INTRODUCTION

Outlining a process to be followed for increasing broadband connectivity is useful for any community, but case studies and real life stories bring life to the process. The following story, authored by Don Sidlowski, outlines the process that was used by the rural Town of Three Lakes, Wisconsin (100 square miles, population 2,339) to increase the level of broadband connectivity for both residents and second home owners in northern Wisconsin. The process that was followed by the Town of Three Lakes has many parallels to the process outlined in the National E-Commerce “Connecting Communities” curriculum (http://bit.ly/TtsOu6). For the Town of Three Lakes, the process emerged organically. For other communities trying to replicate their success, we have added links to resources in the “Connecting Communities” curriculum that should assist with each of the steps outlined by Town of Three Lakes Chairman Don Sidlowski.

Access to adequate high-speed internet service, also known as broadband, is central to the fabric of every community’s infrastructure. HSI is needed for public works like water and roads, for public access points at community anchor institutions such as libraries, schools and hospitals, and for business/residential applications. A community cannot survive into the 21st century with internet access that does not meet the needs of businesses, residents and community anchor institutions.

IF YOU FAIL TO PLAN, YOU CAN PLAN TO FAIL

Communities that wait for the technology to come to them will be waiting for a very long time. Instead, local government must view broadband like any other public infrastructure project. This includes developing a plan or having a model they can follow to develop solutions for building a technology base.

The plan must first establish the existing baseline, address working towards incrementally increasing better connectivity, and recognize that demand for broadband will continue to increase. Being willing to commit local taxpayer dollars, staying open-minded to attracting private investment, and choosing one broadband solution to begin with – one that has the greatest chance for success and adoption – are all critical first steps.

While HSI access is fairly widespread across Wisconsin, the greatest percentage of un-served or underserved communities tend to be in rural areas. Lower population density means fewer potential customers, which for private telecommunications providers makes deployment of HSI a more difficult
economic value proposition. Such communities may have to demonstrate enough demand for the service to make it worthwhile for providers to invest in the HSI infrastructure required to serve them. The Town of Three Lakes, in Oneida County, Wisconsin, is a case study in how to develop and demonstrate consumer demand and to use that information to connect consumers with the providers of broadband. Building subscribership in communities is about far more than merely providing access to the technology. Engaging people throughout the community is critical to the long-term success of the effort.

**THE “THREE LAKES MODEL”**

*The Making of a Rural Town Broadband Infrastructure*

**Part One – Getting Started**

This is the story of how one small rural town in Northern Wisconsin set about to create a broadband/HSI infrastructure to carry it well into the 21st century. It is also about co-branding broadband with economic development to help reinvent the town’s local economy from one that over the past century had relied nearly exclusively on tourism to one based on four diverse cornerstones.

That town is Three Lakes in Oneida County. It all began in 2007 as the town started work to create a 20-year plan in compliance with Wisconsin’s comprehensive plan statute. The local group commissioned by the town board with the task was known as the Town Action Group, or TAG. In addition to the nine elements required by statute, the members of TAG made a far-sighted decision to add “Technology” to the Three Lakes plan as a tenth element. The reasoning was that everything the town would ever possibly want to do for decades to come would turn on having dependable wireless phone coverage and access to the highest speed internet service possible. TAG then went one giant step further and set what at the time was the audacious goal to transform Three Lakes into the “anchor for technology in the Northwoods”. After the comprehensive plan was adopted in December 2009, TAG was dissolved and replaced by the newly formed Three Lakes Plan Commission to whom the task was transferred.

In 2007, like many rural towns with a population of 2,500 or less, Three Lakes had a single HSI provider offering 3.1 Mbps DSL service. Jumping to 2012, almost 90% of residents have access to as many as five providers with the top speed now 12.0 Mbps cable service. Town leaders have vowed they will not rest until 100% have access to at least one choice. Leaders will also remain vigilant in addressing the changing demands for increasing bandwidth options. How was this remarkable transformation accomplished?

At the start, Three Lakes simply went quietly about its business. All of the service providers that could possibly offer coverage were first identified and then proactively contacted. Over time new alliances were forged based on cooperation and mutual respect. A township-wide broadband coverage map was created by plan commission volunteers driving around 130 miles of town roads with signal strength meters that had been borrowed from the providers. The map showed where all the cell phone and
internet coverage in the town was located – at the time, the only such map of its kind in existence in the Northwoods. 2010 saw the first of what would become annual technology fairs. Reversing the traditional model by which providers advertise to locate customers one at a time, Three Lakes put the providers in a room and brought over two hundred potential customers to them. Service expanded.

