

### Welcoming Remarks and Introduction of Speaker # 1 (James Butler, OFA)

Thank you, Jen. Hello everyone and welcome to this Rural Communities Initiative webinar on expanding technology access to rural areas, to improve service delivery to rural TANF programs.

For those of you who may be joining us for the first time, during the Rural Communities Academy this past September, the challenge of accessing reliable and cost-effective technology was identified by many rural community initiative sites as one of the most critical issues facing rural organizations serving TANF participants.

And as part of their technical assistance plan, sites expressed interest in learning more about current efforts to expand technology to underserved rural areas serving TANF participants, innovative strategies and tools for expanding technology access in rural areas, strategies on how to maximize return on investment for expanding technology access in rural areas, and guidance on funding and implementing these types of projects.

Based on the interest you expressed, we have designed this series of technical assistance events that focus on the issues of rural technology, the third of which is today's webinar.

Today we have three very knowledgeable speakers from different programs discussing their experiences with the use of technology to improve options for TANF participants.

As mentioned earlier, after the presentations from our speakers, we will open the lines up for any questions that you may have, so starting-out today we will have Mr. (Daylan Beamon) from Business Access. (Daylan) is the Business Development Manager of Business Access, LLP.

Business Access is an industry leader in home-based distance learning for workforce development and worked to design the most effective programs for the unique needs of specific communities and populations.

He has successfully overseen the planning, design specifications, staff training and implementation of more than 60 distant learning programs since 2000. During this webinar, (Daylan) will present on how the federal stimulus package is addressing distance learning, rural broadband access and issues relating to technology access in the United States.

Ladies and gentlemen, (Daylan Beamon).

### Presentation by Daylan Beamon from Business Access

Thank you very much James and thank you everyone for allowing me to talk to you today. I'm just going to start with a little bit of background about our company and how we got to where we are today and what happened along the way.



Business Access was started by my CEO Kim Bunting who was representing Fortune 500 companies headquartered in Dallas on disability employment and in feedback to getting from what they needed to hire people from government programs, and that was that they needed people to be able to use a computer basically and to demonstrate that they could start a task and complete it on their own, so the idea of in-home learning was born.

At the same time, it was the welfare-to-work days and in Dallas, where the first person to use the in-home or first area to use the in-home learning system was, they piloted a thousand welfare-to-work moms.

They thought the idea of having training in-home would reduce the barriers of transportation and child care for them to access that training. In that pilot, 84% of the women got off of TANF and since then Dallas has gone just over 4000 people and they maintain an 85% off-of-TANF rate.

And after we started in Dallas, we've spread it now we've done the program 125 times in ten states. We've served over 7700 households. Our clients, that we call "achievers," have spent over a million hours participating online and have done over 125,000 classes and we've used all the workforce (fund) experience, private foundations and grants.

Obviously now is a very exciting time. The Recovery Act set forth \$7.9 billion for expanding broadband. Then they broke that out into two main departments. \$4.7 billion is going to the Department of Commerce National Telecommunications and Information Administration and that's for urban and rural.

It was earmarked for broadband, for job creation, healthcare and digital inclusion And of those funds, \$250 million of those are set aside to be available for innovative programs that encourage sustainable adoption of broadband services.

Now this is something that is unique because we - when you have - in New York City, we have some projects set-up that are in the planning phase that kind of got set back with what happened with the budget there after the Bear Stearns and Wall Street things that were going on.

But they had started a digital inclusion initiative out of the mayor's office. They're going to - they're putting together a comprehensive proposal for these sustainable grants because they are looking at well, they're using this as learning for TANF if they're using this for as learning for WIA.

If they're using this as learning, we have some projects with the mayor's office for domestic violence centers. All of those projects would then fit as far as in-kind and that kind of thing when you're looking at those kind of grants and those are for rural and urban.

And then the other one that is specifically for rural areas is the Department of Agriculture's Rural Utility Service. Specifically there you have the business learning and telemedicine grants and their grants, loans and loan guarantees. Now these are - you can use these for infrastructure.



If you need broadband in your area, you can use them for programs for the end user and part of that money is competitive grants and then you can also use the loans and loan guarantees. We've done most of our work in, you know, work force with WIA and TANF.

We're with the ones now, our online communities. Everyone in our program - let me just back up if you haven't heard about what we did before - our programs put a computer and Internet access into clients' homes and from there they take customized training style track, categorized and reported automatically.

And then we - in Dallas for example - they started off using this for TANF. They use it for WIA, food stamps, and then WIA adults, dislocated workers, WIA youth.

They're all on this same online community but depending on their funding stream, their content may be different, the way that it tracks is different, and with all of our programs, with the in-home people have the opportunity to earn ownership of that laptop.

So for each area, each agency with each county that we work with, we customize an online community that their customers log into and they get assigned an offline mentor that is there to motivate them and monitor their progress and be a liaison between them and their case manager and all of that contact is recorded as well.

So for the stimulus funding, there's a lot of emphasis obviously from the Department of Labor on summer youth employment, so what our program has done to meet the goals of summer youth employment with the goal for WIA summer youth is work readiness.

We've partnered with Manpower, National, and we're providing a complete solution where Manpower - well first when a user will come in for their orientation in a Manpower center and have the Manpower world of work orientation and they'll take the assessment, take the test online, take their work readiness pre-assessment, and then they'll start to take training if they need VED or ABE.

