

NORTH BAY-NORTH COAST BROADBAND CONSORTIUM

A member of the California Public Utilities Commission's Rural and Urban Regional Consortia Program

Oversight Committee

Supervisor Steve Kinsey (Marin)
Supervisor Dan Hamburg
(Mendocino)
Supervisor Diane Dillon (Napa)
Supervisor Efren Carrillo
(Sonoma)
Liza Crosse- Oversight
Committee Manager

Consortium Manager

Tom West

County Management Teams

Marin:

Barbara Thornton – County Liaison/
Manager and EO Marin
Telecommunications Agency
Peter Pratt - County Co-Deputy
Liaison/Manager and private
consultant
Barbara Layton – County Co-Deputy
Liaison/Manager and Manager,
County Enterprise Systems Manager

Mendocino:

Steve Dunncliff –County Liaison/
Manager and Director of County
Planning and Building Services
Trish Steel - County Deputy Liaison/
Manager and Chair of The
Broadband Alliance
Diann Simmons-administrative
coordinator for Broadband Alliance

Napa

Anthony Halstead – County Liaison/
Manager

Sonoma:

Mike Nicholls – County Liaison/
Manager
Steve Sharpe- County Deputy
Liaison/Manager

Congressman Huffman holds Broadband Stakeholder's Roundtable

On Nov. 12th Congressman Jared Huffman hosted a broadband stakeholders roundtable meeting in Willits Ca. Attendees included representatives from county government, schools, and public safety; regional representation from the North Bay-North Coast Broadband Consortium; state representatives from the California Public Utilities Commission (CPUC), The Utility Reform Network (TURN), and Cal Office of Emergency Services (CaOES); federal representatives included Federal Emergency Management Agency (FEMA); and, AT&T and PG&E represented private business. He called this meeting in order to support Mendocino County and the other counties in California District I in their efforts to secure broadband for our rural areas. He came prepared with a series of questions that he put out to the group for discussion. The discussion also focused on ways to break down the broadband "silos" between agencies, and to work towards inter-governmental solutions. One of the congressman's goals was to leverage what he can with federal government resources to improve options on the ground for our rural counties. He also mentioned that he would like to have a follow-up meeting and to do this again.

Within weeks, the congressman introduced the Rural Broadband Investment Act which amends Title II of the Rural Electrification Act of 1936 by adding a new section, which will hopefully remove some current funding barriers within the Rural Utilities Service (RUS) for rural areas such as ours. It also increases funding overall, breaks down silos, redefines "rural", and allows for increased grants in addition to loans. Congress Huffman's press release on this bill can be found here: <http://huffman.house.gov/media-center/press-releases>.

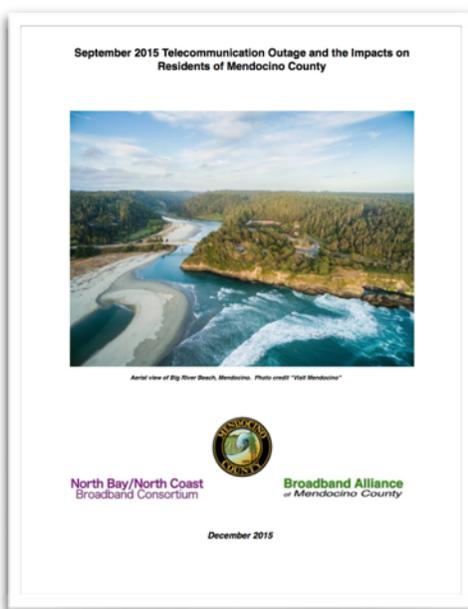
Congressman Huffman's broadband efforts also include promoting connectivity in our National Parks. He was part of a small group lobbying President Obama to put extra funding in his budget request for the National Park Service so more parks can be "wired" for cellphone and WiFi. The letter was sent to President Obama on Wednesday (1/27/16) and signed by Rep. Jared Huffman, D-Calif., Raul Grijalva, D-Ariz., Niki Tsongas, D-Mass., Derek Kilmer, D-Wash., and Jared Polis, D-Colo. They wrote, "Since its founding, our National Park Service has set an example for the world to follow, and we believe that investing in 21st century telecommunications infrastructure is critical to maintaining that leadership."

