because their return on investment doesn't meet their standards for deployment. Unfortunately, they also actively oppose grant funding of broadband service to these same areas as supposedly competitive. They refuse to serve, and try to keep others from serving, these rural areas, while actually not competing at all within them.

⁴ *Legislative Proposal*, May 24, 2013, Broadband Alliance of Mendocino County. The Alliance and Sonoma Connect have compiled information on the broadband service actually provided to consumers in Mendocino and Sonoma Counties. Based on this information, it is plausible to extrapolate these conditions to other Northern California counties.

⁵ *Quarterly Update on U.S. Overall Customer Satisfaction*, May, 2013, <http://www.theacsi.org/>

Attachment E – Broadband Alliance Data Acquisition, Compilation, and Analysis

The Alliance has conducted, and continues to conduct, an ongoing program of acquiring, compiling, and analyzing data related to broadband service, actually delivered on the ground, in Mendocino County:

1. **2011 Broadband Access Survey** – The survey was intended to take a quick look at broadband service in Mendocino County, and coastal Sonoma County. Survey data was acquired by paper form and web form, producing a sample set in excess of 2,000. Results confirmed that many areas in both counties are unserved or underserved.
2. **2012+ Broadband Access Inventory** – The Inventory is an ongoing project to track the status of broadband access over time at anchor institution sites throughout Mendocino County. Such data reports what service has been selected for use at a given site at given points in time. It does not report what service was/is available, just that selected.

The Alliance has obtained a \$7,500 grant from Mendocino County to continue work on the Inventory during 2013. Hopefully, funds from the Alliance CASF/RCC planning grant can also be applied to Inventory development.

3. **2013+ Broadband Access Database** – To effectively eliminate the digital divide in Mendocino County, the Alliance needs to formally challenge the National and California Broadband Maps. To do so, the Alliance will create the Broadband Access Database (BAD) that can be used to objectively compute correlation of service advertised available in the Broadband Maps with a variety of ground truth data sources, including the Inventory and Survey.

In conjunction with the Mendocino County Office of Education (MCOE), and the Mendocino Council of Governments (MCOG), the Alliance has submitted a \$110,000 environmental justice grant application to CalTrans that, if funded, will collect broadband service information from staff and students throughout Mendocino County schools, producing a dataset of about 10,000 (more than 10% of the population.)

Attachment F – Detrimental Provider Practices

1. In general, the incumbent carriers refuse to communicate with the Alliance or the Counties of Mendocino and Sonoma, so we are forced to plan county broadband deployment in ignorance of incumbent plans, which may conflict with planned development goals.
2. In certain cases, the incumbents will choose to provide service to a high-profit anchor institution located in an unserved or underserved community, but refuse to provide service to the surrounding community. Incumbents picking such low-lying fruit make it much harder to eliminate the digital divide in the surrounding community.
3. Hugely disparate service pricing for equivalent service between Mendocino County and urban areas damages Mendocino County economically.

E.g., service that costs \$1,000/month in San Francisco is quoted in Fort Bragg at \$15,000/month.

Businesses in Fort Bragg cannot compete against businesses in San Francisco because of such pricing practices.

Attachment G – Affordable Middle-Mile Infrastructure

Lack of affordable middle-mile fiber infrastructure is a fundamental problem in Mendocino County, and coastal Sonoma County. Collaborating at the Supervisorial level, Mendocino and Sonoma Counties jointly proposed the Route 1 Corridor Project (R1CP)⁶. Since Sonoma County is a member of the Upstate California Connect Consortium (UCCC), the R1CP was integrated into the 16-county Northern California Regional Middle-Mile Infrastructure (NCRMMI) grant application to the California Advanced Services Fund (CASF) Broadband Infrastructure Grant program.

⁶ <http://www.mendocinobroadband.org/r1cp/>

Attachment H – Broadband Alliance of Mendocino County Vision Mission Goals & Strategies/Digital Divide

The following two pages contain a one-page handout of the 2013 Alliance vision, mission, goals and strategies backed with the Alliance definition of the Digital Divide.

Vision, Mission, Goals & Strategies

Approved, March 2013

Vision:

The vision of the Broadband Alliance of Mendocino County is elimination of the Digital Divide for everyone everywhere.

Mission:

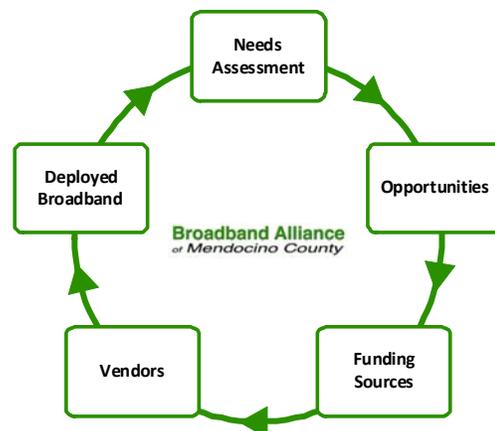
The mission of the Broadband Alliance of Mendocino County is to eliminate the digital divide in Mendocino County, ensuring that all people in Mendocino County have affordable dependable universal fully-served broadband access in their homes, businesses, and public places to support economic viability, ensure health and safety, and access educational opportunities.

Goals:

1. Eliminate unserved and underserved areas of the County.
2. Maintain fully-served areas.
3. Ensure affordable dependable access.
4. Educate the public and organizations of all types that fully-served broadband access is necessary to maintain quality of life and economic/government function.
5. Educate the public and organizations in effective use of broadband.

Strategies:

1. Operate transparently.
2. Work with anyone who will work with us.
3. Identify broadband need, quantify as opportunity, identify funding sources, identify vendors, and facilitate deployment and grant applications.
4. Develop funding sources
5. Continue evaluating organizational structure
6. Continue ongoing projects
7. Continue and enhance outreach
8. Identify collaborators to work on affordability and equipment issues.



The Digital Divide

People become disenfranchised whenever they lack adequate broadband access. Rural and poor communities have particularly poor broadband access, including *no* access at all. Safety, educational, business, and social services are all denied those lacking adequate broadband.

This “digital divide” is a complex, multifaceted problem:

1. **Coverage** – Contrary to federal and State of California maps, much of Mendocino County remains unserved or underserved.
2. **Bandwidth** – The California Public Utilities Commission classifies areas with less than 6 Mbps down as underserved. Only a few urban areas in Mendocino County are fully served using this metric.
3. **Capacity** - Regardless of bandwidth, download limits in many areas of Mendocino County make it difficult to do business, or receive services.
4. **Latency** - Regardless of bandwidth, connections with significant latency often cannot be used for many typical applications, including VPN, voice, and video.
5. **Cost** – Costs for many services, including satellite, can be unaffordable.
6. **Equipment** – Connections without equipment, e.g. desktops, laptops, tablets, phones, etc., are useless.
7. **Redundancy** – Many connections are not redundant, so a single point failure in a middle-mile backbone causes broadband disconnection across a broad area. A tree falls across a line, and a non-redundant middle-mile link disconnects all connections down line.
8. **Diversity** – Connections in many areas of the County are available from only a single vendor. Failure, or retreat, of a local vendor disconnects broadband across broad areas, e.g. Esplanade’s failure on the Mendonoma coast in 2011. Single-vendor coverage areas are prone to inflated prices and reduced service standards.
9. **Adoption**– Many people within Mendocino County continue to reject the need for broadband without realizing that broadband is key to living happily ever after.
10. **Expertise** – Many people within Mendocino County lack the expertise to make effective use broadband, even when available.
11. **Money** – Substantial political and financial resources are invested in maintaining the status quo, often disenfranchising the rural and poor.

Each of these problems must be solved before the digital divide will be eliminated.

Attachment I – Endorsements of Golden Bear Broadband Grant Application

The following letter was sent to Michael Amato, Interim Director, California Advanced Services Fund, on October 22, 2012. As explained in this letter, the Alliance has been designated endorsement agent by those ninety seven (97) individuals and organizations listed, and as such endorsed the GBB infrastructure grant application.

Broadband Alliance *of Mendocino County*

Date: October 22, 2012

To: Mr. Michael Amato, Interim Director, California Advanced Services Fund (CASF)

CC: CASF Review Team

Subject: Endorsement of Golden Bear Broadband (GBB) Limited Liability Corporation's Regional Middle Mile Infrastructure (RMMI) CASF grant application for broadband infrastructure deployment funds in the 16 Northern California counties.

From: Jim Moorehead, Executive Committee chair

Dear Mr. Amato and the CASF Review Team,

The Broadband Alliance of Mendocino County hereby endorses GBB's RMMI CASF grant application for broadband infrastructure deployment funds in the 16 Northern California counties.

The Alliance serves as endorsing agent for broadband deployment grant applications in Mendocino County for those endorsers listed in the attachment. Acting as endorsement agent, the Alliance hereby provides additional letters of support for GBB's CASF grant application for those endorsers.

This RMMI proposes to interconnect all sixteen (16) of northern California's counties via a diverse, redundant, multi-loop fiber-based network. The north state's total population is 1.57 million people (Census 2010), and total land area is 44,117 square miles, or 27% of the state's geography. Agriculture and tourism are the top two industries in the region.

With approved funding from CASF, the GBB RMMI will enhance and strengthen today's infrastructure (backbone), providing connectivity to meet tomorrow's escalating demand. Such increased service capacity (backhaul and last-mile) makes broadband services available, accessible and affordable, possibly opening up choices, as well as preserving the north state's rural way of life. In Mendocino County, local estimates indicate that more than 50% of the county is still on dial-up, so this project is desperately needed to address the problem.