One of the things about our programs is if someone is assigned a skills enhancement curriculum, they can also take adult basic education and GED simultaneously.

We found in Texas that people that graduated the program were three times more likely to be employed according to the Texas Workforce Commission. We attribute that to the ability for them to have just-in-time training. They can be up in the middle of the night and take a curriculum if they find out they're good at and then take that certificate into that employer the next day.

So what we've done for summer youth is work with Manpower where people will get the whole complete spectrum and when they complete their two-day orientation, they get a laptop and if they complete the goals of the summer youth employment program, that is, showing up for work or passing the post work readiness assessment, they'll earn ownership of the laptop.



Now what we're going to do for adult dislocated workers, which will be the next emphasis of the Department of Labor, we've got a new online community that we customize for people - dislocated workers - that are in this situation the first time.

It's designed to help reduce the amount of time that they're on (UF). A lot of our customers are seeing traffic that they've never seen before in their one-stop and this online community - it's thought that people would have their own computers and they would log into this community and we developed it in partnership with (Franklin Covey).

(Stephen Covey) has taken the lead and boiled them down into five for people in the situation the first time. It's going to teach them, you know, show them how to reassess, reorganize. We're talking to a lot of people that their industry is gone.

They've been there 20 years. They've never done a resume before. They are not adept at social networking which is the quickest way to get reemployed these days, so that's what's going to teach them that and it starts off as a core service.

It's got a resume crawler that brings back the jobs that they're looking for for their home page every day and it's also tracking the employment activity in the background with the O\*Net codes of those jobs that they look at each day as a service to send that right over to the WIB.

Now it starts off as a core service but it can go into an extended core or an intensive core service by adding the training libraries and if someone needs a computer and Internet access that can also be added to it.

We're going to be launching the great job online community in Dallas in the next month. Now, what we probably are more interested in, TANF and I probably don't have to tell you guys there's five billion there.

Recently, for TANF we've started to hear from some people who are going to draw down some contingency funds from TANF to start some programs and we're looking at the subsidizing part of the model, the transitional side of the model, and our partnership with Manpower that I just described, while that works for some of you, it really, really works for TANF.

The same kind of deal. They'll come into the Manpower center which Manpower has 1300 locations around the country. They'll go through the assessments and this one is going to be two weeks. It's going to be an emergence. It's going to be partnered with the community college.

Actually why don't we go ahead and advance the slide and we can talk about it. In Los Angeles and our other areas that we're working with that are also doing the same thing with contingency (unintelligible) project or to expand projects to add the in-home to them.

Well in this model that we're talking in Los Angeles, they've got 10,000 jobs that they're going to fill with TANF clients and this traditional model that we're looking at right now, they want to start rolling these jobs out in November. They have 24 months to get it done.



Looking at this traditional model, they don't have the time to go through the normal process of getting people, you know, and if you look here for employer engagement is way down on the list. The goals of this L.A. project are to quickly get 15,000 people recruited to get those to 10,000 people and jobs.

The good part about working with Manpower is that the people that make it through, once they are placed with Manpower, they're going to be on Manpower's benefits so they won't be on Medi-Cal and then for other obvious reasons, being attached to Manpower is a resource for life.

Now Manpower placed four million people in jobs last year. Can you advance the slide? So, what we propose in L.A. - we're in the planning phase right now - is this accelerated model that we're looking at. You see important engagement is going to be on the first level.

From the moment they come into the community college and start the two-week part of the program, they're going to start to use - Manpower has a lot of proprietary systems on employer matching and that kind of thing.

They're going to start that process immediately and all this is going on while the program is being evaluated and the orientation, assessment, individual plan and job matching, all of this will happen within the first two weeks.

And then the outcome there is to get people connected with these subsidized jobs but in the 10,000 jobs, a third are going to public administration, a third are going to for-profit, and a third are going to other non-profits and things around L.A.

So if you think about the impact of it, they're going to even if they're placed in a part-time subsidized, the program model allows the in-home to bridge that activity to full, and that not only works in L.A., that's the same model in a lot of other areas that we're starting in, southwest Connecticut, Kansas, Oakland.

Everybody's doing this model where the in-home is going to be the bridging activity. You're going to be in a subsidized employment or a transitional job for 20 hours a week and you're going to use the in-home from home for the balance of your participation and that can be in basic education, that can be in skills enhancement, that can be in work readiness, we offer financial literacy.

The in-home is really a holistic way to look at each of the real individual clients. We customize the online community for the local areas but if you had a hundred people using the program, there could be a hundred different combinations of what training they're taking.

What are their deficits? Do they need basic education? One of the things that is going to be mandatory in the Los Angeles project is the financial literacy. Once people start making money, we want them to know how to use it.



So really with the stimulus, what we've just done is taken the program and adapted it to like we've always done - what the local area needs. That's pretty much it on my presentation.

### James Butler, OFA

Okay. Thank you so much (Daylan).

Let's move forward with our next speaker who will be Mr. Rene True from Connect Kentucky. Rene is the Executive Director of Connect Kentucky, a non-profit organization and affiliate of Connected Nation, Inc.

Connect Kentucky develops and implements effective strategies for technology deployment, youth and literacy in Kentucky, creating both the form and the incentive for interaction among stakeholders.

