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Municipal Wireless Snapshot Report™

Fighting the Next Good Fight

A planning guide

By Craig Settles
President
Successful.com

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Introduction

Sometime in June we'll see the start of a nationwide mad dash for \$7.2 billion that is the down payment on a U.S. national broadband strategy. Expect this to be a highly competitive process.

Rather than try to create an insider's cheat sheet on what the rules will be and how to beat them, I synthesize over three years of experience in municipal broadband to help you lay a solid foundation for writing a strong grant proposal once we know what the rules are. Addressing the rules is essentially an exercise of reading, comprehending and adhering to a set of guidelines. It matters that you do this well. It also matters a lot that there is a credible broadband strategy plan under the covers.

Ten representatives from rural and urban areas share their experiences and insights as to what significant impacts you should expect a funded network to achieve, as well as how you can sustain a network after it's built. They address the importance of partnerships to network success, and offer advice on ways to tackle the grant applications process.

Based on this feedback and insights from the many public meetings on how the broadband stimulus bill should be implemented, I present analysis and recommendations for the steps you should take now to develop your broadband strategy and business plan. The strategy and plan should shape your grant application. These also are the blueprints to ensure the network you build meets the obligations of the granting agencies, and the expectations of community stakeholders.

Several Washington, D.C. insiders and experts in broadband networks contribute additional tips to refer to as you write your grant application. They and everyone else participating in this report bring varied and valuable perspectives on the challenge of pursuing grants and bringing broadband access into un-served and underserved communities.

The clock is ticking so let's get to work.

I. Preparing for the broadband dash for dollar\$

I venture there is not a state, city, town, hill or hamlet anywhere in America that doesn't have a group of folks constantly thinking, "\$7 billion dollars for broadband. I know we can get some of it. I know it! But how do we get it?"

It's safe to say that many may be called by the siren song of "free money," but relative to those numbers, few applications will be chosen. Once the National Telecommunications & Information Administration (NTIA) and the Rural Utilities Service (RUS) release grant disbursement rules, that picture could change. But let's work with the assumption.

There are plenty of things communities, service providers, vendors and others can do in the mean time to strengthen their proposal strategies.

These are un-chartered waters

Despite the many e-mails proclaiming their expertise in getting you the grant of your dreams, none of these claimed experts have the magic bullet for bagging the broadband grant. Not yet, anyway. Some may have more of a clue than others, but no one really knows what form(s) the grant application process will take.

There are, however, a couple of things you probably can bank on in the upcoming process. There's going to be an incredible number of applications. NTIA and RUS may or may not be adequately prepared for the onslaught. Combined with the short timeline they have to disburse funds, the pressure will be high to cut corners (legally) to push applications through the process quickly.

Since transparency is the new watchword in D.C., the best way to cut corners is to move to the side applications that don't follow to the exact letter all the rules and guidelines. Though I doubt if it will be official policy, I expect that grant reviewers will also process applications that address regions and counties within the states before they look at applications from individual towns and maybe even mid-size cities.

Expect the rules at some level to contradict each other. The broadband stimulus bill reflects a desire to generate fast results, but also lay the foundation for a lengthy process to put America on par with countries that currently lead us in broadband access. It's going to be hard, though not impossible, to do both at the same time. I believe you need well-formulated business strategies and a particularly well-written grant application to address rules that may pull you in different directions.

You can have hope, but you better have a plan

Listening to the comments at the NTIA/RUS public meetings, there were a lot of people who have valid un-met needs for broadband. The potential for transforming a lot of lives and uplifting many communities is great. However, the worthiness of their mission and the strength of people's hopes by themselves will not secure a grant. There has to be a

business plan, a technology plan and a broadband grant strategy plan that drives communities' grant application efforts.

When you read the roundtable interviews here, take note of the strategic thinking and the attention to analysis and planning. These communities have not applied for a stimulus grant yet, but most have built broadband networks of one type or another. Several have applied for grants in the past, either for the network or other technology projects. Communities that come to the table with applications based on smart plans will have a decided edge over those weak in this area.

Rugged individualism is probably not the card to play

In reading articles about the public comment period and how communities are preparing to pursue this money, it's apparent that partnerships are all the rage right now. Everyone's jockeying for pole position when the dash starts, and a major focus is on who can communities partner with for maximum effect.

These partnerships are better structured than the public/private arrangements highly touted during the muni wireless hype. For one thing, no one this time expects private sector companies to carry the whole financial load. The people driving these grant proposals are looking for partners of many sorts: community stakeholders, neighboring municipalities and counties, tech vendors, nonprofits, etc.

There are probably as many potential partner combinations as there are creative minds engaged in the process. The main focus is on who can make us more appealing to Federal agencies, which stakeholders can help us financially sustain the network and what entities can help us build the best network possible with whatever money we eventually get?

Look at the big picture when it comes to money

The good news about the broadband bill is that it has a lot of people talking about making broadband better in this country. The bad news, for some anyway, is that they're talking about grant money as if this is all they need. I read one blog in which the writer said, don't worry about a plan, just give us that money and we'll have people up and down the county doing this and making that. But the reality is, this and that costs money beyond what the grant gives you.

Communities are in big trouble if they don't do effective financial analysis, correctly identify revenue sources and appropriately plan for financial contingencies such as, what happens if we're more successful than we planned and financially implode from the new overhead costs?

Wait, but don't be idle

While many are a little anxious waiting for the grant rules, this isn't a time to sit around. There's lots of work to be done to catch up with communities that already have their plans queued up.

II. Report participants

The people selected for this report represent a cross section of the types of communities that plan to pursue broadband stimulus grants.