Increased availability of and access to high speed Internet services will further support a myriad of day-to-day, business-to-business, peer-to-peer virtual connections for e-commerce, on-line distance education, telemedicine, and social networking. All of which will grow exponentially in the coming years.

Without these connections, the following occurs:

Unserved and underserved areas continue to remain as such, and students face increasing disadvantages; while currently accessing the Internet via school computers at or during school, students in the more rural, remote communities risk falling behind because are unable to

Broadband Alliance of Mendocino County

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complete homework assignments at home due lack of access to high speed Internet Services away from school.

Elementary and secondary schools bear the burden of loss of funding due the decrease in student populations, families leaving the northern counties in search of “lit” communities, or more towns with better infrastructure, hence more access to broadband services.

Businesses, recreation and tourism cannot survive: websites, social media, virtual advertising are critical factors in today’s world, not only for generating revenues but also for recruiting a work force (it is this year’s college graduating class of 2012 that will have been exposed to technology their entire academic career; these students are our business’s future employees).

35 (of 111 in CA) federally recognized Native American Tribal Communities reside in the 16 northern CA counties, and broadband is essential to deploy to all tribes whether tribal lands and populations are large or small. Without broadband, tribes cannot hope to attract business investment of any kind, nor can they educate their children---at school or home, nor can they utilize telehealth or distance learning programs. Especially important, tribal governments cannot operate in today's inter-connected world.

Libraries continue to remain dependent on print media, rather than transitioning to virtual information; as long as libraries continue to “preserve information”, it is critical to our evolution as a society that we retain, and revisit, our histories, preferably without felling more trees!

Rural health clinics lack real-time, immediate access to telehealth, telemedicine support services and critical care experts; as rural populations dwindle, so will critical services, putting those remaining at severe risk of isolation.

Intelligent Traffic Systems (ITS) and SmartGrid technologies---cameras, remote sensors, meters, etc.---are quickly becoming critical methods and measures to ensuring residents’ safety, as well as delivery and monitoring of basic utilities (water, sewer, electric, gas), of which access to high speed Internet is necessary; without which we risk reverting to isolationism.

Upon approved funding from CASF, the RMMI will implement a comprehensive plan that leverages existing infrastructure, and deploys new infrastructure, thereby interconnecting multiple service points, forming a diverse and redundant, multi-loop, fiber-based network throughout all of northern California.

Without state funding, the cost of building a much needed broadband infrastructure for these economically and geographically challenged communities simply will not happen, summarily excluding 1.6 million people from the rest of the state, and the world.

Worst, without access to such badly needed high speed Internet services, northern Californians are being restricted to merely users of information and content, not producers of content and information. And on bandwidth capacities of now 6 yr old speeds, dial up is no longer an option!

While fiber to the home is an unrealistic expectation for the hardest to reach, rural remote areas, we need to upgrade and improve the existing networks to provide a fiber-based backbone to support fixed and mobile wireless networks.

In order to have a robust 21st-century economy, available, accessible, affordable, and ubiquitous broadband is imperative. We cannot afford not to do this.

On behalf of the Broadband Alliance of Mendocino County, and the endorsers listed in the attachment, I endorse, and recommend for approval, the Golden Bear Broadband, LLC, RMMI application for infrastructure funds, and strongly encourage CASF/CPUC do the same.

Sincerely,

/ss Jim Moorehead, Executive Committee chair

Mendocino County
Endorsers of Golden Bear Broadband LLC
Regional Middle Mile Infrastructure CASF Grant Application
As of 10/16/12

	Representing	FirstName	LastName	Title	OrganizationType
1	Mendocino County Farm Bureau	Devon	Jones	Executive Director	Agricultural
2	Perkowski	Bob	Perkowski	Owner	BAMC
3	Baileys	Judith	Bailey	Owners	Business
4	Bio-Engineering Associates	Kathleen	Martin	chief Operating Officer	Business
5	Book Bunnies	Julie	Aldwell	Owner	Business
6	Bostwick Appraisal Services	Linda	Bostwick		Business
7	Cabral Carpet Care	Tim	Cabral	Owner	Business
8	Crane of Ukiah	Douglas	Crane	President	Business
9	Dances in Wood	Eric	Lassotovitch		Business
10	Edell	Dean	Edell	Doctor	Business
11	Graviers Tire and Auto	Shannon	Ford	Business Owner	Business
12	HML Studio, Inc	Henrik	Liisberg	President	Business
13	Laytonville Gas Company, Inc	Charles	Whitecomb	Vice-president	Business
14	Liqua-Tech Corp	Marta	Sligh	President	Business
15	Long Valley Feed	Meadow	Shere	Owner	Business
16	Mendocino County Observer	Susan	Shields	Owner	Business
17	Mulligan Press	Dan	Ramsey	publisher	Business
18	Rainbow Agricultural	Jim	Mayfield	Owner	Business
19	Ricochet Ridge Ranch	Lari	Shea	Owner	Business
20	Ron Krigin Equipment and Pump Service	Ron	Krigin	Owner	Business
21	Skip Gibbs Company, Inc	Skip	Gibbs	President/owner	Business
22	Smyser Associates	Connie	Smyser		Business
23	State Farm	Jay	Epstein	Agent	Business
24	West Company	Pamela	Patterson	Executive Director	Business
25	Community Foundation of Mendocino County	Susanne	Norgard	Executive Director	Community
26	Laytonville Healthy Start	Jayma	Shields		Community
27	Mendocino Coast Broadband Alliance	Shirley	Freriks	President	Community
28	Rancho Navarro Association	Robert	Sowers	President of BoD	Community
29	Sherwood Gates Community	Brian	Corzillius		Community
30	Consolidated Tribal Health Project, Inc.	Michael	Knight	Board Chairman	Health Care
31	Long Valley Health Center, Inc.	Rod	Grainger		Health Care
32	Redwood Coast Medical Services, Inc	Diane	Agee	CEO	Health Care
33	University of California, Berkeley	Peter	Steel	Site Manager	Higher education
34	University of California, Berkeley	Mary	Power	Professor, Faculty Director	Higher education
35	Allende	Megan	Allende		Individual
36	Andrakin	Linda	Andrakin		Individual
37	Bell	Craig	Bell		Individual
38	Bliem	Debbie	Bliem		Individual
39	Burningham	Sharon	Burningham		Individual
40	Carpenter	Carolyn	Carpenter	Artist	Individual
41	Chapman	Linda	Chapman		Individual
42	Clark	Wally	Clark		Individual
43	Darnell	D. Roe	Darnell		Individual
44	Dickson	Regina	Dickson		Individual
45	Dow	Phillip	Dow		Individual
46	Edell, Sharon and Dean	Sharon	Edell		Individual
47	Elliott	Katharine	Elliott		Individual

48	Epstein	Jay	Epstein		Individual	
49	Feaster	Dana	Feaster		Individual	
50	Ford	Shannon	Ford		Individual	
51	Frey	Valerie	Frey		Individual	
52	Gibbs Gengoux	Katherine	Gibbs Gengoux	Business owner	Individual	
53	Gillespie	Carrie	Gillespie		Individual	
54	Golightly	Kandice	Golightly	Teacher	Individual	
55	Gregory-Pruett	Sherrie	Gregory-Pruett		Individual	
56	Harvey Hoehstetter	Harvey	Hoehstetter		Individual	
57	Hunt	Sharon	Hunt		Individual	
58	Komer	Marc	Komer	Legal Document Assistant	Individual	
59	Myers	Lynda	Myers		Individual	
60	Patterson	Pamela	Patterson		Individual	
61	Salmen	Neelam	Salmen		Individual	
62	Scollin	Christy	Scollin		Individual	
63	Seggel	Heather	Seggel		Individual	
64	Selim	Francine	Selim		Individual	
65	Smith	Melvin	Smith		Individual	
66	Steel	Trish	Steel	received letter	Individual	
67	Turner	Steve	Turner		Individual	
68	Wells	Walter	Wells		Individual	
69	Westwood	Kent	Westwood		Individual	
70	Fort Bragg Unified School District	Donald	Armstrong, Dr.	Superintendant	K-12 education	
71	Laytonville Unified School District	Joanie	Potter	Superintendant	K-12 education	
72	Mendocino County Office of Education	Paul	Tichinin	County Superintendant	K-12 education	
73	Mendocino Unified School District	Jason	Morse	Superintendant	K-12 education	
74	Point Arena Joint Union High School District	Colleen	Cross, Ed.D	Superintendant	K-12 education	
75	Ukiah Unified School District	Debra	Kubin	Superintendant	K-12 education	
76	Willits Unified School District	Ray	Chadwick	Superintendant	K-12 education	
77	Coast Community Library Friends	Greg	Jirak	President	Libraries	
78	Mendocino County Library System	Annette	DeBacker	Interim Library Director	Libraries	
79	City of Fort Bragg	Dave	Turner	Mayor	Local government	
80	City of Point Arena, Mayor	Doug	Burkey	Mayor	Local government	
81	City of Ukiah, City Council Member	Mary Anne	Landis	Mayor	Local government	
82	County of Mendocino Executive Office	Steve	Dunnicliff	Deputy CEO	Local government	
83	Mendocino County Board of Supervisors	Kendall	Smith	Chair Board of Supervisors	Local government	
84	Mendocino County Observer	Jim	Shields		Media	
85	Mendocino College	D. Roe	Darnell		Mendocino College	
86	Congressman Mike Thompson	Heidi	Dickerson	District Rep	Political	
87	District Attorney's Office	Beth	Norman		Public safety	
88	Mendocino County Sheriff's Office	Tom	Allman	Sheriff-Coroner	Public safety	
89	Coastal Mendocino Association of Realtors	Paul	Clark	President	Real estate	
90	Frank Howard Allen Realtors	Steve	Harder	Owner	Real estate	
91	Gualala Real Estate Company, Inc	Sean	Gaynor-Rousseau		Real estate	
92	Hometown Realty	Jon	Behnke	Manager	Real estate	
93	Pacific Real Estate	Leonard	Balter	Owner	Real estate	
94	The Coastal Real Estate Co	Hanne	Liisberg	President	Real estate	
95	Joshua Grindle Inn	Joshua	Grindle	Proprietor	Tourism	
96	Sea Ranch Beach Rentals	Steve	Harder	Owner	Tourism	
97	Hopland Band of Pomo Indians	Leonard	Powell		Tribal government	

Attachment J – Broadband Access Inventory for Route 1 Corridor Project Footprint

Data only available under appropriate non-disclosure. For information, contact AdminCoordinator@MendocinoBroadband.org.