Connect Kentucky connects rural residents to technology. Its activities accelerate the growth of technology in support of community and economic development, improved healthcare, and enhanced education.

Connect Kentucky is an established and trusted presence in each of Kentucky's 120 counties. Rene's work for Connect Kentucky includes public policy, organizational strategy, new bus development, and stakeholder relationships for the organization.

Ladies and gentlemen, Rene.

### Presentation by Rene True, Connect Kentucky.

James, thank you for that introduction and I appreciate being a part of the webinar today. Just a little bit of background on Connect Kentucky. Some legislation was passed in 2000 in Kentucky to encourage economic development in a different way than the traditional method.

The industrial recruitment model that had been used and continued to be used was not sufficiently changing the economy in the state and the idea was we need to start looking at how do we attract technology and knowledge-based jobs both with our existing population and with efforts to bring more folks into the state with that kind of skill base. And so a lot of initiatives were started, and one of the programs that came out of that was Connect Kentucky and early on, Connect Kentucky started as a research think tank in the technology area.

And there we identified some needs in Kentucky, some places were Kentucky did not quite measure up in rank well with the rest of the state regarding technology, specifically broadband availability and where there was broadband already available, the adoption of broadband and so there was some strategies developed at the beginning.



The first couple of years there was not any funding. Eventually funding was available to the agency or to Connect Kentucky around 2004 when the idea was let's do something about this research that you've done and so that's when the Connect Kentucky model really started to take off and you can see that as we go through the slides, so next slide.

The problem that was identified in a nutshell is low broadband availability and where it existed, low use, and there was no comprehensive strategy to really attack the problem across the Commonwealth.

Specifically the problem was greater in rural areas than the urban areas but there are pockets in the urban area that have some of the same issues and the same problems as rural areas with the exception of availability.

In the urban areas, general availability of broadband is not an issue. Affordability and adoption of broadband do become an issue with some being graphic subsets of the population.

Really what we have here is just the bullet points of the five components of the Connect Kentucky model. The first thing really to attack the broadband disparage among urban and rural and in certain parts of the state and others is determine where broadband exists and therefore you'll know where it does it not exist.

And so we used a public-private approach to obtain that information directly from providers. There's over 80 providers from the largest telecoms and cable providers in the state all the way down to the smaller wireless providers that may serve just one community.

And through using that and our GIS mapping staff, we were able to create a map and if you go online at connectkentucky.org, we actually have an interactive map out there. I'll talk about it in a slide here or two.

And then also we did market research and I mentioned a few things earlier and that was the result of research that was done on households and we also did research on businesses and we were able to identify some of the barriers to adopting technology and even able to drill that down into subsets of the general population by income, age, region of the state, and some of that research will be in some of the slides coming up.

We also - we were formed as a 501(c)(3) non-profit and that allowed us to facilitate and buffer collaborations between state agencies, universities and other quasi-governmental entities in the private sector and actively provider communities, technology companies or other companies with an interest in seeing technology thrive and to be adopted in the state of Kentucky.

And then to further work on demand stimulation, we formed local technology planning teams in each county and they worked on developing strategic technology plans.



And one of the barriers that came out of the research we also learned that having access obviously to some of the end-user tools or to get onto the high-speed Internet access is obviously having a computer available and so I will talk later on about a program that addresses that.

This is a map and I don't intend for anybody to learn too much from this version on your screen because I'm sure - I'm looking at my screen - it's hard to tell what's going on here, but the yellow areas on there if you can identify them are the areas where there is not any service and when this program was started in 2004, 60% of the households had access to high-speed Internet and now 95% of the homes in Kentucky have access to high-speed Internet.

This map here is hard to see. On a statewide basis if we drill down to the next slide, we can see what it looks like in a particular county and so by having this kind of granular information on where service is provided, we were able to encourage large telecoms to invest in their network in new market areas as well as work directly with small wireless Internet service providers in a more hands-on approach in developing markets.

In some counties, we actually went out and designed a network - a wireless network - cost, then the cost of what that network would require to build it out, and then we overlay this same data that you're seeing on the screen now with Census tract data to identify the number of households in those tan areas that you're seeing there.

The tan areas are the areas that are not covered by broadband and able to do a business case for a small provider to encourage them to invest and expand their networks.

And a little bit more on the research and a couple kinds of research. One is the household survey and the business service (unintelligible). In each of the local communities, we also benchmarked the readiness of various industry sectors in each community to participate in the technology environment.

It's really a technology needs assessment to determine where they are and that allowed us to work on the strategic technology plan that I told you about earlier and provide specific steps for each community to take as far as their technology needs and to drive adoption in their community.

I just pulled this slide up. If you go on our web site and click on the research section, you'll see the survey results statewide and there's some 30 or 40 slides in there and just an idea.

Here, we took the statewide and I put one county - Fayette County which is in the central part of the state - and just to give an idea of the activities that are conducted online, we also - this allows each county team to have an understanding of how they stack-up against the state and maybe where there's some opportunities to drive adoption or whether there's some issues or maybe whether (unintelligible).

In many cases as I mentioned before, there's not - a lot of people haven't found a reason to adopt technology and they can have access, have it available and they can afford it but they don't see any



need, and so we're trying to drive out what is going on in the local market with the information that may allow us to make a business case to people to adopt technology and to adopt broadband.

