

Summary Report, Northeastern & Upstate Workshops Sustainable Broadband: Developing Adoption Strategies

To All Who Attended the 7/23 and 8/4 workshops on Sustainable Adoption: Developing Strategies,

First, thank you all for attending and providing such rich discussion around broadband. For the workshops, we captured all the data that was recorded by you and your working groups on newsprints, and have presented this data to show comparison/contrast within, and between, the two different groups' output.

Remember my statement: "The collective unconscious has spoken"? Not only is there significant demand for high-speed internet services---accessible, available and affordable---but also community members are concerned and willing to participate in efforts to get broadband supply. More important, fascinating and validating to me as a facilitator, is the repetition of not one, not two, but five (5) topics of concern to all 12 counties, each of which was listed during both workshops (see the table of Similarities, pg. 6). These are the areas, I believe, where there is the most "energy", hence the need for development and application of technical solutions, paired with some strategic efforts dedicated to facilitating a change in behavior to encourage the adoption of broadband.

Ok. So. Now. What do we do with all this? I encourage each of you to review and digest this information, see what jumps out at you, pay attention to what strikes you...and ask yourself how and where I and Center for Economic Development may help you and your community, to either brainstorm the possibilities within your community, or conduct some strategic planning sessions to bring an existing concept to fruition.

Any questions, comments, concerns, or if you'd just like to chat about the possibilities and perhaps co-create a solution for your community, please call. Again, thank you for your time and it was a pleasure meeting all of you!

CathE

Cathy Emerson

Center for Economic Development, CSU-Chico

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Brainstorm Initiatives/Programs that can happen when broadband is deployed

Upstate Workshop 7.23.09, Colusa Casino	Northeastern Workshop, 8.04.09, McConnell Foundation
<p>1st to Report Out: Table#4 , Martha Mills</p> <ul style="list-style-type: none"> • Healthy family portal – collaboration of resources • Partnership of use of resources (public, private) maximize efficiency and access • Access, partner with local entities to match ed curriculum to their customers/clients to provide/expand economic development • Provide training education on broadband usage • Expand existing broadband services in the tribal communities and other underserved populations • Increase access for physicians to provide consultant services (telemedicine) • Telemedicine Networks <ul style="list-style-type: none"> ○ Connect Patient to Dr. ○ Health Entities with other Health Entities • Develop MOU's with ISPs and other entities for transmission sites and repeaters for continuous coverage • Providing accessible higher ed. In a comprehensible plan • Educational Entities can come to people • Plug holes in Access 	<p>1st to Report Out: Table#3, Richard DuPertuis</p> <ul style="list-style-type: none"> • Broadband is here! Now what? • Solicit worldwide that we can offer BB at a low rate and snag Steve Jobs • Become in international call center or a local telecommuting community • Our customers are here, and they are everywhere • Small school (11 kids) distant learning, interactive education, real-time video conferencing to aid teachers having to drive far to teach • evolve to telemedicine, remote diagnosis (self-diagnosis – hook up at home and send via computer), remote Rx. • We have a commodity---info flow!--- and no matter what it is we can leverage it.
<p>2nd to Report Out: Table #5, AnnetteMilliron/Wendy Burke</p> <ul style="list-style-type: none"> • Libraries <ul style="list-style-type: none"> ○ Staff training, public training, self –learning, computer-use training, on-line training ○ Entertainment (story hours, via web education) • Many people are introduced to computers @ libraries – only public community center • Libraries could be technology “petting zoo”, try it there • Broadband includes more than computers • Telemedicine, at home or library • Electronic health records 	<p>2nd to Report Out: Table#1, Glenn Harris</p> <ul style="list-style-type: none"> • Live, remote medical assistance <ul style="list-style-type: none"> ○ Coroner/medical examiner assists via telecom/streaming video more remote areas • Provide larger bits of info to remote areas (pictures, video, large docs...) • local banks increasing rate/size transfer of funds • casinos – online gambling, online casinos • allow more video streaming for online virtual tours of parks natural resources for tourism, for staff training to remote staff • online GIS services to track tourists locations in remote areas,