Attachment K – Roads and Communities

Special road and community survey compiled by driving the R1CP route, and supplying community knowledge about service.

Data only available under appropriate non-disclosure. For information, contact AdminCoordinator@MendocinoBroadband.org.

Attachment L – Connect Joy Road

Connect Joy Road is a neighborhood group representing over 250 homes in West Sonoma County. They have submitted an official challenge to California Broadband Map data that showed them broadband fully served, while their ground-truth data showed them unserved.

This attachment emailed separately due to size limitations.

Connect Joy Road

A committee of JRNA (Joy Road Neighborhood Association) to bring Fiber Internet to the community.

connectjoyroad@sonic.net

To: California Public Utilities Commission

Dear Michael Morris
California Public Utilities Commission
505 Van Ness Ave, San Francisco

We are Connect Joy Road Committee - a neighborhood group representing over 250 homes in West Sonoma County. We are submitting an official challenge to your data that we are a served internet community. We are UNSERVED based on CPUC's own definition of upload and download data speeds. Our neighborhood includes over 250 homes needing high speed internet for their small businesses, telecommuting, bill paying, telemedicine and if possible be able to join social media.

We are also appealing to you to help include the Joy Road area in the California state project "Northern California Regional Middle Mile Fiber Infrastructure". Currently we are not included due to the fact that T-Mobile, AT&T and Verizon have informed you, the CPUC, that they already provide adequate cell and high speed Internet coverage and therefore Joy Road area is "served". Not true. We are UNSERVED.

The Connect Joy Road Neighborhood Committee is working with Sonoma County and the Northern California County coalition to see if we can benefit from this government-funded project to build fiber optic infrastructure that would far surpass any current service now available to us (be it dial-up, wireless broadband, satellite). With fiber optic infrastructure that supports current technology, we will have Internet at speeds over 66 times faster than its wireless counterpart.

In order to respond to this challenge we sent out a survey to our neighbors, results of which show that a very high percentage of area residents disagree. Cell phone coverage is spotty, unreliable and/or non-existent. High speed internet coverage is neither widespread nor reliable or available. We have to pay for whatever we can get, even if it is unsatisfactory. Comcast REFUSES to connect us, despite only being a mile away, as it does not fit their "business model". The CPUC GIS Broadband Availability Map shows Comcast coverage where it does not exist for the majority of our respondents.

We are challenging the CPUC data. We are unserved. We need the CPUC to acknowledge this. There are no services without caps on usage or speeds reliably greater than 2Mbps to any of us. Comcast approaches our area at 3 locations. Comcast serves 15660 Bittner Road (1 mile away), 16377 Coleman Valey Road (adjacent) and along Bodega Highway serving the town of Bodega.

We are providing the following proof and documents to refute the CPUC and Cellular data

- 1) Map of Joy Road area showing current internet needs
- 2) Survey results regarding internet availability
- 3) Emails from Comcast to us stating they cannot "help" us as we do not fit their business model
- 4) Emails from residents to their current internet providers complaining about lack of reliable internet, slow speeds, poor customer service
- 5) Testimonials from residents in census tracts 1543.02 & .04 about lack of cellular coverage

We ask the CPUC to accept our challenge and to acknowledge that we are unserved and to help us be included in the Golden Bear Project which we support.

Sincerely

Connect Joy Road Committee

connectjoyroad@sonic.net

Connect Joy Road Committee
connectjoyroad@sonic.net

8 Jan, 2013

To: Steve Sharpe
Mike Nicholls
Efren Carrillo

From: Connect Joy Road Committee
Dear Steve, Mike, and Efren,

The Connect Joy Road Committee has prepared a map of our area and collected resident survey data that refutes current telecom provider data given to the CPUC. Their data states that we are adequately served for High Speed Internet Access. This is false.

Attached is a Joy Road neighborhood area map which indicates the aggregate number of connections needed in each shaded area, the lightest shade representing the need for one connection, the darkest shade indicating the need for four connections.

Also attached is neighborhood survey data - collected from residents indicating their specific usage needs. Of the 245 e-mailed surveys, we have received 92 responses to date. A USPS mailing will occur shortly for residents not covered by our initial e-mail list.

Our map and survey data clearly shows that we are not "served" per 2012 CPUC guidelines specifying a minimum 6Mbps download speed. It is important to note that none of our residents receives a consistent 6Mbps download and most receive speeds less than 1Mbps.

The map covers Joy Road, Fitzpatrick Lane, Taylor Lane, Burl Lane, Lauri Lane, Jennifer Lane, Joy Ridge Road, Owl Road, Joy Woods Way, Deer Meadow Lane, Doc's Ranch Road, Willow Creek Road (upper part), the western part of Bittner Road and parts of Coleman Valley Road.

If you have any questions, please reply to this email and our committee will respond. Our committee is available to gather additional neighborhood information as necessary. We are willing to assist you in any way possible.

Best regards,

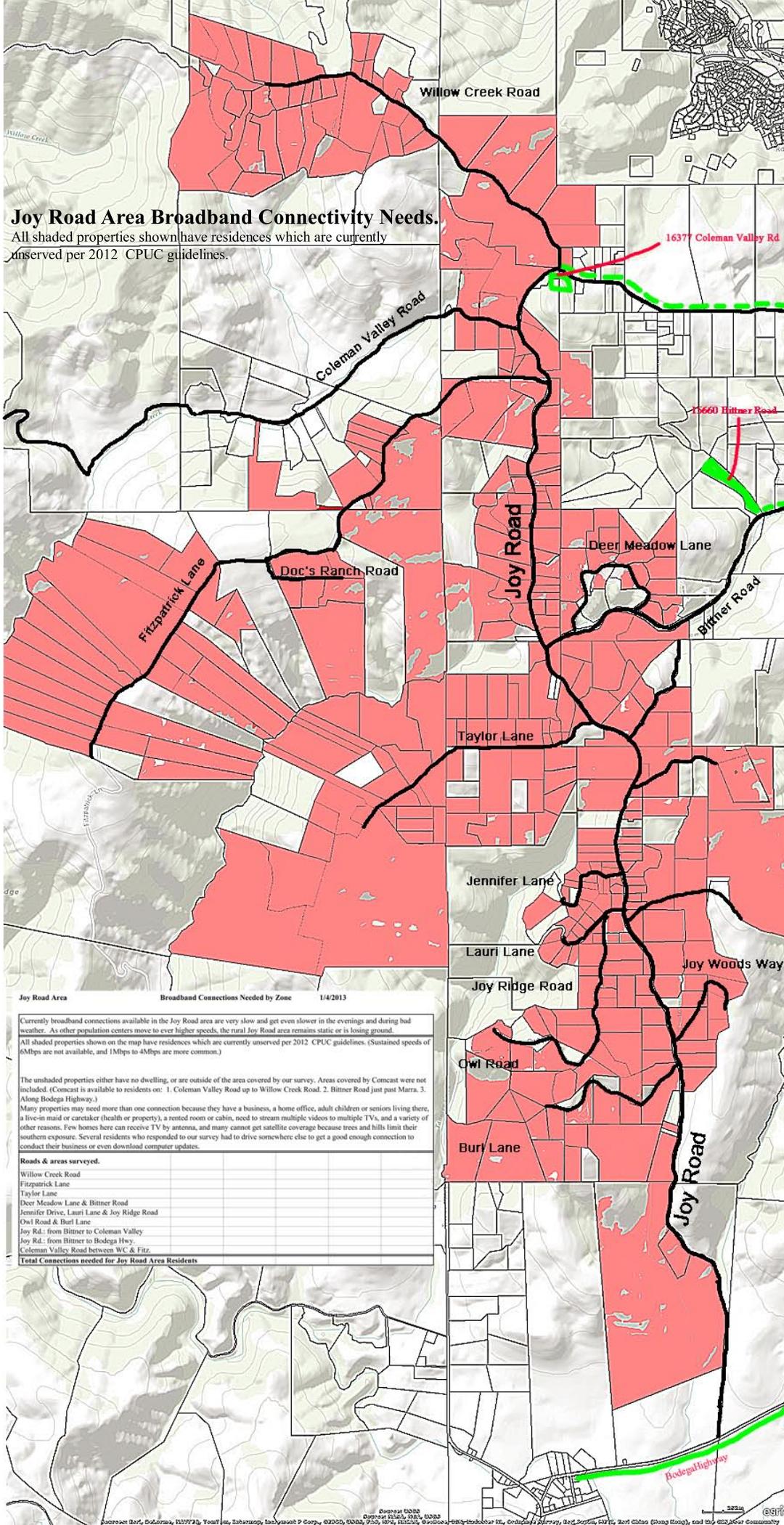
Jim Robinson for Connect Joy Road Committee
Jim_robinson@jimndar.net

Attached:

- Map using Sonoma County shape files, prepared Dec. 20, 2012 (prints 20"x38")
- Pdf of Map Legend
- Survey results collected to date
- Copy of this email cover letter

Joy Road Area Broadband Connectivity Needs.