Casey Beard Dir, Emergency Mgmt Dept – Morrow County, OR

This rural county has a 1,500-mile combination WiFi and fiber network they hope to expand through a 10 – 18-county effort

Brian Feist, emergency services director – Cambria County, PA

Cambria trumped the state's anti-muni wireless law to build a countywide network consisting of several licensed and unlicensed wireless technologies

Dan Gallagher, President and Chairman of OpenCape

This nonprofit corporation plans to build a regional "middle mile" broadband network to cover the Cape Cod region of MA

Brent Graden, Dir of Economic Development, Prestonburg, KY

This rural community of 4,800 initially built their WiFi network to increase shoppers downtown, and now the network is citywide

Jeff Hultman, CEO, Ryan McCaigue, CTO – REW Broadband Networks

REW, this report's sponsor, offers new network infrastructure technology for communities and service providers planning broadband networks

Terry Huval, Dir of Utilities – Lafayette Utilities System

This city of 125,000 repelled incumbent telecom attacks to build a fiber network offering 10 mbps symmetrical speed, \$28/month, 50 mbps, \$58

Michael Johnson, VP of IT and Broadband – Jackson (TN) Energy Authority

This public utility for the Jackson, a city of 75,000, built and operates a fiber network with 16,000 subscribers, 20% of which are businesses

Scott Martin, Dir of Commerce and Leisure Services, Sandie Terry, IT Director – Franklin County, VA

This 721 square mile county of 50,000 people partnered with a local wireless Internet access provider (WISP) to build a countywide WiMAX network

Mark Meier, CIO – Oklahoma City

A 550-square mile Tropos WiFi network covers this city that has both typical urban and remote rural sections within its borders

Jory Wolf, CIO – Santa Monica, CA

Wolf's IT department started with no funds and created a citywide fiber network that has built up over \$2.5 million capital budget from cost savings to the city, and revenue from service sales to businesses

III. Question responses – where are you going

To have a good grant, two issues are of major importance: 1) following the rules to the letter and 2) having a credible business plan as the core of your grant proposal. Since everyone is still waiting for the rules, it makes sense in the meantime for communities to work at addressing the business plan.

Five of the questions speak to foundation elements of a good business plan, particularly knowing what you want the network to accomplish and how you plan to make the network financially viable after building the network. I focused on the potential impact of the network on healthcare because I believe many communities can give their proposal extra impact by addressing this area.

Report questions:

1. When first deployed, where do you see (expect) the greatest economic impact of broadband networks?
2. How do you see broadband networks impacting healthcare delivery and telemedicine?
3. The stimulus bill only provides for 80% of a network buildout. How does a community complete the network and sustain its on-going operations?
4. Are there community stakeholder organizations (businesses, education, etc) that should partner with local government to pursue grants?
5. How does a community address a proposal effort that attempts to leverage several federal agencies' grants?
6. What have you found to be winning elements of a federal grant proposal? Are there tactics to avoid?

1. When first deployed, where do you see (expect) the greatest economic impact of broadband networks?

Wolf (Santa Monica): The most significant impact for government and community-based organizations is that broadband lowers the cost of doing business because they're saving a bundle of money on expensive, outmoded communication technology. Operating our network is 35% of what we used to pay for very slow T1 lines and frame relay. We couldn't support video or other high-bandwidth apps such as the traffic advisory system and traffic cameras we have now.

For businesses, their overhead drops significantly when they lease dark fiber from us and get discounted bandwidth services. Hospitals transport high bandwidth videos and data so doctors make critical decisions in just two or three minutes. Hospitals collect money faster.

These benefits happen relatively soon after fiber is turned on. We can deploy faster and more efficiently than carriers. They have approval

processes for new services and prices that take around three months. We can piggyback off of public works when they're doing street resurfacing and putting in new sewer lines to reduce construction costs.

Feist (Cambria County): We see a twofold economic benefit. Customers are getting cost savings from the traditional service providers along with more reliable service; the government is getting revenue from network services to providers to pay for the system and eventually enhance the network. So far we haven't seen an economic development impact on businesses. Our biggest influx of customers is residential because we're just now getting ISPs with services targeted to larger businesses.

Johnston (Jackson, TN): We calculate \$8 million in direct benefits coming from the lower prices we give customers compared with other communities. We have new businesses start up, and some such as those in the high tech companies expand. Several industries list fiber as a strong draw for them to locate in Jackson. However, it does take some time to get to these benefits.

Some of the immediate benefits are intangible or unpredictable as more things come online that people want to take advantage of, such as social networking. Who would have known three years ago that YouTube or Facebook would be so popular? You can't predict what's coming down the road tomorrow that we'll benefit from using. There's a fear that when you get cut off from the next big thing, you miss out.

Martin/Terry (Franklin County): Everything we're doing is the reverse of the norm of calculating specific numbers for economic impact, such 400 jobs created, or 100 businesses coming to town. It's difficult for a staff our size to easily track this kind of information. We ask does broadband help college or high school students do well in their studies, does it allow people to purchase home at the lake and work from there? We look at the many examples these questions uncover and determine that the network is a success. The value of broadband is real to us. Since we built the network we're the fastest growing county in Virginia.

Broadband is a big factor in attracting businesses. We're recruiting data centers that are between half-billion and billion-dollar projects. A new data farm might bring 50 – 60 jobs with \$75,000 - \$100,000 annual salaries. The buildings built for them are assets, and the equipment used represents significant tax revenue every 18 months when they upgrade and replace the technology.

Gallagher (Cape Cod): The Woods Hole Oceanographic Institution here is a research center with an extreme need for broadband. With it they would be eligible for research grants for as much as \$100 million. The economic impact of would be huge and felt reasonably soon with new employees. Later they would spin out a lot of new companies.

The network could also improve government services and reduce costs. 15 towns on the Cape each have their own GIS systems, so they're not sharing information. The network that links the towns isn't fast enough to support GIS. The network we envision over the Cape would enable everyone to use one more powerful data system, participate in common projects and 100 times the speed for 25% of the price.

Hultman/McCaigue (REW): We see broadband creating new jobs because you have to hire people to build and maintain the network. Before the network arrives, the community can advertise that they're offering higher speeds, which brings a certain number of jobs to the area. The ability to have people take classes remotely helps develop a better-trained workforce. Whether you have a mom & pop business run from someone's home, Native American people in isolated areas who make crafts or medium-size companies, all of them can have online stores so customers can purchase items more efficiently, and start selling to worldwide audiences.

Graden (Prestonburg): We made wireless the central part of an integrated package of activities to revitalize business in our downtown. Our wireless network, combined with 3% loans and development efforts for buildings that weren't being used, made downtown friendly for businesses. Wireless created incentives for people to come downtown.

Within three months of launching the network, 22 businesses moved in with 40–45 new jobs. This creates a cyclical effect with more people coming into downtown, which attracts more businesses. Tax revenue from here in the first year of the program went up \$111,000, mostly through new business growth. This in turn allowed us to buy an aerial fire truck, which has kept property owners and government insurance rates from rising.