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<ul style="list-style-type: none"> • Social networking sites among peer can bring worldwide info to local areas • Interactive, live, facilitated, education • E-government • Supervisors/council meetings on-line • Home-health nursing via virtual worlds • Television & movies • Home-based businesses • Training on benefits & risk of being on-line • Addictive behaviors (gambling, shopping, porn, recovery on-line) • Green! • Telecommuting 	<ul style="list-style-type: none"> • more interactive GIC mapping applications • central source for remote hotels/motels to book rooms/provide more info and book reservations, look at amenities • tourism outreach, public safety coordination • mobile data devices in remote areas to expand/extend services • outreach & education to remote areas to engage more of the population/service base; online GED/alternative education to remote facilities (jails, juvenile halls...) • attract and retain younger generations - workforce • extend/expand home-based businesses & telecommuting/telework opportunities, telemedicine (psychiatry, IEP meetings...) • video streaming: conduct & publish public meetings live • expand/extend network systems to remote areas • create video presentations – disseminate info • educate people countrywide • distribute education opportunities: home to school; home to district • bring in businesses that are broadband dependent: call centers... economic development - provide training for workforce for those businesses • provide training on-line • educate other areas of state @ issues orig. w/northstate: waters, forests...
<p>3rd to Report Out: Table #3, David Shoemaker</p> <ul style="list-style-type: none"> • Telemessaging stops @ a certain point • Ride Sharing • Someone to go get their meals • Gaps in vital services that people need • You can pay your money to drive to services or you can pay your money to subscribe to services • Problem is in rural communities, is not a willingness for ISP's to provide service because there is no profitability for their companies • Mandate for the rural communities to be adopted • ISP's should have to pay for the adopted communities' services 	<p>3rd to Report Out: Table #4, David Christopherson</p> <ul style="list-style-type: none"> • Online learning – broader geography • Electronic medicine, health records • Telemedicine <ul style="list-style-type: none"> ○ remote patients ○ travel, get records ○ imaging • Expand Inter-Net based businesses • Transformation of libraries – all info is online, libraries becoming the new learning place (community e-center) • Governmental services:

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<ul style="list-style-type: none"> • Add teleconference @ the water board meetings • Some agencies don't want to be open & some are • How are you going to pay for the staff in the videos? • Would the rice cooperative be willing to pay for some of this? & not a lot of people who make it profitable • Need for local government and schools to be on broadband, to be able to communicate with citizens & children • What happens as the community grows? • Businesses wouldn't move out to areas because they are strictly residential • Banks have community reinvestment lending • Ways to leverage investments out to small communities • Look at doing the infrastructure for broadband like in the 50's and traffic • You can get money to infrastructure but not to on-going operations • Joint dispatch • Tribes don't use broadband for only economic development • Also used for social networking such as emergency services, domestic violence, child care, homeland security • The demand is for... • Never going to get the biggest bang for the buck in rural America 	<ul style="list-style-type: none"> ○ Forms ○ Utilities <ul style="list-style-type: none"> ▪ Meter reading ▪ Payments • Broadcast public meetings, 2-way communication • All electronic communication, no paper • Records archive and retrieval <ul style="list-style-type: none"> ○ records easier to search, public safety and law enforcement ○ inmates [currently]travel to and from court, causes safety issues so switch to video streaming ○ put other court services on-line • Meetings – Conferences - Collaboration • Public safety information <ul style="list-style-type: none"> ○ Dispatch ○ Emergency notifications ○ Disaster management
<p>4th to Report Out: Table#1, Andy Cardin</p> <ul style="list-style-type: none"> • What happens after the infrastructure is there? • Telemedicine <ul style="list-style-type: none"> ○ Remote Diagnosis ○ Data/patient information (private & public) ○ Institutions ○ Private Sector ○ Training and Certification • Public Computing Places <ul style="list-style-type: none"> ○ Library, Colleges, Grocery Stores , Coffee shops, Government offices, F&B Outlets [Restaurants] • Social Services 	<p>4th to Report Out: Table#5, Jerry Cook</p> <ul style="list-style-type: none"> • Anything we can use Broadband for • Health services access (cannot deliver babies in Modoc County) all emergencies are flown out of county (minimum of \$20,000 for flight)- Remote access • Community access to specialists <ul style="list-style-type: none"> ○ if we can do a consult at the hospital it saves the individual and hospital money • Supplemental local resources re: healthcare <ul style="list-style-type: none"> ○ Delivering babies – fee features • Real-time info sharing between various agencies <ul style="list-style-type: none"> ○ video conferencing saves lives and benefits for patients