September 2015 Telecommunications Outage and the Impacts on Residents of Mendocino County

During a sunny day last September, much of Mendocino and Humboldt counties went dark with a widespread telecommunications outage. The outage was due to the cutting of an AT&T fiber-optic line south of Ukiah. The person(s) responsible have yet to be caught, with a \$50,000 reward offered by AT&T for information leading to an arrest. Many residents and businesses lost multiple combinations of landline phone, mobile phone, Internet, and fax connectivity, including the loss of 9-1-1 which created a serious public safety risk. The county responded to this crisis with activation of their Emergency Operations Center (EOC) at level 2, which involved a series of actions. Incoming 9-1-1 calls were re-routed to a secondary system and emergency protocols were activated. The extent of the outage - how many people were actually affected, may never be known as AT&T does not release such information. The Broadband Alliance of Mendocino County (BAMC) wanted to make sure that the impact this outage had on county residents and businesses was documented, and the results shared with our elected officials who make public policy relating to telecommunications. A 33-question survey went online in the days following the outage, and 627 people responded and shared their stories.

The data from this survey has now been compiled into a report and is available to the public on the BAMC website. This report is not meant to be an in-depth statistical analysis of the data, but rather the telling of our collective stories from that day, and identification of common themes. These common themes relate to safety concerns, financial impacts on businesses, availability of information during the outage, and the need for diversity and redundancy in the network. The report closes with

six recommendations to reduce the chances for such outages from happening in the future. The appendices list all 33 questions and the aggregated results from responses. Also included are 167 "final comments" from participants, many which summarize their on-going general frustration with the lack of reliable broadband and the need for back-up systems. All personal information, such as any names, addresses, or identifying information has been redacted so as to maintain anonymity of the respondents.



The report was presented to, and approved by the Mendocino County Board of Supervisors at their January 12th, 2016 meeting. This report will now be sent from the Executive Office to the following individuals/organizations: Congressman Jared Huffman, Assemblymember Jim Wood, Senator Mike McGuire, Mendocino County Sheriff Tom Allman, the North Bay-North Coast Broadband Consortium, Mendocino County Office of Emergency Services, California Public Utilities Commission, The Utility Reform Network, the California State Association of Counties, the Rural County Representatives of California, the League of Cities, and the Broadband Alliance of Mendocino County.

We encourage individuals to read the report as well. The report can be read and/or downloaded from the BAMC website at <http://www.mendocinobroadband.org/wp-content/uploads/Outage-Report-as-approved-11216-by-BoS.pdf>. For any other information contact BAMC chair at trish@MendocinoBroadband.org.

Napa County Library Continues to Expand Internet Access

By Anthony Halstead

In July of 2015 the Napa County Library officially became a member of CENIC, California's high-bandwidth, high-capacity Internet network designed specially for educational institutions (K-12) and Libraries. CENIC (an acronym for the Corporation for Education Network Initiatives in California) is a non-profit that is unique in California, with a presence in all 58 counties. CENIC is able to provide this high bandwidth to libraries and schools due to their private 3,800-mile fiber-optic-based network that connects 20 million users, called CalREN (California Research and Education Network). When you become a member of CENIC you are eligible to connect to the CalREN network.

Napa County libraries joined CENIC through the Califa Group (www.califa.org), a non-profit library consortium that pioneers technology projects, negotiates discount rates for technology purchases, and develops contracts for circuits and the use of the CalREN network.

With state subsidies to help offset hardware, construction and ongoing service costs, all Napa County libraries will be upgrading to 1 Gbps connections throughout the 2015/2016 fiscal year. In January of 2016 two of the libraries in Napa's four library system were up and running, Napa and American Canyon Branches. In April, the Calistoga Branch will go online after an extensive building remodel. The Yountville Branch library is en route to launch imminently as well, with final construction scheduled by AT&T to bring fiber to the building.

Initial tests show actual speeds, regardless of user demand, at 850 Mbps in Napa and over 950 Mbps in American Canyon.



Young digital users sharing their skills at the Napa County Public Library

Previously speeds were 100 Mbps for both locations. This represents an almost 10-fold increase in speeds.

In the last year over 100,000 computer sessions took place on public PCs and an additional 29,000 patrons connected to the internet via wifi through Napa County libraries.