Meier (Oklahoma City): The existence of the WiFi network allowed us to do things not otherwise possible. We created 42 locations with research quality weather stations to collect all kinds of weather data since we have such a high number of tornados. The University of Oklahoma has projected a \$50 - \$100 million economic impact over 10 years because of the 'Mecca effect' as scientists, weather forecasters, organizations and conferences from all over the world visit. These people will be staying in hotels, eating at restaurants, taking tours and so on.

There are a whole lot of small benefits too. We increases participation in city events since staff sells tickets with mobile devices and wireless cash registers. Inspectors give instant licensing approvals, which save several days of construction time for projects. But WiFi did not create this. WiFi created the opportunity and eventually these benefits happen. Fiber is completely different. Wireless probably won't supplant it as the preferred technology because the expectations for fiber are greater.

Beard (Morrow County): Our farmers started benefiting as soon as the network was completed. They use data that's available while in their vehicles in the fields to track market conditions and make decisions to buy or sell commodities immediately to maximize their profits. They also check the weather to increase or decrease irrigation flow.

When farmers find signs of distress or bugs, they take pictures and send them to a university to get input on how to deal with the problem and minimize damage. The network enables them to check crops' shipping status or determine which grain elevators to send them to, plus use RFID to track equipment and better manage equipment maintenance. Farmers quickly became more competitive nationally and internationally.

2. How do you see broadband networks impacting healthcare delivery and telemedicine?

Hultman/McCaigue (REW): What's real now is the ability for doctors to collaborate with medical professionals around the world. They're able to look at x-rays from remote locations and make diagnoses because broadband lets us send those files immediately. They help people who may not otherwise have access to this care. There's telementry for home care to check in on patients remotely, such as monitoring heart rate and blood pressure, plus support medical alert devices so patients can talk to someone. All of these improve healthcare and also reduce costs.

Resistance to change, however, hinders some advances. Doctors and insurance companies could have faster access to medical records to resolve issues of billing and coverage. But until you have infrastructure in place so doctors and hospitals can take the next step, this will stay on the wish list.

Beard (Morrow County): A big challenge to providing healthcare is finding health professionals who want to live here. Telemedicine initiatives are already here to help this, but we want to expand them.

We currently have a health alert wireless network in limited area that's designed to provide support to health professionals during pandemic outbreaks, but next level we want to take this to widespread general patient care. Our consortium buildout will enable the same level of service no matter where you are in the county. In some areas we can monitor patients, and nurses can put WiFi mobile access points in vehicles so they can make house calls. Linking back to office, they can file paperwork electronically so they see more patients each day and reduce gas consumption.

Feist (Cambria County): Some of the other partners we spoke to when we originally built the network are in healthcare. We are building data radio links to outlying medical centers. We have doctors' offices affiliated with main hospitals and they want a highspeed connection to send large data files. With our fiber pathway from the NOC [network operating center] and wireless capabilities, we can offer healthcare facilities substantial audio and visual services. It's up to them as to how far they want to take it.

Wolf (Santa Monica): While patients are en route to a hospital someone can be scheduling surgery facilities in different hospitals and putting people and resources in place waiting for final decision on where the patient will end up. We could use wireless to transport data from the ambulance. People would get through the ER faster if not go directly to their ultimate treatment area of the hospital.

The network also gives hospitals more opportunities for offering specialized services. A hospital that would take two or three days to get pathology reports or test results from outside labs could decide to do these services in-house using broadband links to specialists to exchange files and digital images. In a similar way, clinics can compete with big hospitals for business, plus run business operations more effectively.

Huval (Lafayette): Telemedicine advances will improve services such as critical care for patients in our smaller hospitals. Instead of going to every patient's room, doctors can talk to patients over screen while a nurse is in the room, allowing doctors to see more patients. We have can create a video link with best heart physician or specialized hospital in the country. As the country tackles hospital data management reform, our network will give the medical community new capabilities to exchange data and improve service.

Meier (Oklahoma City): I can see voice and video applications running inside ambulances and linked to hospitals to help medical responders start early on treatment. I think it has enough value to give a return on investment. But it's not spectacular. If you say we're going to have "docs in a box" [video conferencing between patients and doctors], that has viability. It's being done today in rural areas, though not in major cities which we don't see as the target area. It makes sense trying to push this out to more rural areas. However, I'm not sure the medical community is ready to support it.

Johnston (Jackson, TN): It can do amazing things to change how people receive healthcare. Unfortunately we don't see potential capability meeting reality. The medical community isn't at that place right this minute. Some of my largest customers are hospitals because they need more bandwidth. Yet many doctors or their business managers aren't ready. No one's gone to them or patients to sell them on the idea. There's also a lack of adequate products as well as data security concerns. Somehow the insurance companies need to set up automated procedures that influence doctors to adopt new technology, and medical boards need to endorse the technology.

Gallagher (Cape Cod): We have a lot of retirees, people who are home alone and there's a rehab hospital here. This is a great opportunity to exploit. If we build a network in conjunction with the healthcare community, which is on board with our planning, they can develop apps to serve these constituents. I've seen applications for remote medical care such as monitoring when pills taken.

Though it's actually a short distance to Boston, to drive there can take three hours. Relative to the time of some medical procedures, this is very time consuming. One day you could have a surgeon in Boston operate on patients here using robotic systems. If you don't have broadband, you won't be able to participate in these advances.

Graden (Prestonburg): We have folks in our county who live in pretty remote areas we call hollows, some without water, and a lot on disability. They haven't seen a doctor in years, particularly specialists, because it's so much trouble and expense to get to one. When the weather's bad they're completely cut off.

We intend to expand our wireless out to the hollows so people can use video conferencing to talk to a doctor or medical specialist, and have at least a cursory visual examination. It's not ideal, but much more helpful than no care. I also expect medical people can visit some of these areas and be able to use laptops and wireless to search databases, consult with other physicians and introduce patients to helpful online resources.

3. The stimulus bill only provides for 80% of a network buildout. How does a community complete the network and sustain its on-going operations?

Huval (Lafayette): Understand the difference between a dream and a plan. I hear people talk with emotion about 'yeah, we can do it' and 'that's all it takes.' But it seems they don't have a plan. The business plan has a number of facets. What's the expertise of the people you're bringing to table, what are your costs and cost recovery plan? You have to do some type of marketing study. If people in the community don't want the network, the project will go in the tank. Even if you plan to borrow the 20% to complete the network, you have to show you've done this market research to determine where you'll get operating funds.