Included in some of the surveys - or some of the survey results - we asked questions that are more quantitative like how many times did you use the Internet to get online information, how many trips did this save you, you know, information on how much they shop online, try to quantify the cost savings for us in having a good broadband connection in your home.

This is just an idea of some of (unintelligible) partners. I'm not going to go through all these but just a broad cross-section of government, industry, university have been involved in the Connect Kentucky project.

A look at more about the demand stimulation work at the local level, people at each community leadership team. What you have here, the blue circle, most of the nine industry sectors where we ask each community to come up with a representative for the local team and those are also the nine industry sectors that we ask the representative on the team to benchmark in somewhat a subjective manner.

We didn't go out and survey everybody in the K-12 environment but certainly we would have like a district technology coordinator for the local country school district who would be very familiar with where they work from a technology standpoint to really benchmark where they are and then set goals for where they would like to be.

And the benchmarking process is also available on our web site. You can look at a particular county and see the kind of questions that were asked and how the teams ranked themselves.

We wanted to make sure that we had a broad base collaboration in each community and all sectors of the economy were touched through the process.

All right, when you boil down the approach, it really comes down to the 5 As which I've covered many of them but on approach, we looked at availability which we've talked about and we also looked at awareness, the awareness programs in your local communities about the important of adopting broadband.

Which they're really - they're all interrelated, trying to find applications they have importance to local communities for people that want to have - want to adopt and subscribe to broadband.

And for an example there on applications, when this program was started in 2004 or at least the strategy part or the implementation of the strategic, we came out with the research in the early years of (unintelligible).

One of the applications we saw that only 40 of the 120 counties in Kentucky had a governmental web site and had an online presence. Some governmental institute in the state or in the county had governmental presence.



There was only 40 of them that did at that time, so working through state government and another in a private company that had a contract with the state, we went out and marketed and worked with local counties to ensure that they had an online presence.

We kind of held their hand through the process and facilitated that, explained to them what was needed, scheduled training for them, got them in touch with the right people through the firm that actually built the web site pretty much in somewhat of a template fashion for the local governments.

But that was just one of the example of how you worked on an application to get people to want to be online, in this case to be able to communicate more effectively with their local government.

Affordability is obviously an issue where you have very few providers. We know what happens when there's a lack of competition and then others, all the other four are really important and crucial in driving adoption.

I mentioned the research and I wanted to put this slide in here because it ended-up resulting in one of the programs that we initiated and this one's a slide on the barriers to adopting Internet (unintelligible).

The number 1 and it came out in our 2007 survey is I don't own a computer and number 2 is they don't think they need the Internet so it's kind of what I was mentioning earlier about some of the barriers.

Because half the people - and these are the just the folks that do not have Internet service as of the survey date - why they did not have Internet service, and the third one, too expensive, was not a major factor compared to the other two.

And so we developed a program as a result of this household survey to drive our programs and that's probably the whole concept is allowing the research to drive your programs instead of coming up with the programs first and finding research to support it.

This is just some additional information. I think my - I meant to pass my cursor over the table and transpose some information but there at the bottom, it should - that was annual household income and so we were able to take the data and show that Internet adoption was affected by income level and obviously that makes sense but we were able to quantify that and understand it.

From the slide before, not having a computer in the home was a barrier and where that barrier impacted people from the low-income sample. I didn't put the slide in here but another barrier to adoption of broadband from a demographic standpoint is age.

Certainly all that we saw a definite trend. The older some of them was, the less likely they were to have - to adopt the technology in their home.



So as a result of that, once particular program that we introduced was the computers for kids program. Because of our relationship with the private sector, we were able to work on both in-kind contributions and foundation grants, working with the companies that you see on the screen.

And as a result of that, since about 2005 we have been able to distribute 2100 computers to disadvantaged kids and community centers across the state.

The program originally started with the computers for kids program to take the computers into the home but as the program evolved, we saw a way to leverage some of the limited resources that we had through the grants by approaching community centers, libraries and non-profit after-school programs - YMCA, Salvation Army and programs like that - to really leverage the still-limited resources that we had at our disposal.

So that program has evolved into that and in fact we had a distribution in our largest county yesterday to nine non-profit community center-type programs.

We even - we surveyed some of the rural counties of Kentucky through - with some of the survey results that you saw earlier. We went back and asked about adoption rates in those counties and any counties where - both in counties where there were distributions of computers and where there was not distribution of computers and when I say distribution, we went in provided a computer to every middle school student in the 6th grade that was on free and reduced lunch.

And there was a remarkable increase in the broadband adoption rate in those counties where distributions were made, in many cases as much as twice the adoption rate of broadband where distributions were made versus other counties where no distribution was made.

And so that brings us to the American Recovery and Reinvestment Act and as part of the American Recovery and Reinvestment Act, for the one pot of money - the \$350 million funds appropriated through the MTIA that was discussed earlier - to access those funds you have to have all five components as shown in the Broadband Data Improvement Act.

And when you look those five components, those are the five components that we used in the Connect Kentucky model so I'm not going to go through them again, which is really the same slide as where we started at at the beginning.

And as a result of some of the success that we've seen here with the model in Kentucky, a parent corporation was formed. We are now a subsidiary of Connected Nation and our program has been replicated in Tennessee and Ohio.

It seemed to be West Virginia and Illinois and then our mapping model - just the mapping part itself - has been or is close to being introduced in three or four other states with more likely to come. That's it for me and I'll wait for the question-and-answer period.