Increased speeds are just one of the many benefits that the Napa County libraries will receive through their membership in CENIC and access to the CalREN network. By connecting to CalREN, a unified statewide library network can be developed and will allow applications to interoperate in ways that would be difficult if libraries were connected to disparate network providers. These applications might include shared licensing (for both content and business applications), broad-based content sharing, cloud computing applications, and system or multi-system library cards. If you haven't visited your local public library in a long time, maybe now is a good time for a visit and get "up to speed."

California Broadband Workshop

by Trish Steel

The National Telecommunications and Information Administration (NTIA) and the Department of Commerce hosted the California Broadband Workshop in Mountain View, CA in November. The NTIA is the agency principally responsible for advising the President on telecommunications and information policy issues. NBNCBC Sonoma county manager Mike Nicholls and I both attended.

This workshop introduced “BroadbandUSA”, a new initiative NTIA developed to provide assistance to communities that want to expand their broadband capacity and promote broadband adoption. Broadband USA provides expert advice and field-proven tools for assessing broadband adoption, planning new infrastructure and engaging a wide range of partners in projects. A lot of information was provided at the workshop to help communities, including their “Guide to Federal Funding of Broadband Projects” (www2.ntia.doc.gov/files/broadband_fed_funding_guide.pdf) and their “Broadband Adoption Toolkit.” (<http://go.usa.gov/3fS4C>)

The workshop included a full day of panel presentations and opportunity for discussions. I found the panelists interesting and articulate speakers, and they included our own Assemblyman Jim Wood. Topics were “Regional Approaches to Broadband,” “Successful Broadband Business Models,” “Broadband Funding Opportunities,” and “Innovative Approaches to Digital Inclusion.” Keynote speakers were R. David Edelman, the special Assistant to the President for Economic and Technology Policy, and in the afternoon CPUC Commissioner Catherine Sandoval and John Windhausen, the ED of the Schools, Health, and Libraries Broadband (SHLB) Coalition.

My favorite presentation of the day was by the keynote speaker R. David Edelman. He’s a young, energetic and smart guy who leads policy development and coordination of issues relating to the digital economy. You can tell immediately that he is committed and passionate about broadband as he recalled how in an earlier time broadband access wasn’t available at his home, and he desperately called the cable companies

month after month, only to be told it was “not available.” He knows this is still happening in our rural areas, and wants to change that. He recognizes that broadband is a platform fundamental to modern life which enables and empowers - and his talk was filled with examples of how this is true for small businesses, to classrooms to parents.



California Broadband Workshop key note speaker R. David Edelman, Special Assistant to the President for Economic and Technology Policy at the national Economic Council and Office of Science and Technology Policy

One part of the BroadbandUSA initiative that I found intriguing was the Broadband Opportunity Council, a first-of-its-kind plan which brought together 25 federal agencies to discuss broadband, to make broadband part of their core mission, and to use their programs to get more Americans online. I found this “All hands on deck” sort of challenge exciting, and the next step is to take this from the federal level to the state and local levels. What if our state and local government leadership organized and directed agencies under their jurisdiction to make broadband part of their core mission? What changes would that bring, and how could unique partnerships develop? I would like to explore this idea more in Mendocino.

Mike reported that his meeting with Israel Oliveras, the Technical Director from the Chowchilla Valley Unified School District was a workshop highlight for him. “We discussed in detail the successful addition of broadband to school busses in his district. Israel provided me with positive talking points to use in meeting with the Superintendent of West Sonoma County High Schools and the El Molino HS Principal to further the discussion of a possible broadband trial in three of our long distance run busses.”

The amount of information presented at this one day workshop was a bit overwhelming and more than we could possibly take in. In fact, I have 22 pages of single-spaced notes. But for me, the big take-away from the day was the we have reference guides available online, connections we made, people we can call, and a model at the federal level that could possibly be implemented at a more local level. And that is exciting to me.

www.ntia.doc.gov/broadbandusa or 202-482-2048

Marin County Taps into Optical Fiber First Installed for Star Wars Production

By Peter Pratt

Marin County has a rich legacy of cutting edge digital entertainment and visual effects firms. Today that legacy continues in the growth of video gaming enterprises clustered in San Rafael and the Hamilton Field area of Novato. The leading firms of that legacy remain those brought to Marin by film director George Lucas: Industrial Light and Magic, Inc. (ILM) and Lucasfilm.