Gallagher (Cape Cod): You have to know what services can or need to be delivered to the community and what will they pay for. These could be for municipalities and schools, enterprises or small and medium businesses, wireless carriers. Where are people getting services now and where is there an opportunity that could open up? What are the issues involved with doing this? How much of the market do we think we can capture, and not necessarily by taking business from someone else? These are the factors that sustain revenues.

Wolf (Santa Monica): We pooled money we were already paying for voice and data services and used this capital to build a fiber network and implement new technology such as better switches that allowed for additional savings. This switch generated a \$750,000 in savings, all of which stayed in our fund. Ongoing savings fund other innovations, such as hotzones for free wireless access, providing our police with streaming video in their vehicles and 200 terabyte-data storage devices to store three years of data from video cameras.

We have excess bandwidth, so we can provide a large number of outdoor sites with free wireless access. We're selling dark fiber to corporations. You reach a critical mass in which the service sells on its own. When one company buys, another one buys. The network is growing all over the city using private companies' money. We generate more revenue to expand the network for our use and when all is done we own it. Our fund is self-sustaining and I have \$2.5 million in capital.

Hultman/McCaigue (REW): With government use of the network you can continue to move money into network operations based on expanding areas where you save. For example, using the network to manage utility meters saves on staff and transportation. In several cases, municipalities increase revenue by providing additional enhanced services such as digital parking pay stations that track the cars that have or have not paid. The key is layering on applications that continually raise the return on the investment in your network operations. Consider making applications available to county and state government offices in your municipality.

Beard (Morrow County): Our approach is to create a public/private partnership. The local governments should become the core tenants on the network. Businesses that currently can't get broadband will then be able to do so and at an affordable price because government use drives

down the cost of the network. The general public comes on as an additional revenue stream. It's these elements working together that ensure sustainability.

To make this blending work, you do have to understand the various stakeholders' needs. Private companies need a high level of broadband, but not everyone needs mobile broadband, maybe just farmers and delivery services. You may not find a private provider willing to deliver services to homes because they see too many potential problems, so the government may become the provider of last resort. Once you have enough capacity to cover everyone's needs, then it's just a question of coming up with fee structures that allow you afford to provide service.

Martin/Terry (Franklin County): You have to make sure service providers can make money. Our WISP has just a two-year ROI because they're receiving space on vertical assets such as government buildings in exchange for charging the county lower rates. They have 1500 residential customers as of 2008, and they'll expand this number because they did a deal with the abbey in the hills to put a tower there to extend the network's reach.

Don't expect to make a lot of money initially. Think of it this way. When a city or county puts a sewer lines down in undeveloped land, that line doesn't generate money initially but it does make development possible. You charge for various services as buildings go up and people move in. In your grant proposal, show how you're going to use the broadband infrastructure to draw businesses in, then make your operating money. Explain how it's the same as bringing in water and sewer lines because everyone is comfortable with that concept.

Graden (Prestonburg): Buy good products that rarely break down and require little maintenance by city staff. Creating partnerships rather than strict seller-buyer relationships with vendors also helps keep costs down. Use a little of the operating budget to advertise network services. Brand your product.

Create opportunities to make money. We sell ads on the Web site that our network takes people to when they log on. Everyone who pays the business license has a page on the site. For an extra \$100, we'll create an interactive Web page.

Form creative partnerships. Data Seam is a software and data solutions company in Louisville, KY. We told them that we had \$30,000 for a network services project and they decided to match this with in-kind support. They're local, so they gave us equipment that the community uses during day and company uses at night.

Meier (Oklahoma City): One major operating expense you incur with a wireless network is giving consumer general subscribers support and training if you charge for the access service. That cost increases as subscribers increase. If you don't want to have this overhead, open up the network and let people use it for free with limited speed rates. Because our network is very robust in order to support government applications and these benefits underwrite the operating expense, my costs are incredibly low to open network access to more people. The

minute I have to do account management, billing, support, etc., I doubt I can generate enough revenue to offset these expenses.

Johnston (Jackson, TN): It's typically not possible to sustain these network operations with the staff people you have in place already. You have an IT department that's good at taking care of servers, and you think, ok, they'll be good telephone guys. Sometimes the two don't match. Do a gut check before you go after stimulus money. Are you ready to do what's necessary to take a community network operation where it needs to be? You can't be nice fluffy businessperson.

Take this simple business philosophy – you have to watch pennies in an operation that's not like city government. Let's say we just borrowed \$10 million with the assumption we'll get 1,000 new subscribers every month for a year. But what if you didn't think about the price of success? If you get 2,000 subscribers a month, what do you do? You need more customer service people, more technicians. Beating your 'take plan' is counterproductive if you don't have more access to capital. This can be a problem if you can't get any more 'free' government money and you have to go to the bank for real money.

Partnering with a telco does help because you have to be ready for the different world of telecom operations. The difficulty, however, is that regardless of which telco you partner with you can have completely different goals that are at cross-purposes. The city wants to deliver services in places where it's currently not offered. The partner needs to make money. There's a reason they haven't already delivered service in that area.

Feist (Cambria County): Our broadband focus is middle mile. The key word for us is sustainability – you want to keep it up and running. Tell people what does your cell phone look like today, what will it look like in 10 years. We get money and it goes to network and to upgrades. Based budget estimate from partnerships, and savings to government. we got good figures to determine how much money to expect for products, how much for services.

IV. Question Responses – factors for a strong proposal

4. Are there community stakeholder organizations (businesses, education, etc) that should partner with local government to pursue grants?

Martin/Terry (Franklin County): Definitely. We're figuring out a lot about partnerships as we go along. As an economically stressed community we're looking at our college and the larger employers in area, such as the regional medical center, to give us guidance. They have a lot of folks doing medical records data entry, but more are working from home, which is easier for them and cheaper for the employer.

Just looking at our interaction on a Ferrum College initiative that highlighted the need for broadband, we saw the value of stakeholder involvement. Once we started to work with them, it became apparent how many businesses are not served. Polling constituents when planning the network, you get more perspective on the community's needs, plus these stakeholder groups' demonstrated commitment justifies your claims of network sustainability.

Meier (Oklahoma City): If the network is mainly to be used as a government tool, this should be a shared resource between governments and we have tried repeatedly to achieve this goal. For example, the county wants to use our network, but demands no restriction on what they use it for. Yet they want to run an application that will use up most of the network capacity. This doesn't make sense for us, so what do you do?