All shaded properties shown have residences which are currently unserved per 2012 CPUC guidelines.



Joy Road Area Broadband Connections Needed by Zone 1/4/2013

Currently broadband connections available in the Joy Road area are very slow and get even slower in the evenings and during bad weather. As other population centers move to ever higher speeds, the rural Joy Road area remains static or is losing ground. All shaded properties shown on the map have residences which are currently unserved per 2012 CPUC guidelines. (Sustained speeds of 6Mbps are not available, and 1Mbps to 4Mbps are more common.)

The unshaded properties either have no dwelling, or are outside of the area covered by our survey. Areas covered by Comcast were not included. (Comcast is available to residents on: 1. Coleman Valley Road up to Willow Creek Road 2. Bittern Road just past Marra. 3. Along Bodega Highway.) Many properties may need more than one connection because they have a business, a home office, adult children or seniors living there, a live-in maid or caretaker (health or property), a rented room or cabin, need to stream multiple videos to multiple TVs, and a variety of other reasons. Few homes here can receive TV by antenna, and many cannot get satellite coverage because trees and hills limit their southern exposure. Several residents who responded to our survey had to drive somewhere else to get a good enough connection to conduct their business or even download computer updates.

Roads & areas surveyed.

- Willow Creek Road
- Fitzpatrick Lane
- Taylor Lane
- Deer Meadow Lane & Bittern Road
- Jennifer Drive, Lauri Lane & Joy Ridge Road
- Owl Road & Burl Lane
- Joy Rd.: from Bittern to Coleman Valley
- Joy Rd.: from Bittern to Bodega Hwy.
- Coleman Valley Road between WC & Fitz.

Total Connections needed for Joy Road Area Residents

Please assist our efforts to connect the Joy Road Area to the information highway by completing this survey. The Connect Joy Road committee is working for all of us to have truly “high speed” Internet available in our homes. Be assured that your answers will not be used for any purpose other than improving connectivity. We have taken all steps possible so that your identity will not be passed along or compromised.

Thank you,
Connect Joy Road (connectjoyroad@sonic.net)

- **1*** Do you currently use Internet service within your home?
 - Yes
 - No
- **2** If you do not currently use the Internet at home, would you get Internet service if it were:
(check all that apply)
 - More reliable
 - Less expensive
 - Greater bandwidth
 - Do not want service
- **3*** How many Internet users are on your property?

1	2	3	4	5	More than 5
<input type="radio"/>					
- **4** Which current Internet access methods do you use:
 - No Internet Access
 - Dial up (Sonic, Earthlink, AOL, etc.)
 - Wireless (PogoWave/CDS)
 - Satellite (Wild Blue, Exceede, Hughes, etc.)
 - T-1
 - Cable (Comcast, AT&T, etc.)
 - Cell phone (3G or 4G Verizon, AT&T, etc.)
- **5*** Please indicate all reasons why you access the Internet:

<input type="checkbox"/> Home Business	<input type="checkbox"/> Video Streaming/entertainment
<input type="checkbox"/> Telecommuting	<input type="checkbox"/> Telemedicine
<input type="checkbox"/> Email	<input type="checkbox"/> Web surfing
<input type="checkbox"/> Home Office	<input type="checkbox"/> Bill paying
<input type="checkbox"/> Social Networking (Facebook, LinkedIn, etc.)	<input type="checkbox"/> Other

- **6*** **Are you currently satisfied with your Internet reliability?**

1	2	3	4	5
Not satisfied	Somewhat satisfied	Neither satisfied or Not Satisfied	Mostly satisfied	Totally satisfied
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- **7*** **Are you most concerned about upload or download speeds?**

 - Upload (for sending email, photos, files, etc.)
 - Download (for streaming video, surfing, receiving photos, etc.)
 - Both
 - I do not understand this question

- **8*** **For what purposes would you use the Internet if it were faster and more reliable: (check all that apply)**

 - Home Business
 - Telecommuting
 - Email
 - Home Office
 - Social Networking (Facebook, LinkedIn, etc.)
 - Video Streaming/entertainment
 - Telemedicine
 - Web surfing
 - Bill paying
 - Other

- **9*** **Do you drive to another location to use the Internet?**

 - Always
 - Often
 - Sometimes
 - Seldom
 - Never

- **10*** **How much would you be willing to pay each month for the service you desire?**

 - up to \$30
 - \$31 - \$60
 - \$60 - \$100
 - \$100 - \$150
 - Other

11* Where are you located?

- Joy Road north of Bittner Road
- Joy Road south of Bittner Road
- Bittner Road
- Taylor Lane
- Fitzpatrick Lane
- Doc's Ranch Road
- Jennifer Drive
- Lauri Lane
- Joy Woods Way
- Joy Ridge Road
- Burl Lane
- Owl Lane
- Coleman Valley Road
- Deer Meadow Lane
- Other

• **12* Would you like to have more information about the effort to Connect Joy Road?**

- Yes
- No

• **13 OPTIONAL: If you would like to have more information about the effort to Connect Joy Road, please give us your:**

Name

Email Address

Phone Number

The On-Line survey is preferred for responses.

If you wish to fill out the survey manually and send it via US Postal Service, please send to:

Connect Joy Road

**3970 Joy Road
Occidental, CA 95465**

Results for: Connect Joy Road

1) Do you currently use Internet service within your home?

Yes



No



2) If you do not currently use the Internet at home, would you get Internet service if it were: (check all that apply)

More reliable



Less expensive



Greater bandwidth

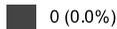


Do not want service



3) How many Internet users are on your property?

0



1



2



3



4



5



more than 5



4) Which current Internet access methods do you use:

No Internet Access



Dial up (Sonic, Earthlink, AOL, etc.)



Wireless (PogoWave/CDS)

██████████ 35 (34.7%)

Satellite (Wild Blue, Exceede, Hughes, etc.)

██████████ 47 (46.5%)

T-1

██████ 1 (1.0%)

Cable (Comcast, AT&T, etc.)

██████ 1 (1.0%)

Cell phone (3G or 4G Verizon, AT&T, etc.)

██████████ 10 (9.9%)

5) Please indicate all reasons why you access the Internet:

Home Business

██████████ 47 (8.7%)

Telecommuting

██████████ 43 (7.9%)

Email

██████████ 91 (16.8%)

Home Office

██████████ 74 (13.7%)

Social Networking (Facebook, LinkedIn, etc.)

██████████ 58 (10.7%)

Video Streaming/entertainment

██████████ 43 (7.9%)

Telemedicine

██████ 11 (2.0%)

Web surfing

██████████ 78 (14.4%)

Bill paying

██████████ 72 (13.3%)

Other

██████ 24 (4.4%)

6) Are you currently satisfied with your Internet reliability?

	1 Not satisfied	2 Somewhat satisfied	3 Neither satisfied or Not Satisfied	4 Mostly satisfied	5 Totally satisfied	Responses	Average Score
Satisfaction with Reliability	34 (36.96%)	26 (28.26%)	13 (14.13%)	18 (19.57%)	1 (1.09%)	92	2.16 / 4 (54.00%)
							2.16 / 4 (54.00%)

7) Are you most concerned about upload or download speeds?

Upload (for sending email, photos, files, etc.)

2 (2.2%)

Download (for streaming video, surfing, receiving photos, etc.)

11 (12.0%)

Both

79 (85.9%)

I do not understand this question

0 (0.0%)

8) For what purposes would you use the Internet if it were faster and more reliable: (check all that apply)

Home Business

50 (8.5%)

Telecommuting

47 (8.0%)

Email

85 (14.5%)

Home Office

74 (12.6%)

Social Networking (Facebook, LinkedIn, etc.)

54 (9.2%)

Video Streaming/entertainment

76 (12.9%)

Telemedicine

21 (3.6%)

Web surfing

81 (13.8%)

Bill paying

70 (11.9%)

Other

29 (4.9%)

9) Do you drive to another location to use the Internet?

Always

5 (5.4%)

Often

14 (15.2%)

Sometimes

29 (31.5%)

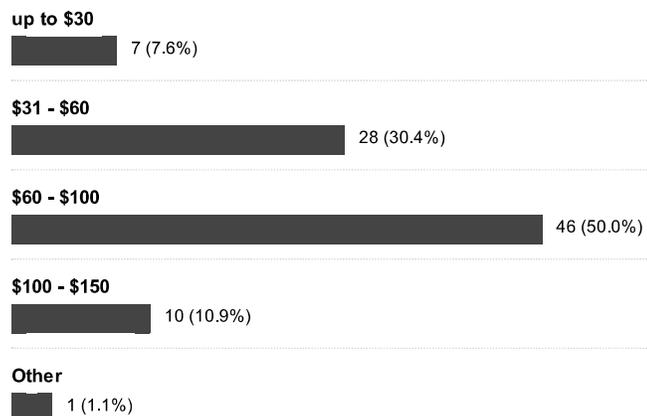
Seldom

13 (14.1%)

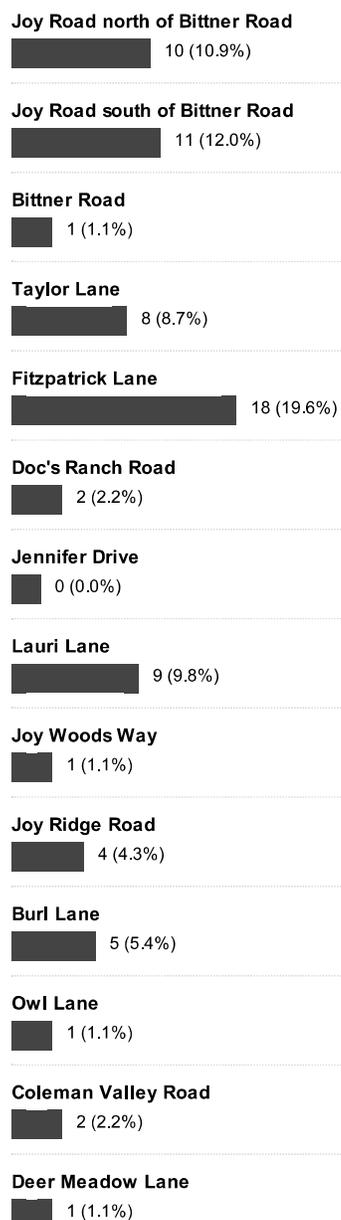
Never

31 (33.7%)

10) How much would you be willing to pay each month for the service you desire?