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<ul style="list-style-type: none"> ○ Multiple providers for case management ○ Staffing serviced by video conferencing ● Community Leadership to drive Internet usage w/in given community <ul style="list-style-type: none"> ○ Friend recommending another friend ● Distance Learning <ul style="list-style-type: none"> ○ Video Conferencing ○ Webinars ○ Remote student education ● Cell Coverage Improves in all areas ● Homeland Security Interconnectivity between key community service providers ● Create a Fund (NFP [not for profit]) that could subsidize costs of broadband/internet access ● Aggregate Tools for Student, Parents and Administrators that feeds core community services and college info with both FED and self-design features ● Business fees drive community fund ● Education on: <ul style="list-style-type: none"> ○ Internet Security and Operations ○ Usage/features 	<ul style="list-style-type: none"> ● More real-time information ---period---for emergency, law, fire, etc. ● Tear & go - communications – improvement ● Raising educational levels – new programs – remote education, both adult and K-12 and charter schools [to meet] the educational needs <ul style="list-style-type: none"> ○ ability to take college classes because there are no jr. colleges or other colleges in Modoc county ○ Have several charter schools in Modoc County ● Library bandwidth to reach people, offer web-based reference and information services ● Is there a way to collect fees for student attending school if he is sick at home, but on-line taking classes? ● Cell phone access with IPS vendors being limited, if you are on dial-up you are still limited to what you can see on the web (you are deprived of the options) ● Home-based business opportunities ● Call-centers, etc., business opportunities ● Many groups jumping into stimulus moneys and wanting fees to help --- w/out real clear plans or guarantees of sustainability ● Any videoconferencing programs to homes will benefit schools and colleges., i.e. Skype ● More bandwidth creates more opportunities for family and community to communicate, i.e., video, pictures, skype (ex. Iraq/transitioning, men and women in Iraq) ● Web is geared to Broadband, not dial-up
<p>5th to Report Out: Table #6, Blaze King</p> <ul style="list-style-type: none"> ● Reliability = Peace of Mind <ul style="list-style-type: none"> ○ Now, reliability is quite low---what can we do with a reliable infrastructure? ● Peace of Mind = Usage, Usage = Economics ● World communication, Stronger family ties, Reduction of carbon ● Eliminates geographic divide, Levels the playing field between rural and urban reg. service, ● Distance Ed to homes, Distance Tele-health to homes and between 	<p>5th to Report Out: Table #2, Tim Morehouse</p> <ul style="list-style-type: none"> ● CSU-Chico Masters Program (MSW, MBA, undergrad programs) ● Partnerships with community colleges, regionally Siskiyou to Feather River to Yuba Colleges ● Education partnering with private industry <ul style="list-style-type: none"> ○ gain subscribers ○ short-term certificated programs (storm water pollution) ○ professional development ● Partnerships with healthcare industries

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<p>institutions</p> <ul style="list-style-type: none"> • Governmental access to OES, public works, levee control, local media, law enforcement, military • Across all bounds • Wi-Fi at Letts Lake ☺ [choice on where to live and how to live, e.g. with or without broadband], Telecommuting • Closing the digital divide <ul style="list-style-type: none"> ○ Business, economics, political • Business Services <ul style="list-style-type: none"> ○ Business to business, Business to customer, Business to government • Access to consumer services • Dictionary, libraries, googles, shopping, recipes, health care, social networking, finance, news 	<ul style="list-style-type: none"> ○ educational opportunities (Mayer's Comm. Hospital) ○ continuing education • Facilitation for K-12 conferencing <ul style="list-style-type: none"> ○ desktop to desktop • Economic Development <ul style="list-style-type: none"> ○ agri-business ○ niche markets ○ decrease carbon footprint • Social/political <ul style="list-style-type: none"> ○ connecting regionally (affordable)
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Similarities between strategies

<u>Upstate, Colusa Casino, Colusa, CA</u>	<u>Northeastern, McConnell Foundation, Redding, CA</u>
<ul style="list-style-type: none"> • Telemedicine • Education • E-Government • Safety (Public) • Partnerships • Level the Playing Fields • Plug Holes • Training • Expanding Services • Public Computing Centers (Libraries) 	<ul style="list-style-type: none"> • Telecommuting • Live remote medical assistance • Distance learning • Telemedicine • Online learning/outreach GED/alternative education to remote facilities • Home/internet-based businesses • Public safety, public meetings • Library e-centers • Community access to specialists • Broadcast Public Meetings • Raising educational levels • Partnerships w/Healthcare industries

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What is necessary, what is required to bring these programs to life? Staff, programs, money, facilities, etc.