The signature productions of Mr. Lucas and his companies are recognized across the globe, with the Star Wars series having become the most valuable filmed entertainment franchise in history.

Little known in the record of ILM and Lucasfilm in Marin County is the positive impact these businesses have had on the telecommunications infrastructure of the North Bay region. Lucasfilm contracted with carriers to make the first investment in competitive high capacity fiber optic facilities in the area.

In 2002 dark fiber carrier Metromedia Fiber Network (MFN) installed fiber across the Golden Gate and Richmond-San Rafael bridges to support ILM's facilities on Kerner Avenue, in San Rafael. The two bridge crossing, with their interconnections to California's most dense Internet exchange points (IXPs) north of Silicon Valley, mean that Marin County's businesses, institutions, and providers are diversely connected to the points of presence (POPs) of scores of carriers.

A decade later, MFN's successors, AboveNet and Zayo Group (NYSE: ZAYO) expanded from this initial south loop, to support Lucasfilm's Skywalker and Big Rock Ranches in West Marin's Nicasio community. Today, as Zayo builds new route extensions and service laterals to Marin's commercial enterprises, the Marin

Broadband Task Force (MBTF) and local residents are taking steps to deliver public benefits from this same optical infrastructure.

Marin's first grant application for broadband network funding under the California Advanced Services Fund (CASF) Program of the CPUC, for a proposed fiber-to-the-home (FTTH) network for a community in rural West Marin, will use the Zayo Skywalker loop for backhaul connectivity. Just as the south loop provides a redundant ring around the San Francisco Bay, the Skywalker loop allows for fully ringed protection circuits from the San Rafael central business district out to the geographic center of the county, at the approach to rural West Marin.

The Skywalker loop was 'lit' for service in late 2014, and runs through jurisdictions of the County of Marin, Fairfax, San Anselmo, and San Rafael. The Marin Broadband Task Force (MBTF) assisted in the arrangements for use of the Zayo fiber by the CASF grant applicant.



The most valuable filmed entertainment franchise in history, Star Wars series is.

-Yoda

Mendocino County Update

by Trish Steel

Mendocino County has been very active on many fronts in the last six months, and has received some prominent press attention as well. We have been working with providers for increased communication and community outreach/organizing, as well as some announced provider upgrades of services.

The survey results from the outage of September of 2015 have been written up into a report, endorsed by the county Board of Supervisors, and distributed to many of our elected representatives (see the article on Page 2). The outage that occurred thirteen months earlier (August 2014) was also described in a report by the Government Accountability Office (GAO) as part of a congressional-requested investigation into the IP transition and effects on public safety. This GAO report was released in December 2015 and is titled *Internet Protocol Transition: FCC Should Strengthen Its Data Collection Efforts to Assess the Transition's Effects* (GAO-16-167). The reference to the Mendocino outage is on page 12 of this 48-page report. The whole report is pretty interesting with the conclusion in the title (FCC needs more data on the IP transition). You can find the report here: <http://www.gao.gov/products/GAO-16-167>. These outages and their documentation are playing a crucial role in bringing public awareness to the issue of reliability of networks. The outage report of 2014 was cited by CPUC commissioner Sandoval in a July 2015 document advocating for an "Alternate Proposed Decision." Please see pages 8,9 and 12 for these references in the document. (<http://www.mendocinobroadband.org/wp-content/uploads/Infrastructure-review-alternate-decision.pdf>)

Manchester, a small town on the southern Mendocino coast, was featured in an article published in the national magazine *The Atlantic*, published November 13, 2015 and titled, "Where the Cloud Rises From the Sea." This article highlights the irony of the town's digital divide when literally beneath their feet trans-Pacific super-highway of the Internet cables are transporting data across the globe. You can find the link to the full article here. <http://www.theatlantic.com/>

[technology/archive/2015/11/where-the-cloud-rises-from-the-sea/415236/](http://www.theatlantic.com/technology/archive/2015/11/where-the-cloud-rises-from-the-sea/415236/).

Mendocino County was also featured in an article for the online health news site [healthline.org](http://www.healthline.org) which appeared on November 9th, 2015. This article used the example of Mendocino and how interruptions in broadband access in rural areas can wreak havoc with health care delivery and other vital services. <http://www.californiahealthline.org/insight/2015/mendocino-broadband-problems-persist-amid-national-push-for-better-access>.