If the network is for all constituents, and one objective is to reach underserved communities, try to get heavy corporate network users to help provide laptops and desktops to those neighborhoods. Get the education community to support hardware giveaways with training. Lots of these partnerships make the deal work because the private sector is involved in a civic leadership role. Ask church and community centers to participate, and also get large tech companies to help people who go through these courses.

Huval (Lafayette): We haven't had a dialog yet with these groups since we've focused heavily on residential customers, but oil and gas, the medical community and education are some key stakeholders for us. You have to look at what makes the biggest impact on you community. As a whole, the ones we've identified are big influencers on our economy. Looking ahead, the water and electric utilities should become major broadband stakeholders for things such as smart grids, and when energy conservation increases in importance.

Hultman/McCaigue (REW): In many cases, it takes time to build consensus. Based on what we've seen in the legislation, Congress is looking for greatest potential impact from these grants. People need to do a good job analyzing what they can do and getting as many stakeholders as possible to buy-in. Give potential partners a simple common purpose with several specific objectives that are a part of a

broader picture. You can layer things on later with more sophisticated apps and services. Set sights low relative to bells and whistles.

Feist (Cambria County): When we initially built the network we went to educational institutions, chambers, public utilities, all of those people to create partnerships. The partnerships will stay in place as we go after stimulus grants since these constituents have a better vision of what their communities need. We want to offer the best bang for the money we're asking for, so we need to understand how stakeholders' needs relate to each other. If you address all of these with one broadband system, you can address the main principals of the stimulus.

We're working with representatives from Congress to help us partner with other counties to enhance their efforts so they won't have to start from scratch. Why re-create the wheel when we have already taken the lead.

Graden (Prestonburg): Look to your local colleges. For example, Big Sandy Community and Technical College here with 1600 students wants to promote distance learning. 80% of tests for these programs are online. You can get masters degree online. You may want to open library services or have educators promote after school programs. If broadband funded by grants can help any of these constituents, then bring them into the proposal.

If the community is going to form partnerships, you have to get the word out so people know you're looking. You also want to go to vendors and service providers to get them to become partners. If you're going to get matching grants, form public/private partnerships so government gets the money, and the private entity brings in-kind offerings that match grants with the dollar amount of these services or products.

Wolf (Santa Monica): We're already partnering with the redevelopment agency to see how can we assist their districts. They're building low-income housing and we're putting fiber in these houses, so we get financial compensation. For other developments such as business complexes and cooperatives, money is there to put in fiber, making them good potential partners.

Nationally, we're looking to partner with Cox, Cogent, British Telecom who now want to bring new business or attach their fiber with ours. We're connecting to other local government organizations such as the transportation agency that wants to bring in broadband to manage transit operations. These activities are cited as what we can do and want to do when we put these companies in the proposal.

Gallagher (Cape Cod): Open Cape already represents a large number of constituents by design: school administrators, municipalities, regional association and so on. As we develop grant requests, we're looking at all Federal agencies to see what makes sense and who can we partner with to maximize the benefits of approaching each.

We have a board made up of hospital administrators who are looking at healthcare needs. There's stimulus money for libraries, so we're working with our library consortium to see if we can apply together and have a stronger application. Another group is looking at the transportation part

of the bill and requiring the people building roads to consider putting conduits in for fiber while they build.

Beard (Morrow County): We're looking at 10 – 18 county consortium of local governments and districts within the counties. This will allow us to provide broadband to many rural areas through a shared fiber backbone and a mixed wireless/fiber redundant backbone. The last mile is mixed wireless infrastructures. Town governments, healthcare facilities and school districts are combining to pay through service fees what the grants won't cover, and then a private sector partner will sell services to other parts of population.

Most of the communities out here are similar enough with common enough problems to make it easier to address them as a whole. Counties can share each other's resources that a network requires, allowing us to build more for less. For rural communities, the only option for getting this money is to work together.

Johnston (Jackson, TN): We don't have enough of the plan laid out yet because we're still waiting for the rules, but we'll be meeting with stakeholder groups on our area before then. I'll need to deal with nine or ten different utility companies and several town councils, working with them one at a time. In my pitch to get them on board it's going to come back to lots of those intangible benefits I alluded to earlier.

5. How does a community address a proposal effort that attempts to leverage several federal agencies' grants?

Meier (Oklahoma City): In the past we've submitted to each agency, referenced the other agencies in the respective proposals, but never asked agencies to work together. This stimulus is not much more problematic than other grants. The same issues exist. You need someone writing the grant who is smart enough to structure the proposals correctly. Assume for a large project there's one agency that can support the purchase of servers, and another one will fund the software. The one agency approves Piece A, but Piece B fails to get approval. Write into the proposal language that allows you to back out of A, or not accept money until Piece B is funded from somewhere.

Martin/Terry (Franklin County): You need a team of people committed to this process. If your project has a component eligible for money from a healthcare-related agency, maybe a local medical director can play a role on the team. The same with education. Two or three items in that agency's grant program got Ferrum College excited because it would allow them to provide services beyond students to the community and businesses.

Johnston (Jackson, TN): We're going to go cross-stimulus in our request for funds. We'll approach the Department of Energy and say here are the AMI [advanced meter infrastructure] projects we're planning, and here's how our dollar multiplies if we combine this with another project. Same thing over at Health and Human Services, showing them what the hospitals will be doing and how together with the AMI funding we'll make a greater impact.

We intend to use hard numbers to define elements that are important relative to the needs of the people writing the rules. In your proposal, don't just say 'we'll help economic development.' Tell them 'here's what we've done in the past and it achieved three outcomes. If you give us x dollars, we'll build an industrial park and do these five concrete things that we have proved help economic development. We've done this before. We have these people on the ground ready to go.

Beard (Morrow County): This is like herding cats. The technology helps steer them toward a common objective, and that common goal is what gets teams together in the first place. There are only so many places to put towers for infrastructure and a limited number of technologies to choose from, which can help focus everyone's efforts. Most of the communities out here are similar enough with common enough problems to make it easier to approach the respective agencies with a proposal for the group.

Hultman/McCaigue (REW): This requires a lot of collaboration. You have to align political processes with the goals you want to achieve with broadband. Get the stakeholders to understand that there are limited financial resources and competing priorities within the community and within the Federal agencies. It's really important to get people to look at this as just the first step to get broadband up to the next level, so it's ok to compromise on some of what they want.

Local WISPs [wireless Internet service providers] you partner with could try to manipulate the grant process to their favor, so you have to balance between their needs, the needs of your communities and the requirements of the respective agencies. Hope that your projects can leverage open networks since this could help you use several service providers to implement different applications on the network that appeal to the different agencies.