<p>Public Safety (County Sheriff, Local Police, Fire, OES, National and State forest, Fish and Game, State and County Health, FBI)</p> <ul style="list-style-type: none"> • State/Regional training • Coordination of resources in real-time • On-site reporting • Inter-agency cooperation • Community outreach local to state/fed • Priority – training and coordination cooperation 	<p>Education for job development :</p> <ul style="list-style-type: none"> • Who: Inmates, youth, green thumb, cal works clients • Why: Skills upgrade, workforce development to attract employers, economic development, creates opportunities and job creation • How: distance online training partnership with local jr. colleges and schools, community-based agencies, family resource centers, libraries, one-stop centers, grants to obtain pc's, partner with private industries and community organization to service pc's
<p>E-Government (local, city, county, state, federal, special districts)</p> <ul style="list-style-type: none"> • Online: All permits as appropriate • Business licenses • Developer Licenses (grading and building permits) • Meetings streamed online and archived • Minutes and Agendas posted • Online Payments (tax bills, utilities, licenses, permits) • Expand library services • Educational, Healthcare • Local Government • City and County • Public Utilities • Priorities - where to focus our attention • Pub Safety - providing services for training, VC, assets for fire fighting, cooperation among agencies, communicate in real time, • E-gov - expand library, more services, umbrella around library for free Internet, focus on education Comm Colleges 	<p>Raising educational levels for K-12, how can we shift what we already have?</p> <ul style="list-style-type: none"> • Partner with ISP's, • Office with education would partner and make sure standards are met • Use mixed-media classroom • Notebook computers instead of books • Shift from brick and mortar classrooms to virtual classrooms • Develop a plan for grants to operate and buy computers, libraries are already funded
<p>Partnerships</p> <ul style="list-style-type: none"> • Vehicle to build goals • Cross agency cooperation - all groups or stakeholders 	<p>Distance learning –</p> <ul style="list-style-type: none"> • Technology is the easy part, difficult part is to change the culture (change classroom from teacher up front (union issues, classroom size) to virtual classes

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<ul style="list-style-type: none"> • Public and Private cooperation • Buy-in from all partners • Trust and transparency • Opens up New collaborative opportunities • Eliminate the silos – make them explicit 	<ul style="list-style-type: none"> • How does ADA Average Daily Assistance (students in seats) work • Agreement on instructional courseware was difficult, the real hurdles are changing the cultural experience
<p>Leveling the Playing Field</p> <ul style="list-style-type: none"> • Ubiquitous access to broadband • Community Centers <ul style="list-style-type: none"> ○ Stores, libraries, schools, etc. • Universal Access Fee (like telephone rates, fees based on income) • Broadband pricing subsidized based upon income • Broadband a right not a service • Redundancy and reliability • Knowledge and training on what BB is and what it can do <ul style="list-style-type: none"> ○ BB "Petting Zoo" ○ Test environments on what can be done and how to use • Devices - accessible and affordable <ul style="list-style-type: none"> ○ Wireless Smart devices 	<p>Live – Work where we want to!</p> <ul style="list-style-type: none"> • Define technology (at the moment 10mb at the house, in the future it might be 100 mb at the house) • Define revenue to ISP, change the thought process it is like another utility we plan • Entrepreneur Business Plan---what fees are you willing to pay, what is the demand usage (time and bandwidth needed), growth projections • Marketing plan – there are not enough clients in a small rural area so I will have to reach out to others
<p>Plugging Holes “What holes, where?”</p> <ul style="list-style-type: none"> • Seniors • Computers in homes • Organized voice • Bringing in Towers • MOU's created <ul style="list-style-type: none"> ○ Reducing permitting costs - work with local Economic Development folks • Reduce cost for investment and sustainability costs • ID in every Area goes to depth of service 	<p>Expanding Services*</p> <ul style="list-style-type: none"> • Expand service to communities <ul style="list-style-type: none"> ○ Government Cooperation - Streamline the process ○ Appropriate Public Input <ul style="list-style-type: none"> ▪ Public Meetings ▪ Eminent Domain Issues - Towers need to go in ○ Improved Communication <ul style="list-style-type: none"> ▪ What's involved (gov't knows what private needs are then can make it happen faster) ○ Outreach / education / marketing ○ Perpetually expanding network
<p>Training</p> <ul style="list-style-type: none"> • \$1.5- 2mil for 3 years, Training to include: 	<p>Education and Public Computer Centers*</p> <ul style="list-style-type: none"> • Providing vs. Receiving