11) Where are you located?



Other

 19 (20.7%)

12) Would you like to have more information about the effort to Connect Joy Road?

Yes

 76 (82.6%)

No

 16 (17.4%)

From: Sandy & David Troxel <dptroxel@aol.com>

To: Scott_Adams5 <Scott_Adams5@cable.comcast.com>

Sent: Wed, Feb 13, 2013 4:16 pm

Subject: Re: Connect Joy Road- Follow up from Sandy

Dear Scott

Thank you for the information. I am hoping you can fill in a few more specifics for me just so that I have all the facts straight.

Where is the "existing plant" that is so far away? What defines too far away?

Where is the fiber optic infrastructure tie in located?

Is this the same plant and fiber optic tie in that currently services the town of Occidental, houses on Coleman valley road in Occidental, houses on Bittner Road in Occidental and the towns of Bodega and Bodega Bay?

When your construction coordinator says the homes are "just too far" apart, what is considered "too far"? I realize some homes are spread out but there are some areas where the houses are as dense as other rural communities that Comcast currently serves.

We spoke briefly about finances, which I gave some thought to. Would something like \$1200 sign up fee per household spread out over a 2 year contract for 200-300 houses= \$240000-360000 help us get closer to your business model? Of course this is just a figure I grasped out of the air I do not know if it is something viable for the other residents.

If you can get back to me before the weekend I would truly appreciate it so that I can present this to our group and Efren & his staff.

I hope we can continue to work on finding a way to both meet Comcast's business model and the real need for high speed internet by an unserved Sonoma county community.

Thank you again for your time.

Best

_Sandy

-----Original Message-----

From: Adams, Scott (California) (California) <Scott_Adams5@cable.comcast.com>

To: Sandy & David Troxel <dptroxel@aol.com>

Sent: Mon, Feb 11, 2013 2:32 pm

Subject: RE: Connect Joy Road- Follow up from Sandy

Hi Sandy,

Hope you had a good weekend. I just went through my notes and found the following comments regarding Joy Rd from our construction coordinator:

"Unfortunately, we looked into this as a possibility a few years ago. I took a second look per your request. The distance is just too far from our existing plant as well as the even greater distance to our fiber optic infrastructure where the tie in would need to come from. Another issue is the density of homes, the distance between most of the homes is just too far. There is no way to have this meet our business model as a viable project in the near future. I hope this helps."

Sadly, these comments are consistent with what I told you.

Best,

Scott

From: Sandy & David Troxel [<mailto:dptroxel@aol.com>]

Sent: Tuesday, February 05, 2013 3:52 PM

To: Adams, Scott (California)

Subject: Connect Joy Road- Follow up from Sandy

Dear Scott

Thank you for your time today discussing Joy Road's current internet woes and current needs.

I appreciated your honesty about what comcast looks for in order to help communities become served but I hope we can do something to help us become part of the comcast community.

I look forward to continuing this conversation later on this week when you have had some time to look at your notes about Joy Road so that you can provide me more accurate information as to what comcast has on record about Joy Road. I can then use this information to report back to the Connect Joy Road group on February 18th.

Friday is the best day for me this week as I telecommute that day- I can be reached at 707-874-9964 that day as my cellphone (415-613-3065) doesn't work at home.

Thank you again and I look forward to speaking with you on Friday

_Sandy DeVries-Troxel

on behalf of

Connect Joy Road in Occidental

Subject: Fwd: Testimonials

From: Michael C Nicholls <mcnicholls@me.com>

Date: Thu, 30 May 2013 16:44:21 -0700

To: Greg Jirak <greg@fogeatersinc.com>

CC: Steve Sharpe <Steve.Sharpe@sonoma-county.org>

Valley Ford Testimonial

Begin forwarded message:

From: Steve Hecht <steve@coastalagent.com>

Subject: Re: Testimonials

Date: March 29, 2013 7:00:05 PM PDT

To: jim_robinson@jimndar.net

Cc: Tom West <twest@cenic.org>, Michael C Nicholls <mcnicholls@me.com>, Cathy Emerson <cmemerson@csuchico.edu>, Steve Sharpe <Steve.Sharpe@sonoma-county.org>, Jim Moorehead <jim@mcn.org>, Brian Churm <brian.churm@gmail.com>, Efren Carrillo <Efren.Carrillo@sonoma-county.org>, Susan Upchurch <Susan.Upchurch@sonoma-county.org>

I just confirmed with the Comcast Sales Department that their services are not available in Valley Ford (all of 94972) even though this spreadsheet shows it covered. I do not know what the column headed "To Be Connected to NCRMMI" means but it is also noted as a "Yes".

Steve Hecht DRE: 01378755
Artisan Sotheby's Int'l Realty
www.CoastalAgent.com
(707) 481-8474 mobile/text
(707) 377-0302 fax

Featured Listings
RESIDE online magazine

On Mar 29, 2013, at 5:38 PM, Jim Robinson <jim_robinson@jimndar.net> wrote:

If I may offer:

Comcast does not serve a single address on Joy Road, Taylor Lane, Joy Ridge Road, Owl Road, Lauri Lane, and Burl Lane.

Fitzpatrick Lane is in two parts.

The upper part starts from Joy Road and is a dead end. On the upper part, Comcast does not serve a single address.

The lower portion goes north out of Bodega and is a dead end. I have no information.

Attachment M – 2012 Interim Report

This report summarizes Alliance activities during 2012 pursuant to the CASF planning grant through Redwood Coast Connect and the Humboldt State Sponsored Projects Foundation.

Date: December 3, 2012

To: Connie Stewart, Consortium Director, Redwood Coast Connect

Subject: Interim report for the services contract between Humboldt State Sponsored Projects Foundation (HSUSPF) and the Economic Development and Financing Corporation of Mendocino County (EDFC), effective January 2, 2012 (Agreement)

From: Greg Jirak, Broadband Alliance of Mendocino County Business Committee chair

Overview

This document is intended to provide HSUSPF with an interim progress report regarding the services the Alliance provides HSUSPF pursuant to Exhibit 1 of the Agreement, which is included as Exhibit A of this document. It is intended to augment the detailed activity reports that the Alliance submits to HSUSPF each month.

Much of this information is also available on the Alliance web site,
<http://www.mendocinobroadband.org/>.

While the Agreement doesn't require a final report, the Alliance feels it important to document clearly what services the Alliance has actually provided to HSUSPF in the first year of the Agreement. The Alliance would appreciate HSUSPF's review of this document, with HSUSPF noting anything further required in the final report, but missing from this interim report.

The Alliance would also appreciate understanding what the Alliance needs to do to renew the Agreement for 2013. The Alliance assumes that a new Exhibit 1 will be drafted to specify the services in 2013, and a budget for doing so.

The body of this document is organized by topic as listed in Exhibit 1 of the Agreement.

1. Activity: Inventory Existing County Broadband Access

a. Action: Compile Mendocino County's current broadband access inventory.

Based on data the Alliance collected last year, through its website and through county-wide community input, the Alliance compiled an anecdotal database of unserved/underserved/served areas in Mendocino County. This data clearly showed that the then current state and federal government data and maps were inconsistent with field data in many portions of Mendocino County.

Based upon field data it has gathered during 2012, the Alliance compiled a first draft of the Mendocino County Broadband Access Inventory (MCBAI) intended to contain information about each broadband connection at every location of every anchor institution in Mendocino County.

Currently, MCBAI has reasonably complete, reasonably accurate, information for K12 schools, higher education, libraries, and health care providers, with partial data for cities, districts, and tribal. Data for public safety is maintained separately by the Mendocino County Office of Emergency Services (MCOES). MCOES has an organizational liaison who sits on the Alliance Steering Committee to ensure that public safety is included in Alliance planning while maintaining sensitive public safety information confidential.

The Alliance will use MCBAI to generate reports and maps needed for planning and broadband deployment grant applications.

Throughout 2012, the Alliance consulted with CPUC mapping staff to better map unserved/underserved/served areas in Mendocino County. The Alliance has received a copy of the new CPUC field survey app for Android smartphones that delivers field data directly to CPUC databases, and is planning a county-wide publicity push to educate the public about the need to gather good field data throughout Mendocino County.

Mendocino County government lacks GIS capacity to provide GIS services needed by the Alliance, so the Alliance has arranged for Sonoma County GIS to provide all mapping/data services. This is very convenient, as the two counties work closely together on projects that cross county borders, such as the Route 1 Corridor Project (R1CP).

The Alliance has also worked with CPUC staff to clarify the meaning of the terms certificate of public convenience and necessity (CPCN) and competitive local exchange carrier (CLEC), and distributed a short white paper on the topic to Mendocino Vendor Connect.