The county was successful in revising our inland zoning ordinance, which now allows for an administrative permit process for small wireless broadband projects. This is a much simpler, less expensive, and more streamlined process for providers to get permits. This inland model will be used as a template for the revision of our coastal permitting process, which will have to be approved by the California Coastal Commission in addition to the county. Recently, a wireless guidelines workshop was held on the coast as an opportunity for providers and residents to give input to county planners on their needs, concerns and ideas.

Broadband Alliance administrative coordinator Diann Simmons has taken the lead in the development of a grant proposal that involves non-profits and schools to increase digital literacy. We hope to have a draft proposal ready in March, and after review/revision to submit to a potential funder.

We are making progress, but it's slow and there is still much to do. Many rural areas remain unserved and underserved, and even in our most populated area, the county seat of Ukiah, there is cause for concern. A recent Mendocino Business Survey by the Center for Economic Development found that "Broadband Access" came out in list of the "Top 10 list of barriers to economic development".

Regular public outreach meetings and participation in various public forums continue. The Alliance has submitted [written comments](#) to the FCC and local government on broadband topics as we continue to work to expand access for broadband to our county residents.



Scout Expands Opportunities for Mendocino County Students

In January Camila Vega, the Program Assistant from the University of California Scout program visited Mendocino County and provided an overview of the opportunities that Scout provides to high school students. Camila traveled up from the Bay Area to be with us, and her colleague David Ranzolin represented Scout in Sonoma County.

Scout's mission is to reach out to educationally disadvantaged students across the state. It is a relatively new program which offers free curriculum options for California public school students and educators. They offer interactive online classes, curriculum, and supplemental education materials to both middle and high school students and teachers. The program is funded through the University of California, and it is designed to expand opportunities and increased access to Advanced Placement classes, college prep, "A-G" approved curriculum, and science, technology, engineering, and Mathematics (STEM) courses. Many small rural high schools often don't have enough students, nor appropriately credentialed teachers, to offer all the classes needed for college-bound students. Scout provides an educational tool to help fill in any gaps.

Scout learning options are flexible, self-paced and tailored to fit the unique needs of individual students and classrooms. Courses are approved by both

the National Collegiate Athletic Association (NCAA) and the College Board, and if also approved by the student's school can be taken for credit. Scout programs can also be used as a supplemental learning program, or to expand enrichment, summer school, Saturday School, or gifted and talented (GATE) programs.

Scout also offers scholarships for California public school students, low-cost alternatives for out-of-state students and private schools, and increased options for independent study.

For rural school districts, the stakes couldn't be higher as our students compete to get into colleges and plan for their futures. Resources such as the Scout programs are available, and have proven track records in boosting high-school graduation and college-going rates. But students and schools must have adequate connectivity to access these resources. This is why we must work diligently to make sure that all students are given the resources and inspiration to fulfill their dreams and potential.

"Access to broadband is access to opportunity and should be available to all."

-FCC Chairman Tom Wheeler

Sonoma County Update

by Mike Nicholls

Outreach meetings were held by Access Sonoma Broadband on a monthly basis during 2015. Invited program speakers included Mike Dawe, Technical Services, Sonoma County Library; Frank Bell, Property Manager, The Sea Ranch; Tennis Wick, Permit and Resource Management Director, County of Sonoma; Blake Hillegas, Sonoma County Planner III; John Gutierrez, Senior Director, Comcast Government Affairs California; and Preston Dickenson, ATT contractor. We have found by inviting guest speakers, committee members gain improved insight to issues and challenges providers, as well as users, face in the broad scope of closing the Digital Divide.

Co-Chair Sharpe has been active working on negotiations between the County of Sonoma and a potential vendor on the use of county owned conduit generally along the Highway 101 Corridor. Sharpe is also extremely active lobbying CSAC on broadband language to be included in a legislative packet to be sent to the Executive Committee for approval. Co-Chair Nicholls has been involved in Assemblymember Wood's Sub-Committee on Closing the Rural Digital Divide, attended the annual NTIA Conference in Mountain View, participates in Assemblymember Stone's AB238 committee and is working with Senator McGuire on a 911 bill to be presented this session. Nicholls attended and testified at a CPUC hearing in Garberville concerning the purchase of Verizon wireline assets by Frontier Communications and also attended the CPUC Workshop on Consortia Extension in San Francisco. Sonoma County personnel participated in Mendocino County's Emergency Services meetings with ATT and also attended Congressman Huffman's meeting with ATT in Willits reviewing recent fiber cuts in Mendocino County.