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<ul style="list-style-type: none"> ○ What is BB, how do I get it, how do I use it, What are the benefits to business? ○ Institutions/clubs/service organizations ○ Non-computerized businesses ○ Educate community ○ Online records/privacy ○ Training in Community Colleges <ul style="list-style-type: none"> ▪ Availability of training centers ● \$750,000 for accurate accounting <ul style="list-style-type: none"> ○ Identify what holes and where (detailed map) ○ Seniors ○ Computers in homes ○ Organize voice ○ Bring towers ○ Mou's created ○ Bring everyone to the table ● \$1.3million <ul style="list-style-type: none"> ○ Address regulatory ○ Processes for development, reliability of outcome, timeliness, cost, \$'s ○ Sustainability – cost of long term maintenance ○ I.D. ISP's in every area - goes to depth of service 	<ul style="list-style-type: none"> ○ Access ○ Equipment ○ Software ○ Maintenance ○ Staff <ul style="list-style-type: none"> ▪ Providing ▪ Maintaining ▪ Teaching (Educational Component and Training) ▪ Support to Access Centers ○ Long and short term funding component ○ Surveys to find out what they need and want <ul style="list-style-type: none"> ▪ Comprehensive education system for all to participate ○ Inventory of need (to provide appropriate opportunities) ○ Marketing Plan and implementation ○ Access sites <ul style="list-style-type: none"> ▪ No charge setting <ul style="list-style-type: none"> ● Schools ● Libraries ● Hospitals ● Plus <ul style="list-style-type: none"> ○ Other services for those who don't have the capability to access BB ○ Apartment Complexes ○ Labor Camps ○ (Residential centers) <p>Housing Development as part of infrastructure services (e.g. childcare) make community access for BB access</p>
<p>Telemedicine</p> <ul style="list-style-type: none"> ● Central responsibility ● Partnerships (traditional and non-traditional medicine) ● Create update and maintain websites ● Doctors 	<p>Green*</p> <ul style="list-style-type: none"> ● Reduce travel ● Educating the public on broadband usage to conserve resources ● New “green” technology

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<ul style="list-style-type: none"> • Medical support and training on telemedicine services • Sustainable revenue stream - insurance and billing • Public Awareness of System - educating the community 	<p><i>(Topics w/an asterisk were generated by the Colusa Group, 7/23/09)</i></p>
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What do you want to get out of today?

<ul style="list-style-type: none"> • A check • more information on what people want <ul style="list-style-type: none"> ○ what's required ○ what do people want • a template for the RUS grant • some effective examples of success stories using broadband (i.e., distance learning, site-to-site, home to site) and how it affected the economics of the communities, how it's changed in the past 5-7 years • who's doing what re: ARRA • a clearinghouse that displays who is applying for what • how to get broadband to people outside the sphere of influence • what strategies will we implement to get broadband to outside the sphere of influence • how to get broadband and collect fees from those without credit card 	<ul style="list-style-type: none"> • if we assemble the plan what are the next steps • what can local government do to help besides spending the money • for the education people...use the adoption funds in the round two sequence – start putting together a business plan for the adoption process • there was a suggestion for CED to get the county agencies together so they could develop an application together instead of individual apps from each county agency (this would help avoid duplication of efforts) • why do I want to be in the broadband business: do I want to be a user or provider? • how do we create customers for the network (beyond individual users) that will help pay the freight of the broadband (20% of subscribers but 80% of revenue)
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continued...

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What is the take-away?

What was this like for you? What was the experience?

<ul style="list-style-type: none"> • Better Service • Partnering opportunities • Need for Outreach • Need for Education • Deeper Drive to make it happen because of the end result • BB awareness <ul style="list-style-type: none"> ○ Consciousness raising • Bigger Vision Created by a broader group of stakeholders • Conversation that goes beyond IT • More vocabulary - like learning a new language • Moving forward with providing services to be ready when they are needed <ul style="list-style-type: none"> ○ Build the resources readying ourselves for adoption of them (Educational Service) • Theory and reality not so far apart • Provide a significant perspective for developing a proposal • Bridging the digital divide - Surveys will be 80% completed in August 	<ul style="list-style-type: none"> • Exercised our brains • found out that a lot of things are already out there • it's about how we can get our applications to work in the environments we are in • heard a lot of commonality • delivery of service is the key • cultural acceptance from organizations • “touch” vs. “virtual” • changing some of the laws and rules <ul style="list-style-type: none"> ○ ADA funding, what is the barrier – is it that a student is not learning if they are not in the classroom? • Penalties: if an agency leverages technology do they lose revenue? • how do you provide oversight in a distance-learning environment since you cannot do it face-to-face? • support and supervision are different things • technology is growing at such a rapid rate that individuals and organizations struggle with what is culturally acceptable • there is a human element that plays a major role (maybe more so than technology) • diversity of organizations of those in attendance • diversity within each organization
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Let me know how we can support you and your community!

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0 530.898.3862