Graden (Prestonburg): I go after everything at all times. However, sometimes when applying you have to list all types of grants, and you might get a lower score from some or all of the agencies you approach. So be aware of the rules. You have to know where you want to end up. Most cities have five-year plans and this proposal has to be factored in, which can help you decide which grant to pursue.

Most grants have open meetings. When you're there, talk to people who've won grants before. Sometimes I ask for them for a copy of their proposal. That probably gives you the best indicator of how to answer questions. I have whole cabinet full of grant proposals.

Huval (Lafayette): As a community owned utility, our relationship is unique. Our business plan is not based on having success at the expense of our customers or competitors. I envision asking stakeholders to give us their input on applications they want to use after doing some needs analysis with an eye on what's available now and in the future. How does what you want to do bring unique benefits? When we finish, it will be easier to determine which agencies to approach and with what type of proposal.

6. What have you found to be winning elements of a federal grant proposal? Are there tactics to avoid?

Gallagher (Cape Cod): It would help to have the rules. We'll pay close attention to the bill itself since we believe NTIA is going to define rules directly from the law. This grant is to reduce the risk to private businesses by offsetting cost of serving lower density populations. So you need to show NTIA that if they invest in you, how will your plan enable businesses to make a profit, and underserved people get service.

We'll also fall back on what we're trying to do, which is get people fully engaged in the 21st century. We're trying to write the application as we go along, but we've been working on engineering studies, business cases, how are you going to sustain networks like these over time. We'll include these with our application.

Meier (Oklahoma City): We have high success rates when we articulate ideas of substance and how exactly we're going to reach the goals established for particular grants. We're pretty straightforward about what we are or aren't going to accomplish. Money goes exactly where we said it would go and does exactly what we said it was going to do. This is not the most common approach you see in proposals. I've read some applications that are too grandiose.

Avoid overstating, what you're going to accomplish, and don't low-ball project costs. This sets unrealistic expectations at all levels within the community about where the money is going, or how much you can accomplish. Though constituents don't know anything about the process of getting the money, and some think it's 'free money.' When you promise to accomplish something but can't, people say you're incompetent. People only know this was promised and it did not occur.

Feist (Cambria County): Make sure you know the tenets of the program and what the agency wants to achieve. The best picture you can paint for that reviewer for how to reach those objectives, the best chance you have to get a grant. Assume reviewers have some background in what they're reviewing.

Have an explicit knowledge of grant guidelines and follow them to the letter. Make sure all the costs and your goals are well documented. If you want to create jobs or enhance education, explain why, how will you meet these goals? Just state the facts without embellishing and make the best argument for how much money you need.

Don't overstate your budget estimate. Make sure the project fits your community. I've seen people try to build something the community may not use, like wanting an advanced version of some technology when they don't have the basic computers. Or trying to bring in technology with the hope that someone comes in to build a business complex in the swamp when the swamp can't physically support buildings.

Martin/Terry (Franklin County): Look at the applicability of what you're proposing as it relates to the agency offering the grant. The winning ticket for one particular public safety-related grant we applied for was the fact that the county's fire and rescue operation is primarily a volunteer business. Reporting tasks, overall management and ultimately

community responsiveness were pretty tough with 16 stations. For instance, we had a person going to each station with thumb drives trying to collect data. Our proposal focused on using technology to better manage volunteers so we increase public safety.

Graden (Prestonburg): Show how you'll produce quality jobs that take advantage of broadband to create an industry. The more partner support you can demonstrate for your broadband strategy through endorsement letters or partners' direct involvement in the proposal, do it. Monetary and political support from state and Federal leaders is good.

You want to show that you're creating an infrastructure of things that stay around, such as buildings or tables and chairs. If a business leaves tomorrow, I still have the structure, so I can put another business in there. Don't put in requests for salaries, one-time fees or services that are, from a government agency perspective, temporary expenses that don't build things; that once the grant is gone, those services disappear.

Beard (Morrow County): Clearly state your objectives and keep as focused as possible. If it's for rural fire services, then continue to hammer home how the network will increase efficiency, save money and help firefighters do a better job. If your proposal's too long, it can put the reader to sleep. I try to make them as interesting as possible in a very dry format.

Be realistic. There's little point in asking beyond that amount if you know what the award limits are. But if you're writing a proposal with other counties, show where the larger request is justified because you're creating a greater collective common benefit and covering more areas. Clearly show the grant reviewer the economies of scale such as you'll use five routers instead of 20.

Hultman/McCaigue (REW): You need a good coalition of people interested in the project who commit resources to it. The project should have a broad scope that's capable of providing mobile and fixed broadband solutions to a community. It needs to address how do you get cost effective access to, and how it's going to be distributed within, that community. Once you have a good community-supported plan, address the ongoing operations and what revenue sources will sustain the network.

From their meetings it seems like NTIA and RUS don't want to entertain proposals from every little town or ISP. Your grant strategy may have to take into account the agencies may set up a state-level priority approach in which someone from state ranks all of the proposals coming in.

V. In the final analysis

While fine-tuning broadband strategy, consider this approach. Your actual grant application will focus heavily on your proposal's ability to help stimulate your local economy, and lay a foundation for advancing community broadband as part of a national strategy yet to be written. But as you develop the business plan, write it so it could be a successful venture capitalist or bank loan proposal in better economic times.

Why the mental gymnastics? First, this exercise ultimately helps you create a network that is more likely to succeed financially, and also achieve many transformative changes such as those described in this report. If you build a business plan that is so well conceived, visionary and well supported by a broad group of stakeholders it could attract serious interest from risk-averse investors, you increase your chances for a grant award from federal agencies eager to give away money.

Second, you may not get a grant. Should this happen, why let the dream die because you didn't get funding from one particular source? Some communities have been planning broadband networks for a year or more before the broadband bill, and believe they're on track to get financial support with or without the stimulus. They're the leading contenders in this dash for dollars. Those who want to succeed in bringing broadband to their communities need to use this grant process as a launch pad to cast a wide net for capturing funding and financial success.

Your proposal needs a short-term focus

There is intense pressure on NTIA and RUS staff to show short-term economic results: get money out the door quickly, produce results soon. To increase your chance to win, you must help them win. When you review answers to the first roundtable question, look at the early successes achieved by others. Use these as reference points.