More choices became available. Competition brought better prices and additional options. Three Lakes threw itself into broadband collaborations such as the Public Service Commission’s LinkWISCONSIN initiative. Word about what Three Lakes was doing began to spread, first to the regional and eventually to the state level. People began to take notice.

The University Wisconsin-Extension Center for Community Technology Solutions selected Three Lakes for one segment of its 2011 video series on building community capacity through broadband (see: [http://bit.ly/WIcasestudies](http://bit.ly/WIcasestudies)). One day, the key question was finally asked, “can this be turned into something that is duplicable by other small communities?” We think that the “Connecting Communities” curriculum can assist with replicating the success of the Town of Three Lakes.

It was through this multi-year evolution of many parts and varied activities that what has come to be known today as the “Three Lakes Model” took form. It is a five part process and methodology.

**STEP 1: CHANGE AND COMMIT**

What TAG did by setting that lofty goal was to *commit* to a course of action that, once started, would not be stopped. However, to co-brand broadband with economic development obviously required the support of the town board. The single most critical element of the model is that the mindset of the local town board must *change*. Until that happens, little will happen. If you think broadband will come to you, then you will be waiting for a very long time. The board members must first accept the importance of broadband/HSI and then agree it is a basic right for the citizenry and access to it must have one of the highest local priorities. It should be duly noted that the United Nations has declared broadband a “basic human right” and that some countries have passed legislation making it a legal right.

The board then must do something that is not easy in difficult economic times. They must commit funds to broadband and economic development. They have to find what dollars they can afford, wherever they can find them, and commit that money to their local effort. Even a little set-aside is a good start. It gets you moving towards your solution.

In this step, communities would likely find the following four tools helpful:


2) The “Community Readiness Assessment tool” can help determine whether or not a community is ready for this level of commitment [http://bit.ly/JNwFTl](http://bit.ly/JNwFTl)


4) Take time to assess how the community is currently using technology [http://bit.ly/JJTweE](http://bit.ly/JJTweE)
STEP 2: ASSESS AND DECIDE

Start by taking an inventory of what technology you already have and, based on that, make a list of what you want. Communities that need help in designing potential solutions for connecting their communities should refer to these tools in the “Connecting Communities” curriculum http://bit.ly/RPHQeH

Don’t shy away from being aggressive. Three Lakes committed itself to being the “anchor for technology in the Northwoods” of Wisconsin. Starting with a single DSL provider, dial-up, and the occasional satellite dish, it was easy for Three Lakes to assess what it needed: everything. They also had to be realistic: in a township of almost 100 square miles and challenging terrain there would be no single solution that would work for everyone. In the end, Three Lakes decided it would have a “creative patchwork quilt” of HSI solutions – some wired (such as DSL and cable), some wireless (such as 2G/3G), some point-to-point wireless, and some satellite. The goal in the short term was to get everyone a choice of at least one provider. Once you know what you have and what you want, you can start the process of collaborating with the local providers in your area to develop a plan for implementation. The “Community Internet Access and Infrastructure Assessment” can be used to assist the community with this task. http://bit.ly/IF65Gd

The most important aspect of the first two steps is getting started. You must be consistent, persistent, and patient. Going in you must accept that it will take time. But Three Lakes did it and following the parts of the model as adapted to your own unique local needs, so can you.

Part Two – Building Your Infrastructure

It took time and evolution for the “Three Lakes Model” of bringing internet connections to a rural Wisconsin town to ultimately take shape as a five-step process. Different approaches were tried. Some were kept and refined, and others abandoned. We learned that the most important aspect of the first two steps is getting started. Now let’s examine how Three Lakes turned planning into action in the final three steps.

STEP 3: COLLABORATE AND CONTACT

We start with a statement: technology providers are not the enemy! It is most unfortunate the misconception exists that providers are somehow not to be trusted because they want something. Of course they do. They want to provide service to your community. And the point is you should want exactly the same thing for your citizens and business owners. If you expect to get good cell phone and high speed internet (HSI) coverage in your municipality, then you must proactively collaborate with your providers.