ASB in conjunction with the Joy Road and Area Committee have met with potential vendors to extend high speed affordable broadband into an unserved area west of Occidental. One of the potential vendors we met with has submitted a CASF proposal to CPUC for review.

Broadband discussions are ongoing, during public and private meetings, with County Supervisors, the CAO, School Board Trustees and County Department Heads and staff. We have lobbied for a "Dig Once" policy with three of our Supervisors and it appears this subject has gained traction and will be reviewed, by direction from the Board of Supervisors, with the key department heads within the next couple of months. Sonoma County is embarking on a \$26 Million road rebuilding project over the next two years and we are optimistic Dig Once will play a big part in this endeavor in planning for the inclusion of empty broadband conduit within major roadways.

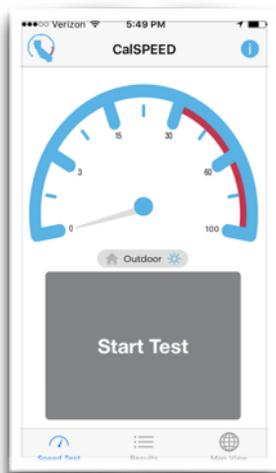
Water Conservation and healthy fish habitats are important talking points with local, county, state and federal officials. Strategic future broadband projects are vital for effective water conservation analysis and will enable reliable counting of PIT tagged Salmonoid smolts from our hatcheries.

Sonoma and Mendocino Counties have entered into a joint powers agreement to form a Sonoma Mendocino Economic Development District. Once the Federal Government and the State approve the district formation, the district directors are charged with enhancing job development and industry growth. Broadband will be an important component of the discussion, as new businesses and industries will depend upon state of the art communication capabilities.

In closing, either in 2016 or 2020 the legalization of recreational cannabis most likely will be a certainty. Approximately 60% of the national supply of this \$42 Billion industry will be centered in the five, rural North-Western California Counties – Broadband will play an important part in the growing, irrigating, harvesting, sales and marketing of this immense industry. We need to be ready to supply the bandwidth as this huge business sector ramps up!

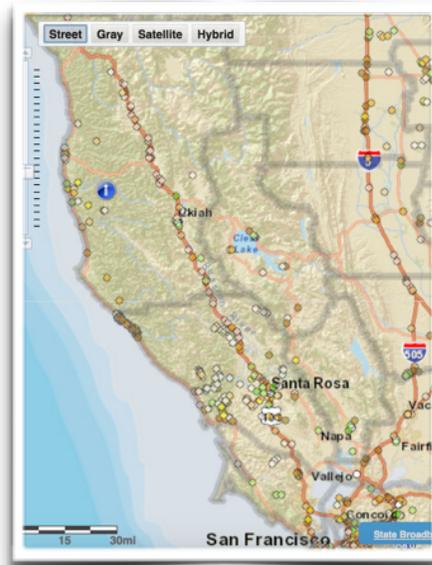
CalSPEED is Here

Good news! After years of waiting, the CalSpeed app for the iPhone is finally available for free download from the Apple store. The app has been available for Android devices for several years, but Apple users have been waiting. The CalSPEED app enables any resident with a smartphone to collect data for the California Public Utilities Commission (CPUC) mobile connectivity database. Basically, crowd-sourcing of data. The app is described as “a professional-level, industry-standard testing tool to measure the quality and speed of their mobile data connection. The test captures upload speed, download speed, message delay latency and message delay variation jitter.”



or absolutely no connectivity, and to up to 10 minutes in areas with poor connectivity. The test also uses some of your data, so watch your allowances.

Here is a map of current CalSPEED testing locations for the 4-county area. As you can see, we can really use more people to be out testing locations.



Here's how to join in this effort:

1. Download the free “CalSPEED” application to your mobile device
2. While at a location you would like to test, open the app and make sure your locations services is “on”. Turn off your “wi-fi” if you have a wi-fi signal.
3. Choose “indoors” or “outdoors” on the app.
4. Being stationary will give the best results, but it's not necessary.
5. Hit “start test” and watch your results.