One of the vendors working with the Alliance also confirmed that application for CASF funding and application for a CPCN can go on in parallel, but the application won't be approved until the CPCN is issued.

i. Outcomes: Work with CPUC mapping staff on areas that CPUC may have listed as served that are underserved to help understanding of current conditions on the ground.

ii. Milestone: Hold at least one meeting with CPUC mapping staff to discuss census block differences.

Both the outcome and the milestone have been completed.

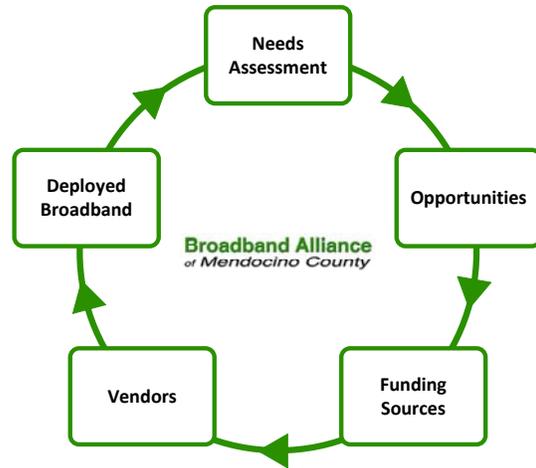
As noted below, the Alliance worked closely with CPUC staff when the Alliance discovered a discrepancy in the CPUC database between service classification of CBGs and the CBs each contains.

b. Action: Identify critical gaps--assure that all unserved communities have a last mile plan.

To identify service deficiencies and to identify middle-mile and last-mile providers to remedy such deficiencies, the Alliance has initiated two activities:

1. **Mendocino County Vendor Connect** – The Alliance has organized Mendocino County Vendor Connect to include all telecommunications vendors who currently do business in Mendocino County, or those who are interested/should be interested in doing business in Mendocino County. This includes both middle-mile and last-mile providers.

2. **Notices of Opportunity** – Through its Notices of Opportunity program, the Alliance has formalized the cyclic process of identifying broadband access need, quantifying need as an opportunity, identifying funding sources, facilitating vendor grant application, expediting broadband deployment, and repeating the cycle.



On an ongoing basis, the Alliance will distribute notices of opportunity (NO) to Vendor Connect. Notices of opportunity are intended both to identify opportunities, and to facilitate vendor evaluation of, and grant application for, each opportunity.

For each notice of opportunity, the Alliance will compile data for the opportunity, including that needed to submit CASF broadband deployment grant applications. The Alliance makes an investment in maps and data whose benefit is spread across all vendors in Vendor Connect.

Vendors need not make speculative investments in mapping and data to evaluate possible opportunities, and can concentrate instead on figuring out how to make a viable, fundable, business case, or determine that no business case can be made in the current funding/economic situation.

The Alliance may perform field verification to confirm the CPUC’s classification of each census block group (CBG) included in the application’s affected area. The Alliance worked with CPUC staff to understand the formal process whereby the Alliance can petition to certify field data correct for the purposes of grant applications.

To date, the Alliance has distributed three notices of opportunity, and is preparing a fourth:

1. **Rancho Navarro** – We have tremendous community support and leadership, and a potential last-mile applicant actively pursuing this unserved opportunity. The major impediment to eliminating this unserved area is for the vendor to be granted a CPCN before the grant is made.
2. **Route 1 Corridor Project** – This strategic project, which is a mix of unserved and served areas, would provide an open middle-mile fiber running from Petaluma out to Bodega Bay, up Route 1 to Westport, and east to Laytonville along Branscomb Road. We have worked with two different potential middle-mile applicants to evaluate possible business scenarios, each of whom has had a plausible last-mile provider story.
3. **Sherwood Road/Willowbrook** – This notice, for a mixed unserved/underserved area (mostly unserved), was only released in September. We've had a few nibbles, but nothing concrete to date.
4. **Point Arena¹** – Point Arena is significantly underserved – a recent one-month study conducted at Coast Community Library, located in the center of town, had an expected download speed value of only 800-900Kbps, though the local ISP claimed to be providing 5Mbps service. When given the data, the ISP said that it could provide no better service than currently, but would charge for only a 3Mbps residential service

A Notice of Opportunity for Point Arena is in development, but not yet distributed.

Point Arena is a pilot project for evaluating central office opportunities (CO) in general. The Alliance will inventory all COs in Mendocino County, and will generate data and maps centered on each. Using the associated demographics, the Alliance will generate a scored list of COs for further investigation. Notices of opportunity will be generated for promising COs.

Long-term, CO opportunities are limited by the imminent demise of CO copper plants. Wherever ILECs abandon CO copper plants, ADSL2 opportunities will probably die as well.

All NOs are under development, and none have complete data and maps.

The Alliance will continue issuing new notices of opportunity, and updating associated data, throughout the rest of 2012, and all of 2013. As notices are published or updated

¹ During development of the Point Arena notice, the Alliance detected an issue with the CPUC dataset. A single CBG completely encompasses a two mile radius circle centered on the Point Arena central office. The CPUC's data for this CBG claimed that it was unserved, while all census blocks (CB) contained in the CBG claimed to be underserved - Alliance field data also indicates that the CBG is underserved. The Alliance notified CPUC mapping staff, who confirmed it a bug in the computation of CBG service status.

underserved in the current funding/economic state. Such analysis can be used by the CPUC to devise changes that could lead to elimination of unserved/underserved areas in Mendocino County, and throughout the State of California.

The Alliance will present a year-end draft of the *Mendocino County Broadband Plan*, which includes the work products of the Agreement, to the Mendocino County Board of Supervisors at its meeting on December 10, 2012.

i. Outcomes: Develop last mile plans for all unserved communities in Mendocino and present the last mile plans to the County Board of Supervisors

We note:

1. The Alliance, per se, cannot devise specific last-mile plans because the Alliance is a match maker, not a vendor. Every vendor has a proprietary cost structure that produces a different last-mile plan. Through Vendor Connect, the Alliance facilitates/expedites vendor development of both middle-mile and last-mile broadband deployment plans, but does not apply directly for broadband deployment grants.

The Alliance depends upon Vendor Connect to understand the business realities of the current market for broadband in each unserved or underserved community, and to take action when an opportunity becomes attractive.

The Alliance strives to make it very easy for vendors to evaluate broadband opportunities in Mendocino County.

2. There may be *no* possible last mile plan for some communities with the current regulations, funding guidelines, and overall economic climate. The Alliance will compile a database of such failed opportunities, and provide an analysis to the CPUC.

The Alliance has an ongoing discussion about the notion of an ISP of last resort that would develop all opportunities not developed by Vendor Connect. Nothing definite has been decided, but some scheme must be devised to address the issue of residual unserved/underserved areas.

2. Activity: Create Funding Plans for Middle Mile, Last Mile and Public Agency Deployment

- a. **Action: Work with stakeholders to address their concerns about broadband unmet needs and determine their level of possible funding support.**

The Alliance holds weekly Steering Committee meetings in Ukiah, hosted by the Community Foundation of Mendocino County, that are open to the public. Agendas and supporting materials have been distributed for each meeting to an open subscriber list. In 2013, they will be posted to the Alliance web site where visitors may subscribe to notifications via email or through RSS feeds.

As detailed in the monthly reports, Steering Committee meetings often target specific constituencies, including vendors, public safety, tribal, medical, and library.

In January, 2012, the Alliance hosted a tri-county (Mendocino, Sonoma, and Lake) meeting to establish an informal working relationship between the three counties at the supervisorial level. All counties were represented by at least one supervisor, the CEO's office, and economic development. Others represented were public safety, information services, K12, higher education, the library district, health care providers, and tribal interests.

In February, 2012, the Alliance convened a meeting of Mendocino County Health Care Connect with representatives of California Telehealth Network (CTN). Most health care organizations in the county sent representatives to work with CTN to expedite CTN membership applications that were due at the end of March.

Both the Mendocino County Office of Emergency Services and Mendocino County Planning & Building Services have officially designated members of the Steering Committee, and participate actively in the Alliance.

i. Outcome: Gather financial support in order to obtain the CASF matching grant and technical assistance for Mendocino broadband deployment.

The Alliance identified a qualified investment fund of \$35M interested in investing or loaning the matching funds for broadband deployment and operation projects in Mendocino County. The Alliance then introduced a potential Mendocino County vendor to this funding source. Their discussion was proprietary, but both parties thanked the Alliance for the introduction, and indicated that business might be transacted. The Alliance will continue to provide such introductions as opportunities evolve.

The Alliance is also closing in on a \$40,000 challenge grant from the Community Foundation of Mendocino County, and plans to meet the match by the end of 2012. This will significantly boost Alliance unrestricted reserves.

b. Action: Promote CASF Fund. Conduct open information briefings for stakeholders and providers.

The Alliance promotes CASF explicitly in most of its work products. Documents and presentations often include explicit mention of CASF, and the notice of opportunity program promotes CASF funding as a primary funding source.

The Alliance was prepared to endorse a non-standard regional CASF application, scheduled for submission October 1, 2012, but this application has been delayed to February, 2013.

The Alliance was also prepared to endorse a CASF unserved application that would have qualified for the October 1 submission date, but that application will be delayed until the applicant obtains the CPCN needed to apply for the grant.

The Alliance is working with two other possible applicants scheduled to submit in February 2013.

i. Outcome: have at least one CASF application submitted from Mendocino County.

Events beyond the Alliance's control result in the fact that no CASF application will be submitted before the end of the year for a project in Mendocino County. The Alliance does not apply directly for broadband deployment grants, but depends on individual vendors to do so.