### James Butler, OFA



Thank you so much, Rene. I'm going to go ahead and move on now to our next speaker who will be Ms. (Susan Corbett) from Axion Technologies. (Susan) is the CEO of Axion Technologies, a locally-established, woman-owned technology firm created to bring broadband Internet and services to rural communities in Machias, Maine.

Axion created the (wave path beta) which provides fast, reliable, efficient and cost-effective broadband services for hard-to-serve rural populations. Axion provides its services on a cost-effective scale to rural communities overlooked by many companies.

It strives to create economic opportunities for those who have not had access to such services before and it works to advance new models of economic development and sustainability for rural communities.

Axion has been instrumental in bringing high-speed Internet access to many of the unserved rural areas of Washington County building 40 access points across a difficult geographical region in 18 towns.

Axion has a staff of 12 providing much sought after technical jobs. Axion is the recipient of three Connect Me grants and has set forth a mission to bring broadband to an additional 30 towns in Washington County throughout 2009. Ladies and gentlemen I introduce to you (Susan).

### Presentation by Susan Corbett, Axion

Thank you James and thank you to the Rural Initiatives for having this webinar. Also thank you (Daylan) and Rene, I very much enjoyed your presentations.

Washington County, Maine is what is referred to as a super rural area. We are in the northeast corner, almost up to the Canadian border. Where the sun rises in the morning, that is where Washington County is.

So we have a mission. Imagine that Washington County - the poorest county in the state of Maine - challenged by economic barriers, poverty and geographical difficulties leads the way in developing the most advanced next-generation telecommunication technology in New England.

Just imagine that. We feel that because we have a - we are in - have an open territory, there is so much opportunity here. For a company like Axion to go in and do what we're doing in the metropolitan areas, we would have had so much competition and so much challenge; the company would not be existing.

In a region like Washington County, we are the only information technology company covering 2500 square miles. Next slide please. Per capita income in Washington County in 2006 is about 26,000 and the median household income is about 31.



We are classified throughout the state of Maine as being the poorest county in the state; however, we are very rich in resources and beauty and many people move to this area for quality of life.

Washington County covers 2500 square miles. It takes four hours to drive from one side to the other and there are only 13,000 homes. When Axion came into existence in 2004, we brought the first DSL service to two towns.

In 2005, we started to deploy a wireless. The reason is because DSL was very expensive to deploy, we were very limited in the availability of DSL here from our local phone company, and it also only covered the first three miles or so from where the co-locations - where the telco companies had their facility.

So in order to get out into where the majority of people live which is outside of those town centers, we needed to come up with an alternative. We introduced wireless in June 2005. Today we're covering 18 towns, 40 access points.

The project in 2009 is through a Connect Maine grant. This was a program that was approved by the governor on a directive in his state-of-the-state address in 2005.

We found that in order to reach the most people that wireless was a very efficient way to deliver service. Now what's interesting is we are a small company. We are a grass roots company.

We have done this on pretty much a shoestring budget. For our access points, we pay no rent for any of those access points. We have had an entire community behind us in having this project come to fruition. What we do is we do a lot of exchange of service.

There's a lot of Yankee ingenuity that goes on up here so we will have some of our equipment on an access tower and the exchange for that might be free Internet service for the town office or for the Washington County Emergency Services or it could be for a business if we're on top of a business roof.

The difference in our wireless company versus many other wireless companies certainly here in the state of Maine, many wireless companies will put an access point up on a tower and whatever they can see is who they will serve.

What we do is we do something called mini-pops so we are on those big towers but then we have smaller access points going into the neighborhood, so sometimes our access points might only hit 12-20 homes but we know that we're bringing service where it needs to go.

We believe that technology and aggressive and directed applications of technologies can produce a positive effect on both the quality of life for our Maine rural citizens and for rural areas across the country.

We have seen first-hand when we are bringing broadband into a business that the business may have Window 95, Window 98 machines. They don't have in-house networks.



Our very favorite story is of a seafood distribution company on Great Wash Island here in the southern part of Washington County. This lobster company - or this seafood company - exports lobsters to all of the United States and brings in hundreds of thousands in dollars of revenue into Washington County.

When we first went there to talk to him about what we could do for him, the owner said to me (Susan), I know I need you. I just don't know what anything is called and that was what we have found to be a repeated theme throughout most of our business here in Washington County.

What we found we needed to do in this particular - for this particular business and for many of our businesses - is to evaluate what was going on in the business, so for many Internet service providers their job is to bring the connection to the outside of a building, to get them hooked-up, and then they go and they go to the next home or business.

In our case, that was just not enough. We needed to go in and teach people what to do with it. We had questions like what is that E on a screen. How do I get my e-mail?

Just basic computer knowledge and for our economic development people, they were a little bit appalled when we were saying to them we need to get our business owners up to the level of our average high school graduate.

They get a little appalled at that because they thought well that wasn't a very good thing to say but we said, the average business owner here is between 40 and 60 years old and those of us between 40 and 60 probably haven't had formal training and man, we've done a great job in learning what we've learned.

However, when we look at our high school graduates, they've been sitting in front of a computer since they were in nursery school. Next slide, please. We know that there's a digital divide. We see that more so in the rural areas for reasons like this.