The test can take anywhere from about 30 seconds in areas good connectivity

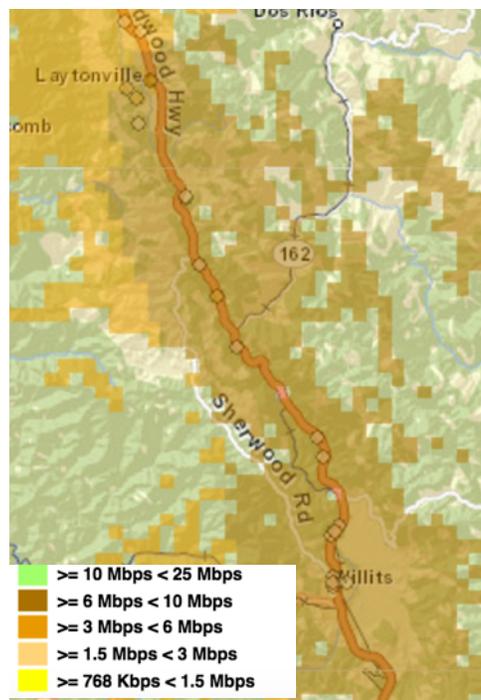
Results are stored on your device, and automatically uploaded to the CPUC. If the test is taken in an area of no or poor connectivity, the results will be uploaded when you next have connectivity. I always try to remember to run the app when I get home to be sure the results are uploaded, and use my wi-fi as well to save on my data. Your results should appear on the California Broadband Map within a few days. To check, go to <http://www.broadbandmap.ca.gov/map/>, click the 5th icon down (the “layers” icon), and then select “mobile test results”. Next select BOTH the round and square checkboxes for CalSPEED. You should be able to see your test location (a circle) and information on the map.

It's interesting to check the map and to compare your results with your provider "advertised" information. For example, see below for my testing results between Laytonville and Willits along the Highway 101 corridor using my Verizon service. N/A means that there was no connectivity:

Date	Up	Down	Delay	Delay Var
01/25/16 02:42 PM	0.7915 Mbps	3.942 Mbps	106 ms	2 ms
01/24/16 05:32 PM	N/A Mbps	N/A Mbps	N/A ms	N/A ms
01/24/16 05:31 PM	N/A Mbps	N/A Mbps	N/A ms	N/A ms
01/24/16 04:56 PM	N/A Mbps	N/A Mbps	N/A ms	N/A ms
01/24/16 04:54 PM	N/A Mbps	N/A Mbps	N/A ms	N/A ms
01/23/16 05:24 PM	0.3091 Mbps	0.7832 Mbps	265 ms	6 ms
01/22/16 03:49 PM	N/A Mbps	N/A Mbps	N/A ms	N/A ms
01/22/16 03:47 PM	N/A Mbps	N/A Mbps	N/A ms	N/A ms
01/22/16 03:45 PM	N/A Mbps	N/A Mbps	N/A ms	N/A ms

Now look at the next map (where my test locations are indicated by circles) and compare the *advertised* Verizon service level in that same area, as reported by Verizon. According to the color-coded legend (which I find a bit difficult to use), Verizon mobile downstream speeds should be between 3-10 Mbps.

Map with Verizon reported mobile speeds along the 101 Corridor between Laytonville and Willits



Since mobile connectivity is considered "broadband" to the CPUC, this "ground truth" data may be important if there are funding decisions before the CPUC.

Note that there is also a desktop version is available to test your internet speeds at your house. The link to download the free app to your computer is <http://calspeed.org/>. Once you download the app, click on the left side for "location" and put in your address before you run the test. If your download speed is less than 6 Mbps, or your upload speed less than 1.5 Mbps, then you are considered "underserved." This desktop app does take into consideration that some homes may have opted to purchase a service level lower than what is actually available.

Legislative Update

by Steve Sharpe

Federal Legislation

Jared Huffman is proposing legislation to amend the 1936 Rural Electrification Act (**HR 4160** Rural Broadband Investment Act) expanding the law's provisions to include telecommunication and broadband services. The new legislation would broaden federal investment in telecommunications infrastructure into rural areas that previously would not qualify for funds. Broadband funding through the Rural Utility Service, administered by the U.S. Department of Agriculture would be doubled from \$25 million to \$50 million a year beginning this year. Congressman Huffman's staff is determining whether funding under this program would be available in the NBN/CBC region.