The Alliance has endorsed the Northern California Regional Middle-Mile Infrastructure grant application that will include the Route 1 Corridor Project spanning Mendocino and Sonoma Counties.

ii. Outcome: Submit a minimum of 10 Letters of support for every CASF grant submitted to provide broadband infrastructure for Mendocino County.

This year's endorsement drive has already netted almost 100 endorsements with more in the pipeline. Since the Alliance will be endorsing multiple applications from multiple funders, The Alliance has asked its endorsees to make the Alliance endorsees' agent for the purposes of endorsing broadband deployment grant applications in Mendocino County during the coming year.

3. Activity: Work with everyone to expedite rural broadband deployment.

The Alliance motto is "we will work with anyone who will work with us." The Alliance operates in a vendor/community/demographic neutral way. Weekly Steering Committee meetings are open to everyone, and everyone can receive electronic meeting materials, which are widely distributed. A conference line can be kept open throughout the meetings for telephonic attendees.

As detailed in the monthly reports, members of the Alliance have appeared on the radio, on podcasts, and in the newspapers discussing the critical need for improved broadband service in rural California.

a. Action: Work with State and Federal regulators to understand environmental issues and requirement for priority deployment projects.

The Alliance has established an ongoing relationship with Mendocino County Building & Planning Services, and is collaborating on drafting a revision to the County's *Wireless Guidelines*. As detailed in the monthly reports, the Alliance has held Steering Committee meetings that brought the County planning department together with interested vendors to discuss planning issues related to broadband deployment projects of all magnitude.

Mendocino and Sonoma counties are also collaborating to expedite planning of inter-county projects.

4. Activity: Provide support to remove barriers impeding advancement of wireless broadband deployment.

a. Action: Engage wireless broadband providers, local jurisdictional reps, and consumer advocacy groups, to identify permitting barriers to cell tower siting.

The Alliance is fully engaged with Mendocino County Planning & Building Services (MCPBS). The Director of MCPBS sits on the Alliance Executive Committee, and the county planner responsible for broadband meets frequently with the Alliance.

The Alliance is also engaged with Vendor Connect, hosting special Steering Committee meetings specifically targeting broadband planning issues, including permitting for tower and equipment installation. These meetings bring together vendors and county planning in a cordial, productive process that will lead to improvements in broadband planning in Mendocino County.

The Alliance has reviewed and commented upon new Mendocino County Wireless Guidelines, and has encouraged Vendor Connect to do so as well.

The Alliance has formed an informal working relationship with Sonoma County at the supervisory level to facilitate and facilitate broadband deployment in both counties, and for inter-county projects.

b. Milestone: Develop a list of barriers to wireless deployment, suggest policy changes necessary and present them to the Board of Supervisors

Following is a discussion of impediments to the elimination of unserved and underserved areas of Mendocino County. Most of these impediments are assumed to be problems for other low density rural areas.

The Alliance operates on the basic assumption that individuals and organizations have a basic right to broadband service in populated areas and along transportation corridors. Most impediments to elimination of unserved/underserved areas are systemic, and need to be remedied strategically.

1. **No backhaul** - Lack of affordable reliable backhaul for local last-mile providers is one of the biggest impediments to elimination of unserved/underserved areas in Mendocino County.
2. **No cherry picking** – Cherry picking comes in many forms, but all are basically the same – a high-value asset or localized area is served, but the surrounding low-value area is not. Typically, the backhaul for the high-value asset/area passes through unserved/underserved areas.

ILECs should ensure that low-value areas surrounding high value assets/areas, and along backhaul routes, are served as well.

Suggestions:

- a. **Provide backhaul in refused service areas:** ILECs either provide last-mile service in surrounding areas and throughout backhaul routes, or provide affordable backhaul to last-mile providers in such areas.
3. **Reduce barriers to entry** – Eliminate possession of a CPCN as a requirement for certain CASF broadband deployment grant applications, e.g., WISPs collocating for IP only.

4. Costly queries about collocation effectively stifle local last mile providers.
5. Require ILECs to lease dark fiber running to remote terminals at reasonable rates to CLECs.
6. Allow collocation at reasonable rates by CLECs at any drop along dark fiber route, including remote terminals.
7. **Eliminate Pole Tax** – Reduce expensive pole and attachment tariffs

5. Activity: Involve the entire County of Mendocino

a. Action: Convene at least 4 face-to-face meetings that are open to the public in Mendocino County.

As detailed in the monthly reports, the Alliance has conducted over 30 public meetings during 2012:

1. The Alliance holds weekly steering committee meetings that are open to the public, and whose meeting materials are widely distributed.
2. The Alliance has held community meetings, and addressed community organizations, throughout the County.
3. The Alliance has appeared on radio programs and podcasts, and in newspaper articles.

6. Activity: Participate in the Redwood Coast Connect Regional Consortium

The Alliance believes that it has submitted all reports required by the Agreement, is current with all, and has responded to HSUSPF promptly.

The Alliance would appreciate prompt feedback from HSUSPF with respect to HSUSPF's satisfaction with the Alliance's performance of all services provided by the Alliance pursuant to the Agreement.

7. Activity: Collaborate with everyone, including participation in the annual broadband forum

The Alliance sent two representatives to, and gave a presentation at, the annual broadband forum sponsored by CASF/RCC, and held October 11, 2012, in Fortuna, California, at the River Lodge.

Attachment N – Broadband Crisis in Rural America

A two page handout summarizing the problem.

BROADBAND CRISIS IN RURAL CALIFORNIA

Participating Organizations

Community Foundation of Mendocino County
Economic Development & Financing Corporation
Mendocino County Board of Supervisors
Mendocino County Executive Office
Mendocino County Office of Emergency Services
Mendocino County Office of Education
Mendocino County Library District
Mendocino County Tribal Connect
Mendocino County Health Providers Connect
Mendocino County Colleges Connect
Mendocino County Public Media Connect
Mendocino Coast Broadband Alliance

Executive Committee

Dan Hamburg – Mendocino County Supervisor
5th District
John McCowen – Mendocino County Supervisor
2nd District
Steve Dunicliff – Mendocino County Executive Office
Susanne Norgard – Community Foundation of
Mendocino County Executive Director
John Kuhry – EDFC Executive Director
Jim Moorehead – Executive Committee Chair
Brian Churm – Technology Committee Chair
John Goldsmith – Fund Development Committee Chair
Greg Jirak – Strategic Planning & Business Chair

Advisory Panel

Al Beltrami - Retired Mendocino County CEO
Paul Tichinin - Mendocino County Superintendent of
Schools
Melanie Lightbody - Mendocino County Library Director
Mary Anne Landis - Ukiah City Council Member
Conrad L. Cox - Retired Judge of the Mendocino County
Superior Court
Mitch Sprague - Business Manager, Mendocino
Community Network
Rod Lorimer - Mendocino Coast Broadband Alliance
Bob Coppock - Mendocino Coast Broadband Alliance

Community Council

Albion – Shirley Freriks
Comptche – Mark Zarin
Elk – Sharon Garner
Fort Bragg – Gary Garcia
Little River – Jim Culp
Mendocino – Jim Moorehead
Point Arena – Tom Reid
Potter Valley – Brian Churm
Redwood Valley – Keith Tiemann
Sea Ranch/Stewarts Point – Bill McCarthy
Cazadero/Jenner – Mike Nicholls

The mission of the Broadband Alliance of Mendocino County is to ensure that the county's population has affordable universal broadband access in their homes, businesses and transportation to support economic viability, ensure health and safety, and access educational opportunities.



California's rural economy is threatened by inadequate broadband access. Faulty maps, based on unverified data provided by the telecommunications industry, and compiled by the state and federal governments, hide this escalating crisis.

In 2011, government data claimed that 84% of Mendocino County had broadband access, while Alliance on-the-ground estimates indicated that over half the County was still on dial-up. Because of this disconnect between official data and on-the-ground reality, Mendocino County has been denied funding for critical broadband projects throughout the County.

2011 also saw the business failure of a major Internet service provider (ISP) for coastal southern Mendocino and northern Sonoma Counties. Even though this service was too slow to qualify as broadband, it was the only viable ISP for many areas. This failure had a cascading negative economic impact.

Some local businesses were immediately forced to switch to expensive, inadequate satellite service. Some small businesses, who couldn't afford satellite service, failed. Library and senior services were disrupted, and tourists had disappointing visits.

Without adequate broadband access, rural economies will stagnate and fail.

Broadband Alliance of Mendocino County

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www.MendocinoBroadband.org

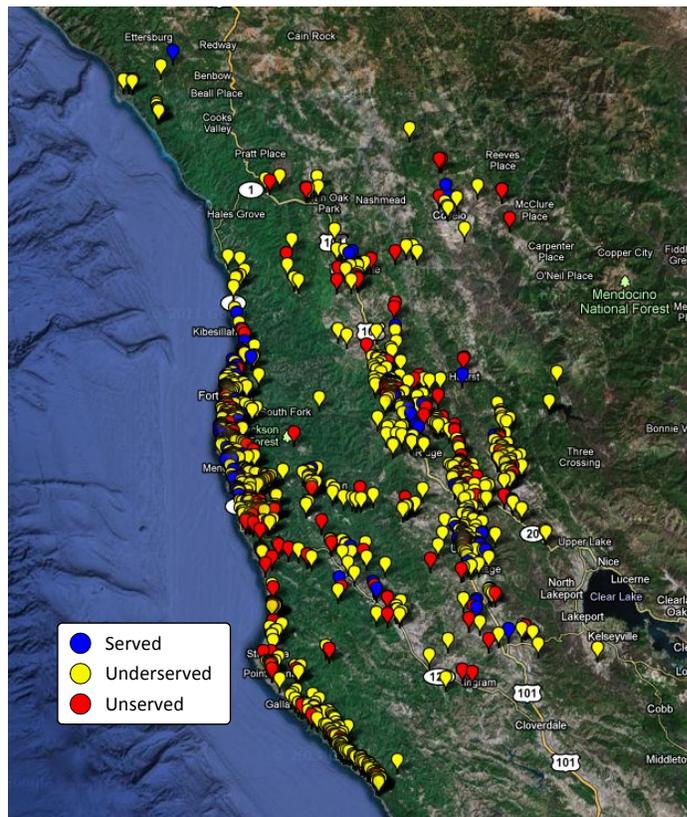
AdministrativeCoordinator@MendocinoBroadband.org ♦ 707.354.2262

In 2011, the Alliance conducted an online county-wide needs assessment to determine actual, on-the-ground, broadband access throughout the county. Using an online form, or hard copy survey forms, people could report broadband access data at specific street addresses. After receiving data for over 7% of all county residences, the Alliance produced maps showing the extent of the problem.