We know that small businesses need to use broadband services and we know that very often they don't know what to ask for. They don't know what's out there. For communities that don't have broadband, there's not that drive or that need to even find out what is out there.

If you're on a dial-up connection and today more than ever, you get onto a web site it's going to take you a long time to get through that web site as it very slowly paints the screen.

So for many small business owners, they give up. They don't even want to bother with that so for some small businesses, when we bring broadband into them, they're beginning to learn some of the tools of the trade that are being used very widely across the rest of the globe.

e have found businesses like the one I talked about on Great Wash. What Axion did is went in and spent a week following their staff from position to position to try to figure out exactly what



they were doing, and then at the end what we did is we sat down with a plan of what we felt that their in-house networking needed to be.

We worked with third-party vendors and then we set a classroom up right at the business location and our trainer - who we hired an educator to fulfill this role within our company - and what she did, is she would sit one-on-one with every staff member to find out exactly what they knew.

So the younger staff at this particular company, they knew how to download music, they knew how to Yahoo and Google. They had never opened a spreadsheet.

We had a 62-year-old woman who had never sat in front of a typewriter and she had to learn how to use a computer because she couldn't retire and collect her Medicare benefits until she was 65.

We have informal polls because we go from business to business and we stay with them over a period of several years. We are now starting our fifth year of operation for broadband deployment so it is - we can go back and we can talk to those businesses in those early years and find out how they had been affected, what's the skill level of their staff at this point.

And what we are finding is that the staff knowledge and skill sets have increased, that the staff themselves are much more marketable up there, and the productivity for the businesses have absolutely increased.

For our seafood distribution company, within months they actually eliminated a position but what they did is they didn't eliminate the person. They shifted them to an entirely source of work which brought in additional revenue.

What has been concluded here and certainly across the country is that broadband investment can create jobs, can increase productivity, and it can pull down inflation, so Washington County, when the economic turn started here last fall we were asked well how is it affecting Washington County?

Well, you know, we're pretty resourceful and we do without a lot up here so it was not - we were not as hard hit as some of the more metropolitan areas.

For rural areas and depending on what is the source of - what is the types of jobs - certainly can affect how technology is introduced. Here we have our big industry is blueberry and fishing.

Our next step is we move into our next phase of development is to work with the fishermen and the blueberry farmers to utilize technology in the work that they're doing.

We have a test program with one of the larger blueberry companies where we have put wireless out on the blueberry barrens and so from a vehicle, the farmer can control irrigation, pesticides. They can see if a pump is working instead of driving perhaps an hour into a barren blueberry field.



The other thing that we've been able to with this particular company is to put Internet cameras, so we have surveillance cameras that are run by Internet connection. It has decreased their vandalism by 100%.

What we found when we're coming into these traditional skills is that the staff automatically is moving up the ladder in the set of skills that they're obtaining and the more that they are learning, the more they want to learn and the more beneficial it is for that company. So we're trying very hard here to start to bring in technology into those traditional jobs that are here.

So how do we begin, because we still have a lot of work ahead of us here?

We've been spending four years and building the infrastructure and yes, we've been working with businesses but we have a long, long way to go and so we have been in this for 2009.

What Axion has done is created the plan to work with businesses on an ongoing basis so that we actually start to turn our revenue here from not just the recurring revenue that is coming in from our broadband subscribers, but also is coming in from professional services and in education.

We thought if we looked at who we are looking at, we're looking at rural businesses. We want to help them stabilize and stimulate growth in the rural area. How are we going to do that? We're going to do that through education.

If we can train our employers, it will mean that we're also training the employees.

For the business owner, what are our goals here? We need to empower the business owners to help them reduce their operating costs.

What is the business growth and stability? Can we unlock new markets? There are many businesses here that have not even dabbled in e-commerce yet or they've not sold their product outside of perhaps just their small little geographical area.

People are afraid. They're doing this for the first time. I don't want to do that. I don't want to change. I like my pad of paper, so it's helping to remove that fear and instill the confidence.

Their survivability - how are they going to compete in the global market, and how can we bring that economy here, turn the numbers around so that we continue to have that quality of life in the beautiful place that we live but can support ourselves, and our families and our children as they grow up do not have to leave this area to find a job that will actually pay back their school loans. Next slide, please.

In making the changes with the businesses, we go from delayed communications, from going from mail, answering machine, memos and it becomes real-time communications, e-mail, voice services, mobile data.



My daughter had a baby in Costa Rica a couple of years ago. I went to Costa Rica for that. I brought my voice phone with me, plugged it into her Internet and my staff dialed my extension and they had me and anyone who called from outside the company had no idea I was sitting in sunny Costa Rica during the cold weather.

Moving from paper records, many people have their hands on them, it's in several places, where did it go, physicians' offices piled up on a doc's desk - becomes electronic records.

You can access them from anywhere. There is a backup. They're not going to get lost. There's an accuracy. It's far more efficient.

From going from lack of basic technical skills, I'm afraid to, I don't want to, no, no.

The labor pool is not - is unskilled - becomes skilled labor. There's an education and confidence that comes with that. We create a qualified labor pool.

For geographical challenges, here we are up in the far corner of the north. We have the shipping costs for some products.

How much time to drive it to the post office, which might be 20, 25 miles away? The travel costs, marketing opportunities, and then it becomes non-geographical, the use of software, UPS automation, e-commerce, online marketing tools.