Job creation is the major objective of the stimulus bill. And yes, there's an economic boost in putting people to work building networks. I would argue that, to have the greatest local job-creation impact, it's best to work with local or regional telecom companies, wireless Internet access providers (WISPs) and other providers that are closely wedded to your community. The workforce and senior management are local and revenues they collect tend to stay at home.

Many of those interviewed find that the greater short-term economic benefit though, appears to come from the sudden creation of home-based businesses, immediately opening local businesses to worldwide markets and increasing traffic into business districts. The key is to put in place awareness campaigns, training programs and a pipeline to get inexpensive computers into the community before the network goes live.

Galen Updike, Telecom Development Manager for Arizona's Government Information Technology Agency observes that, "in the first six months of a new network installation, expect that the initial economic impact to be within whatever cottage industries exist in the area and among tourist-related businesses. The arrival of broadband allows the local community

to give outsiders a new way of looking at that community. With all other things being equal, the flow of people leaving should stop. Then you should start to see one or two examples of Main Street becoming more popular, which should stop the decline of the downtown area.”

The opportunity to bring new companies into the area quickly enough for fast economic impact is credible if your plan shows you’re going to launch an aggressive marketing campaign for the network while it’s being built. Remember, Lafayette, LN closed a deal with a new company and 600 jobs while the city was still fighting legislative issues before network building started.

Another area for short-term economic impact, though it is uncertain how NTIA and RUS will view things, is the financial savings to local governments using the network to cut departments’ operating cost and improving services. The impact on government budgets and operations enhancements can be huge, and these savings/revenues can contribute to the sustainability case you must present. I wrote extensively about this in 2007 - <http://www.successful.com/msp/reports.html>. It’s trickier showing how this impacts the local economy. One could argue, for example, that the sudden increase in business activities and influx of businesses will put a severe strain on local government services that broadband can also alleviate.

Your plan should reflect long-term vision

I can’t emphasize enough about making a strong AND credible argument that you will be able to financially sustain the network you build. As Terry Huval said, you have to understand the difference between a dream and a plan. This grant is helping you to create a business, and even though (depending on who owns the network) it doesn’t have to show a profit to the same extent that a corporation might, earn at least as much money with the network as you spend operating it. This can be direct revenue, or money coming into the community that you can reasonably track as resulting from having the network.

Along with the revenue/fiscal support issue should also be your vision for how you plan to transform education, healthcare, power and general utility usage and public safety. Addressing these potentially opens the doors to more grant money.

I focused a lot on healthcare in this report because it is an area that touches everyone regardless of economic status, geographic location or political philosophy. Many of the benefits broadband brings to healthcare are in the future, and the economic benefits are not often direct. Yet healthcare reform is a top priority of the Obama administration, it will be front-page news for months to come and so many people care about the issue that you likely will score bonus points (probably unofficially) if your plan addresses healthcare in a meaningful way.

Partnerships are the center of your grant universe

Partnerships are a significant recurring theme among the people interviewed. Everyone who has successful experience with broadband knows that partnerships are the cornerstone of that success.

Identifying and working closely with various stakeholder groups are essential to defining broadband needs. Without them there is no sustainability, and even short-term economic impact is questionable. It takes a lot of work and coordination, but they help you define issues and opportunities that strengthen your efforts. Their endorsements give your proposal credibility. Stakeholders increase the number of Federal agencies that can potentially provide grants, as well as the number of financial sources that may support network operations.

You also have to cultivate an assortment of outside partners. Counties are banding with other counties. Cities definitely need to consider other municipal partners. For better or for worse, state agencies, legislators and governors are likely to become players in the grant disbursement process. Cultivate and improve partnerships in these areas now.

Communities that built broadband networks and/or pursued Federal grants before likely have relationships with Federal agencies. Tap these to get feedback for your proposal, and possible avenues to additional funds for your network. Focus heavily on the economy of scale that benefits everyone through a multi-agency project. You can begin to build relationships here for the first time, but it may be more practical to partner with communities that already have Federal connections.

Private sector companies are vital partners to bring to the table. But the private/public partnerships you see working do not treat private partners like ATM machines. As you've read here, everyone profited. These partnerships lead to the success of community networks only with open, honest negotiations that ensure their business needs and yours are fairly and sufficiently met.

The angel's in the details

It's fair to say that many people dread the grant application process because of the tedious details to address. With the broadband grant application, this won't change. However, I believe that forcing people to go through these details will create better network planning than we got during the muni wireless hype.

View the NTIA and RUS staffers reviewing these applications as similar to bankers: they have lots of money to disburse, there are more proposals than money to fund them and reviewers may have only a basic working knowledge of the many technology issues. Those adhering to every detail in NTIA and RUS guidelines have a leg up on the process.

I learned in college and later in life, it isn't always the best students, the noblest causes or the greatest products that succeed. Often the people who figure out how to best execute the boring processes of academia, political organizing or brand marketing are the winners. So I expect it to be with these grants. And that you can take to the bank.

VI. Recommendations

Balancing your needs with the government's

I've written a book (<http://www.successful.com/msp/fgfsummary.html>) and several analysis reports that address conducting effective needs analysis, so you have plenty of material from me online to help you. With the broadband stimulus grants, however, realize that your needs have to align with the mandates given NTIA and RUS on how to disburse them.

Once the rules come out, do a reality check. Does the network you and stakeholders determine you need match NTIA and RUS requirements and guidelines? Pay particular attention to agency definitions for "un-served" and "underserved." It probably won't help to argue the point if your definitions and theirs' don't agree. The agencies are running this game. Conversely, clearly state in specific terms where your needs align with NTIA/RUS rules. Don't assume "any idiot can see that we qualify." Nuance is lost on someone with stacks of applications in their In box.

Support the validity of your needs with credible analysis and strengthen it with stakeholders' endorsements. Present your case with language an average 10th grader can comprehend. Broadband is an incredibly complex collection of technologies. Even life-long techies could get lost evaluating between dozens of proposals. Giving financial data relevance for the reviewer is likewise a challenge.

Randall Schwartz, Principal Consultant with Wireless 20/20, has created a business case tool called WiROI and offers some insight on making financials comprehensive.

"By outlining the network technology and buildout requirements, services and pricing to be offered, and other potential revenues the network could generate, you can develop a financial model that shows capital needs for building the network and lets you create a realistic operating budget. Once a comprehensive model is built, software tools can perform valuable 'what if' planning analysis so you improve your application for stimulus money and other fundraising you may do."