This is the one step that many find to be the most difficult because at first glance it seems counter-intuitive. Yes, you are the customer and they are the provider. But this is a case where if you not only want progress but also to control the process, then you must reverse the roles.
Don’t sit around expecting providers to come to you. Instead, you go to them. We’ve met with some town chairmen who actually said, “Why should we go to them? They can come to us”. With that attitude, you’ll be waiting for a very long time. Start with the companies that already provide service in your town. Find out the name of your local representative and contact them. Ask for a meeting. Keep on asking until you get one. If they can’t come to the town office then you go to their office. Do whatever it takes to establish contact. You want to get the relationship started. Take the initiative.

Next, find out which other companies are in your area—especially if you learn one of them is looking to expand locally. A good place to start in Wisconsin is the LINK Wisconsin broadband map (http://wi.linkamericadata.org/) that provides contact information for the firms reporting to serve a specific area. Even if they aren’t providing service yet, go visit them in person. Develop these relationships to the point that your tech providers are among your town’s most trusted vendors. Explore service expansion options with them. Make it easy for them to do business with you. The one common theme all providers have expressed is how difficult it is to gain the cooperation and trust of many town boards. They are so accustomed to rejection that they stop trying. If they learn you are a town that welcomes technology providers, your town will be offered services and options that others are not.

If it is available, offer town-owned land for the construction of cellular and HSI towers. In some cases this may lead to a lease revenue stream for your town. Even if the provider offers to build a tower at no cost to you but with no lease payments, jump at the chance. It’s at least as important if not more so to provide your citizens and businesses with the service they need to compete and thrive in the 21st century than for you to generate a revenue stream from a tower lease. If you can negotiate one, good for you. If you cannot, then still good for your people. You win in either case.

**STEP 4: IMPLEMENT AND EXECUTE**

So now you have worked with your providers and identified site locations and created a vision for the future. Now it’s time to implement your plan and to not only execute against it but to execute any agreements that are needed to proceed. The project action plan template is one resource that might assist with this task. Not every plan will involve tower construction but if yours does then you can expect pushback from a segment of your citizenry with the usual “not in my back yard” or NIMBY complaint. Of course, you always want to think carefully about where to place any towers but you can’t let location hamstring you. Your provider’s engineers will identify sites that will bring the most benefit to the maximum number of people. If the location is potentially controversial, then simply be prepared in advance to explain the trade-off between the social and commercial benefit that is derived for the benefit of all in your town from the placement of just one tower. In Three Lakes, the first tower was constructed on a town-owned parcel adjacent to Fire House #1 near the downtown business and residential district, in clear view of the town chairman’s back yard. From that day forward, it was pretty hard for anyone to complain that it’s easy for town officials to approve towers as they don’t have to look at them. “IMBY” is what the town chairman now says to any naysayers – “in my back yard”. Towers are the symbol of progress: when you look at them, think “money and prosperity”.

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STEP 5: EVALUATE AND REFINE
You have now accomplished the first phase of your technology infrastructure. Take the time to track your progress and celebrate your success. The “Project Progress Log” is one tool that can be used to assist with this task (http://bit.ly/SYgshm). Give yourself a pat on the back but then on that very same day start on phase two because broadband demands are constantly increasing. Talk to your business owners and citizens about the quality of their service and evaluate its performance. Work with your providers to bring ever faster service with more options to your town. Competition always benefits the consumer. Cable companies “bundle” HSI with TV service at a better price. DSL companies offer discounts for bundled phone and HSI service. Everyone wins. Next, look for gaps in coverage. Refine your plan.

At the end of phase one in Three Lakes, close to 90% of all residents and businesses had up to five choices of HSI and cellular providers. While that is truly a remarkable accomplishment it still begs the obvious question: what about the 10% who have none? In phase two, the goal in Three Lakes is to ensure that 100% have a choice of at least one HSI provider. It’s likely to take as much time to infill that last ten percent as it did to build out the first ninety. But that’s simply the nature and challenge of providing a patchwork quilt of technology solutions in any community.

There you have the “Three Lakes Model” – at least as it is today. Every community following this same process is likely to discover their own distinct “model” that will best serve their needs. No one model will ever apply exactly or perfectly to every community. Every community has certain unique qualities and challenges that will require creative, custom approaches. For example, from a humble beginning with our first tech fair the events – now known as Connect to Three Lakes – have evolved into teaching/learning forums with a “Tech U” series of short courses where attendees can learn hands-on to use social media and more while visiting at dozens of vendor display tables. But at least now you have a starting point with this, the first small town model to be documented. Take it as a template that you can use today to start on your own path to broadband deployment and the prosperity that inevitably comes with it.