We have higher costs for lack of raw materials that's not available; again travel time is a big issue here. Four hours to drive from one side of the county to the other. With uses of broadband, we have access to global vendors, global costs, more availability, more competition here.

Typically what happens in most businesses, it becomes broken, okay, we fix it, and what we try to do with businesses to get them more proactive, get them doing preventive maintenance on their system, there are many businesses we do into and we say okay, tell us about your anti-virus program and they say to us, oh it came with the computer.

Have you updated it, and we get that glazed-over look. When was your last backup? No answer. So we worked with those businesses so that we can - we helped them understand that their information is critical. It is critical to the operation and running of their business and its future growth and development.

When we go into a business, we evaluate it. There's a consultation. We're on-site. We come up with a plan. We figure out to implement it and then how to support the staff and the network.

In the initial interview, we try to understand, we need to know what your business does. Who are your clients? What do you do? Where do you provide service? Where's your geographical customer base? If we know that, we can help them identify what it is that they're going to need.



We do emerging right on the site so our staff, one, two, three, depending on the size of the business, sit down, walk through, try to understand exactly what the employees are doing because I have to address that business owner who does say to me I know I need you.

I don't know what anything is called. I can't expect them to ask for something if they don't know what exists.

We come up with a very comprehensive plan, a network design, how we're going to implement it.

We introduce the technology tools. We very often work with third-party vendors. For our seafood company, there was a weights-and-measures product - third-party software - that was specifically for food processing.

We came up with a training plan for the staff. What are the goals for the business? Maybe it's a business that doesn't want to grow. Maybe the business owner really wants (nexus) strategy because they're going to retire in five years, so we work with them.

What is exactly the goal for that business? It doesn't always mean that every business wants to grow and add more staff. What's the financial plan, so can we help you work with the banks? What can we do to find out what is available through our non-profit SBA finance authority, all of the different organizations that we work with here?

And then how are we going to implement it? How are we going to go from the old way to the new way with our training schedule? How are we going to utilize this and then staying with the business as we implement these day-to-day operations.

It is not enough for us just to put that network in and walk away. We know from experience that we have to stay on-site and become part of that office for a short window of time.

And the continuing support, monitoring the networks 24/7, that remote IT department, continuing talking to management about what they're doing, how are they doing it, what else can we do? Can we improve something?

What we have found is when we start to turn the corner on technology development in a business, it produces more questions and more "what if", "can I"? What if I did something new?

Continuing education for the staff; they're only going to learn so much. All of us, we only learn so much at one time and then we go on overload, so we continue doing periodic training for the staff as we move forward. We try to measure those business growths and development regionally and for the business.

The most successful networks and the most creative applications of technology come from the private sector. We know here that if we invest in our businesses, it means that we're investing in our people.



We're creating a skilled workforce. It's kind of coming at it from the back end.

We're not training people and then finding them jobs. We're going to the business to get them to the point that they train their staff, so it's kind of coming into the back door and it seems to be working well. Staff respond to it very well because it's real, it's their on-the-job. They're utilizing those skills as soon as they're learning them.

We believe that working with businesses will have a positive impact on the economy here and through growth and development, the use of technology; we offer businesses substantial development and assistance in all facets of information technology.

We want them to compete in the global economy. For rural areas, the goal here is to bring money in from outside so that it increases the amount of revenue coming into our county.

For that lots of distribution company, we're looking at hundreds of thousands of dollars that's coming from outside of Washington County. The lobsters you're eating in Kentucky from Maine are more than likely from here.

Investing in our people is probably the number one way we're going to fight the poverty here and so we believe that by investing in our people, we will achieve long-term sustainable growth and we're going to meet those economical challenges of our region.

We believe that people are the source of our success.

Through the use of technology, we can accomplish great things and this is just imagine.

Those are services that we offer. I'd like to thank you all very much for giving me this opportunity. Sometimes when we're in rural areas, we tend to think that we're all by ourselves up here so it's nice to hear from other rural areas going through much of the same.

Thank you very much.

### James Butler, OFA

James Butler: Thank you so much, (Susan).

Do we have any additional comments from our speakers before we open-up the lines for questions and comments?

Daylan Beamon: No.

James Butler: No?

Rene True: No.



James Butler: (Erica), I believe we're ready for questions now.

### **Question and Answer Session**

It was specifically for (Susan) and/or (Daylan), if you want to chime in about anything related, please feel free. The question was about the technologies that you're using and what the technology is called that allows you (Susan) to provide your wireless service to your rural communities and how it's delivered, if it's by satellite or if it's not by satellite, how that works.

**Susan Corbett**: No, what we do is we have a series of radio transmitters that are on top of either towers or buildings. We use several different radio frequencies. They are fed by high-capacity circuits.

So in wireless, it eventually connects to somewhere on the ground but what happens, if you can kind of picture laser tags. There may be a circuit that goes to a tower.

From that tower, it beams a signal to another tower which beams it to a third tower which eventually hits all 40 towers. From the towers, it beams those signals to the subscriber's home or business.

At their location, there is a small little radio about the size of a book and that piece of equipment receives the signal and from there, there's a wire that goes from that piece of equipment on the roof that comes into your home or business and connects to your computer or to a wireless router.

So it's pretty seamless and it's one of the advantages of wireless as I can get from point A to point B without running any wires. The distance for some of our transmissions go up to 20 to 25 miles and we also use a series of different radio frequencies.