Congresswoman Anna Eshoo (D-CA) and Congressman Greg Walden (R-OR) introduced **H.R. 3805**, the Broadband Conduit Deployment Act, which is commonly referred to as the "dig once" legislation. The legislation would mandate the inclusion of broadband conduit during the construction of new roads receiving federal funding if there is a demonstrated need for broadband in the area within the next 15 years. The law would also apply the construction of additional lanes or paved shoulder for an existing highway.

State Legislation

AB 238 (Stone) was introduced by Assemblyman Stone late last year. The bill proposed several regulations supporting broadband projects including standardizing higher band widths, fostering public and private project funding and providing additional funding for deployment projects to unserved and underserved households. Due to significant industry opposition the bill is

being rewritten and reintroduced within the next two weeks.

AB 806 (Dodd) is proposed to streamline the permitting process for wireless internet facilities using strand mounted antenna to existing permitted facilities. The bill is being referred to the Senate Government and Finance Committee for review and recommendation.

AB 57 (Quirk) was approved and streamlines permitting for wireless telecommunications facilities. The new law provides that new tower siting projects and collocation projects are automatically approved if the local agency (city or county) fails to act in a reasonable amount of time.

AB 1549 (Wood) The Broadband Map Act would require Cal-Trans to keep a centralized database of where conduits available for fiber-optic cables are laid throughout the state. Currently, data regarding the location of fiber lines is scattered among dozens of companies and agencies. The development of a central database would drastically reduce the cost and time it takes to further expand California's broadband network.

Assembly Select Committee on the Digital Divide in Rural California: Assemblyman Wood convened the 2nd meeting of the Committee on December 14, 2015. Presentations and topics included the history of major public infrastructure development in the state and public-private funding models for broadband projects. Another meeting is proposed for February 2016 but the date has not been set.

Upcoming Events

2016 NBNCBC Oversight Committee Meeting

Thursday **April 28, 2016**, 1:30 PM – Conference Call

Friday **July 29, 2016** @ 1:30 PM – Conference Call

Thursday **October 13, 2016** @ 1:30 PM – In-Person Santa Rosa

Contact the county supervisor for specific location information:

Marin: Supervisor Steve Kinsey,
skinsey@marincounty.org
(415) 473-7331

Mendocino: Supervisor Dan Hamburg,
hamburgd@co.mendocino.ca.us,
(707) 463-4221

Napa: Supervisor Diane Dillon,
Diane.DILLON@countyofnapa.org
(707) 944-8280,

Sonoma: Supervisor Efren Carrillo,
ecarrillo@sonoma-county.org, (707)
565-2241

Broadband Alliance of Mendocino County Public Outreach Meetings

Please check the website for details

www.mendocinobroadband.org

Friday, March 4th, 10am

Friday, May 6th, 10 am

Access Sonoma Broadband Meetings

Please check the website for details

<http://sonomacounty.ca.gov/EDB/Access-Sonoma-Broadband/>

Wednesday, February 17th, 10 am

Wednesday, April 20th, 10 am

NBNCBC Applying for Funding to Continue Broadband Planning Efforts

The NBNCBC has submitted a grant application to the CPUC, seeking funding to continue it's work to expand broadband access across the four-county region of Marin, Mendocino, Napa, and Sonoma beyond it's current two years. Funding from the original two-year grant application ends on June 30th, 2016. If successful as proposed, funding would allow broadband planning activities to continue until June 30, 2018, for an additional two more years.

Each county has developed their own county-specific workplans for year 3 and year 4 which focuses on their own specific and unique needs. The consortium as a whole has also developed-specific workplans which focus on regional planning efforts, which include developing a design for a regional middle mile infrastructure that will interconnect the communities in all four counties. NBNCBC believes that such a robust and redundant middle mile infrastructure is essential to the future economic growth and development of each county and the region.

Each county was supported in these efforts by their respective county governments and many community Anchor Institutions. All four Boards of Supervisors passed resolutions in support of the NBNCBC, and many Anchor Institutions provided Letters of Support.

We would like to especially thank our consortium manager Tom West for doing the lions share of the work in the time-consuming and difficult task of the preparation and submission of this grant application. Without Tom's leadership, guidance and hard work on this project, it would not have been possible. Thank-you Tom!