Working with its contacts throughout the county, the Alliance compiled a broadband access inventory for county anchor institutions including emergency services, medical services, schools, libraries, colleges, and major businesses.

Alliance data conflicts with government data for the same period.

In 2012, the Alliance will identify broadband deployment projects throughout the county, start getting currently buildable projects built, and advocate for the changes needed to build the currently unbuildable.



Alliance Online Broadband Access Survey

Initial study indicates some projects will not be built under current broadband regulations, due to economic constraints. Costly middle-mile fiber over-builds might be avoided if existing middle-mile bandwidth were made available in unserved/underserved areas.

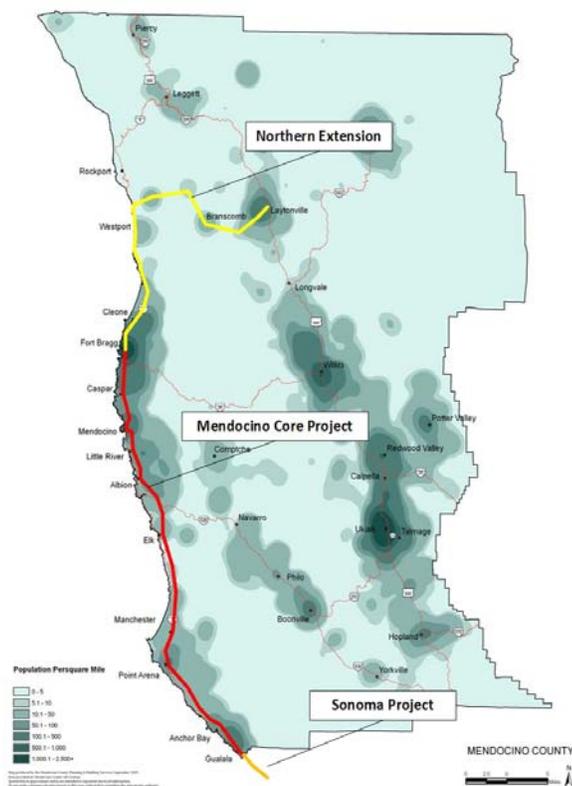
Without recourse to reasonable regulatory change, many rural areas throughout California won't benefit from broadband. Their communities will become increasingly disenfranchised, and their economies will eventually disintegrate.

The Alliance has received a three-year, \$60,000 planning grant from the California Advanced Services Fund, and a \$40,000 challenge grant from the Community Foundation of Mendocino County, of which over half has already been raised.

The Alliance is largely staffed by volunteer professionals supported by part-time paid staff.

Contact the Alliance today - help us ensure that **everyone** in California benefits from broadband.

www.MendocinoBroadband.org



Proposed Route 1 Corridor Project

Attachment O – Local Press

Two articles on broadband from the Independent Coast Observer, Gualala, CA.



\$100 Million Cut From Rural Broadband Bill

By J. Stephen McLaughlin

Last week, \$100 million was cut from a bill in Sacramento intended to bring broadband Internet connectivity to unserved — mainly rural — areas of California.

Under existing law, the California Public Utilities Commission administers the California Advanced Services Fund (CASF) to support broadband infrastructure in the remote parts of the state that still lack high-speed internet service. The CASF is funded by a customer surcharge on telephone bills and other intrastate communications services.

Large areas of Mendocino County and other north coast counties are among those areas currently unserved by facility-based high-speed internet access, such as cable or local wireless; if only dialup service is available, users are unable to even access many websites and other internet services.

The Broadband Alliance of Mendocino County is working to expand high-speed internet access in our area (see related story, p. 3).

Under current law, the CASF makes grants and loans only to telephone corporations, and the fund grants up to 70 percent of qualifying broadband infrastructure projects. Senate Bill 740 by Sen. Alex Padilla (San Fernando Valley) was introduced with two goals: to expand the

eligibility for CASF grants and loans to organizations that are not telephone companies, and also to bolster the CASF with an additional \$100 million.

According to Padilla's office, CASF currently has authorized funding of \$225 million through 2015, of which about \$41 million has been awarded, with an additional \$14 in million in pending applications.

On Feb. 1, the CPUC received applications seeking a total of \$200 million, including a \$119 million "middle mile" project to bring fiber optic backbone infrastructure to far north California counties. These applications could drain the fund for additional "last mile" projects which would connect the 225,000 households that still would lack high-speed internet access, according to Padilla's staff.

On May 7, Padilla's bill was amended to delete the additional \$100 million in funding.

In addition, the provisions to expand eligibility to non-telcos was tightened. According to the Legislative Counsel's digest, "a local governmental agency may be eligible for an infrastructure grant only if the infrastructure project is for an unserved area, the commission has conducted an open application process and no other eligible entity applied, and the commission

determines that within the region of the local agency's jurisdiction there is less than 98 percent broadband deployment."

Padilla's office did not return calls by press time to explain the origin of or reasoning behind the amendments.

The amended SB 740 is set for a hearing May 20 before the Senate Committee on Appropriations.

Broadband Alliance
of Mendocino County
www.MendocinoBroadband.org



Rural broadband boosters warn of digital oblivion

By J. Stephen McLaughlin

“The broadband situation in Mendocino County is damaging to the county,” according to Greg Jirak of the Broadband Alliance of Mendocino County. Jim Moorhead warned that unserved customers may be “condemned to digital oblivion.”

Jirak and Moorhead launched the Alliance three years ago, after Marshall Sayegh’s Platform Horizons Internet service business abruptly disappeared and left hundreds of Mendonoma coast residents in the digital dark. (Central Valley Cable has filled some of the vacuum left from Platform’s disappearance.)

In remote areas and small towns on the Mendonoma Coast, inns and businesses must spend hundreds of dollars per month each for T1 lines to connect their Internet-hungry guests and customers, Moorhead said. If area-wide, high-speed broadband were available, their individual costs would be a fraction of that.

A state Senate bill to provide people and businesses in remote and rural areas of California with broadband internet access like that enjoyed by their urban cousins is set to be considered by the Senate Appropriations Committee on Thursday, May 23. On the way, though, it was amended to remove a \$100 million allocation to do the job.

Currently, a surcharge on phone bills puts money into the California Advanced Service Fund (CASF), which is allocated for grants to telephone corporations to bring broadband service to unserved areas of California. Most unserved areas have low-density populations and infrastructure is costly, especially on a per-customer basis. CASF grants can amount to 70 percent of the project cost.

Senate Bill 740, by State Sen. Alex Padilla (San Fernando Valley) would expand the type of entity which could qualify for CASF grants, and originally added \$100 million to the CASF fund.

According to Padilla’s office, CASF currently has authorized funding of \$225 million through 2015, of which about \$41 million has been awarded, with an additional \$14 in million in pending applications.

On Feb. 1, the CPUC received applications seeking a total of \$200 million, including the \$119 million Golden Bear Broadband project to bring fiberoptic backbone to far north California counties, including down Highway 1 through Mendocino and Sonoma Counties. Mendocino County Broadband Alliance is part of the Golden Bear project. (Jirak said AT&T “wouldn’t even answer Golden Bear’s phone calls” to inquire about possibly leasing part of AT&T’s existing Highway 1 fiberoptic cable.)

The existing applications could drain the current fund for additional “last mile” projects which would connect the 225,000 households that still would lack high-speed internet access, according to Padilla’s staff. Even if the Golden Bear backbone is installed, more CASF funds would be needed for those “last mile” connections to users.

The Energy Committee analysis indicates that “industry stakeholders” stated concerns that the \$100 million may be premature, as some of the applications may be deemed ineligible because of “overbuild.”

Instead, the bill was amended to provide that the goal of the CASF program is, no later than December 31, 2015, to approve funding for infrastructure projects that will provide broadband access to no less than 98 percent of California households and would provide that it is the intent of the Legislature to authorize collection of additional surcharge amounts necessary to achieve this program goal.

That goal of 98 percent of households served is misleading, according to Jirak and Moorhead. They contend that the industry-supplied maps of the “served” areas overstate the case: if there is just one connected broadband user in an block of census tracts, then that entire block is counted as “served” on the government maps. This leaves great swathes of rural California categorized as “served,” but still unable to connect. “Those maps are pure fiction,” Moorhead said.

The Alliance is preparing a county-wide survey of school students and their families for September, 2014, to establish ground-truth beyond the telco maps, asking, “how do you and your family connect to the

Internet?” They expect the answer to be more revealing than the telco maps, which present what they agreed was a “fiction of service.”

Moorhead and Jirak contend that the telcos don’t want to serve these remote customers, but they won’t let anyone else do it, either. Amended SB 740 is set for a hearing May 20 before the Senate Committee on Appropriations.

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