Again, not all wireless companies do that but we do because we feel it gives us the best penetration. In Washington County we have mountains, we have trees, we have oceans, we have lakes, we have valleys. It is a very tough terrain and so that's the reason why we use as broad of a technology as we can.

Our second question is actually slightly related and Rene and (Daylan) may have some insight on this as well. Have any of you run into issues working with providers, that is, like a cable company, telephone company provides the actual service in making broadband available in your rural areas, or have you found that it's more of an adoption issue with many people than it is an infrastructure issue?



**Susan Corbett**: Well, here in Washington County, we have a cable company that has just recently come into the lower side of the county and was not a near-future plan to expand into the northern part of the county.

But typically when you're looking at your telephone companies and your cable companies, they are going to stay on those main thoroughfares. It is very expensive for them to run their cables 25 miles out where there might only be one, two, three houses.

So we work actually with both the cable and the phone companies and there are some pockets where that's a good delivery of service. Typically with wireless, they are referred to as the last-mile delivery. It's where nobody else can go.

**Rene True**: I would second that in Kentucky, you know, we provide information to the telecoms and the cable industry but really from a hands-on standpoint, the wireless providers as (Susan) said reach that last mile, they're generally small mom-and-pop operations.

You might have a meeting with them one day and they come in and do a proposal and the next day, that same person who's the president of the company is out climbing a tower fixing the transmitter.

I mean they have to do it all and they're underfinanced and so what we try to do is close the gap on some of their market research capabilities and ability to generate a business case because they're just as busy as can be.

More recently we've tried to identify - well really, we've done it all along - but we continue to identify financing sources for them as well.

**Daylan Beamon**: Yeah, I mean we started out ten years ago using primarily dial-up and at that point, dial-up was not available in all of the urban areas that we were at so we've seen it come a long way.

Obviously with some of the rural areas that we're now working with in Montana and some of those areas that are actually frontier land like I think you're talking about in Maine, wireless is going to be the only option there and we have to use the arrays that you spoke of - the transmitters and repeaters - in rural areas in Texas.

So it seems that it's not so much an adoption issue but an access issue now in these rural areas.

Rene True: I will say with the federal stimulus money and the potential for being an 80/20 max on the broadband infrastructure funds out there, I think you'll see some with some of the smaller telecoms and cable companies that aren't concerned about some of the definitions that are going to come with it.

There's some strings attached with that money or could be once they get their parameters established and their guidelines for access and their funds, but I think it's the extension into the rural



areas as a result of that because their return on their investment becomes more attractive when somebody else is paying for a significant part of the infrastructure.

Daylan Beamon: Right.

Great. Thank you so much. We do have another question and the question is what are some of the financing services available for wireless last-mile start-up?

**Susan Corbett**: You got to work really, really hard to try to secure financing. For a small company like ours, the owners had to personally guarantee so it basically came down to what did we own in property was what the banks would give us.

We do have loan guarantees through the Finance Authority of Maine so they do do partial loan guarantee. We're hoping that under the stimulus package under SBA, there'll be a loan guarantee and some low-interest loans that may be available.

There is no such thing as free money as they say. As a woman-owned business, that's great. I have, however, there is no magic formula to just apply to for grants and say here's some money.

We have worked really, really hard. We have also established many collaborative arrangements here in Washington County. We work with the banks.

We work with the economic development people, the emergency services, the colleges, the local schools, so we have a great network and support network around us.

The Connect Maine initiative was the first time that we had some money on a local level and even with that, it's only a percentage of what the total budget is.

Our budget for 30 towns in Washington County is about \$1.6 million. We're only being funded for about 30% of that, so we need to get the rest of that money through recurring revenue, through professional services, so it is a struggle.

I'm not sure whether it was (Daylan) or Rene who said it but whoever's helping with the gap financing, I would have given my right arm to have someone help us over the last four years.

We've written many grants, many to the federal government. When you're writing to the USDA or CDBG, any of those type of grants, you're competing with companies across the country, so it's a tough market and very difficult to get financing.

Wireless is expensive to start out. When you put a radio on a subscriber's house, it's anywhere from 200 to \$450 for a radio depending on the frequency.

**James Butler:** Can I ask you a question (Susan)? Have you thought about doing this outside of Maine or is this something that you're just going to do in Maine or you're looking at expanding your business?



**Susan Corbett**: The business model that we have developed is that it is transportable. We can take this model anywhere around the world actually. My partner who is the network guru behind all of this, this has been done so that we can work with any company anywhere that's in a rural area, so yes, we can go outside of Maine.

James Butler: Okay, great.

Jen McHenry: Erica, are there any other questions on the line?

**Operator**: There are no questions at this time.

**Jen McHenry**:Okay. If there are no other questions, thanks so much to everyone who joined us in this webinar today. Special thanks to all of our speakers. (Daylan) from Business Access, Rene from Connect Kentucky, and (Susan) from Axion Technologies for sharing their knowledge and expertise with us on some of the rural technology initiatives that serve TANF participants.

The PowerPoint presentations and audio recording from today's webinar will be made available for everyone within the next coming weeks. Also you can feel free to e-mail anyone on the Rural Communities Initiative team if you have any further questions.

So on behalf of the Rural Communities Initiative team and myself, I think you all so very much for joining us today and have a pleasant day.

**END**