Grab your partner and dosey doe

Communities do not all have the same combination of stakeholders that make up a dream team of proposal partners. You must do some legwork to find your best hometown team. Ideal partners are the ones who help you qualify for grants because they 1) fit the definitions of un-served or underserved whose needs broadband can meet, or 2) they can help financially sustain the network once its built. The rules will help you clarify who is in the first group. The second category of stakeholders you should cultivate now if you haven't done so already.

The business community should probably be on the top of your list since these organizations tend to need the most broadband and are willing to pay for quality premium (but fairly priced) services that address their needs. Local government is a close second. They can emulate Santa

Monica and others in using broadband to significantly reduce operations and mobile workforce management costs, and then use these savings to underwrite network operations.

Two city and county government agencies that by themselves are powerful partners are public works and public safety. Broadband applications that address either of these two areas open your grant options to Federal agencies besides NTIA and RUS, such as Homeland Security, Justice, Transportation and possibly Energy. Public works projects also allow you to reduce the cost of broadband infrastructure buildouts. Every road, bridge and public building project is an opportunity to put in broadband infrastructure at a reduced cost.

Though education got the short-changed (according to some) in the overall stimulus bill, k-12 schools, colleges and universities are viable partners. They have a huge need for broadband, which open them to various grant opportunities, plus higher learning institutions with access to tens or hundreds of megs of Internet speed are eligible for large research grants that bring huge economic benefits to your community.

Here's to your healthcare

This is an area I feel you really should address in your proposal where possible. If you have or desire a sizeable healthcare community, linking these various professionals, facilities and patients through broadband is a valuable service for which many will pay and/or seek grants to underwrite.

Broadband for healthcare is a short-term political ace card because of its high profile this year. But it's also a long-term investment for your community. Updike states that, "Telemedicine spends 70% of its budget on spectrum because it cost so much. If your network reduces this cost, money is then available for more aggressive applications such as highspeed, high-resolution video or transmitting telemetrics from monitoring equipment. I see eventually supporting home-based telemetrics so someone at home or a rest home has devices that plug into heart or blood pressure monitors."

From a local government perspective, " a broadband video link in paramedics' vehicles and save millions of dollars in legal fees from unwarranted legal suits, " states R. Lee Heath, an expert in emergency communications systems. "The ability to protect yourself, where one avoided litigation can pay for the network, exceeds the price of the application. Even if someone screws up, video evidence makes it easier to settle than to litigate for 10 years."

Reality check on the need for speed

It is accepted conventional wisdom by many that fiber is the only true broadband that will meet all of our speed needs now and into the foreseeable future. While this may be true when taken at face value, I challenge the assumption that fiber is best for everyone. In Franklin County and other places, it's not practical to build fiber everywhere. They've discovered that you can get enough wireless speed, depending

on the technology, to entice new businesses to the area and serve many constituents' needs to a level that justifies the investment.

Coming back to the NTIA staffer with 100 applications in their In box, this person wants to do the most for the most number of people while at the same time not having to review 1,000 \$10,000 proposals. If someone has a \$1 million project for a wireless network to adequately cover 75,000 constituents, and another community in the same state has a \$30 million project to cover the same number of people, I believe the (again, unofficial) tendency will be to fund the \$1 million baby and similar size projects first. Remember, this is a bill to produce short-term impacts and give people much higher levels of Internet access than they have currently. \$7 billion isn't going to buy everyone's ideal network.

Several communities have analyzed their needs, their opportunities and the technologies involved, and concluded that the best option is to get grant money to pay for what's called the "middle mile." The part of the network end users access to get online wireless or wired connections is called the last mile. All of these access points are fed to a "pipe" that aggregates traffic to send to a massive digital clearinghouse and on to the Internet. That pipe is the middle mile and it plays a huge role in the overall speed of the network.

By paying for the middle mile and having service providers come in to build and collect subscriber fees for the last mile, communities bring in faster speed to more people for the money invested. Communities also have relatively small operations cost long term because they only have to support a small number of providers, local governments and institutional customers.

Whichever way you end up going, you should really think outside the box about which technology you want to use to meet your needs, and how this technology is deployed. Short-term compromises may make sense in light of America's long-term national broadband goals.

The new KISS – keep is simple and short

I am not a grant writer, but based on the comments of the people I interviewed, my advice is to be exceptionally specific when defining your needs, explaining what you want to build, why you want to build it and what benefits you hope to derive. As my grandmother used to say, cross every "t" and dot every "i" as pertains to the application guidelines. Brevity while using words that paint vivid pictures is ideal. And do not be shy when asking for the money.

Insider tips

I asked for some grant strategy tips from a couple of people I know who work inside the D.C. Beltway and have been tracking the broadband stimulus – and community broadband in general – quite extensively. Keep these handy.

Jim Baller – President, Baller Herbst Law Group

Jim Baller is widely recognized as the nation's most experienced and knowledgeable attorney and foremost legal expert on public broadband matters. His firm helps communities in 35 states on communications matters. He is also the founder and president of the US Broadband Coalition (www.bb4us.net), a large and diverse group of organizations that is trying to develop consensus on the terms of a national broadband strategy. I'm among scores of people who read his newsletter every day (<http://www.baller.com>). Jim@Baller.com, 202) 833-1144

Here are some of Jim's tips on what to include in your proposal.

1. Obtain relevant data and make preliminary projections
2. Emphasize multiple-purpose, multiple party projects, that get 'biggest bang' for federal bucks
3. Concentrate on high-value targets – e.g., schools, libraries, medical and health care providers, colleges, community-support organizations that serve vulnerable populations, public safety
4. Develop agreements soon with potential partners
5. Emphasize affordability of the proposed services for constituents since subsidized network capital costs should lead to lower prices
6. Make sure you and everyone involved with the proposal understand what terms such as Network nondiscrimination, interconnection, un-served and underserved mean
7. Focus on getting the most speed for the largest number of constituents (e.g. fiber v. DSL or cable)
8. Understand the potential for state barriers to public entry and how you should interpret these
9. Contact and register with the various federal and state agencies you may approach for a grant
10. If your grant gets funding, meet all compliance and reporting rules

Andy Lipman – Partner, Bingham

Andy Lipman, a partner with the Bingham law firm (<http://bingham.com>), has spent 30 years developing and managing their Telecommunications, Media and Technology Group. He practices in virtually every aspect of communications law and related fields, and has been following this broadband stimulus program like a hawk. Andrew.Lipman@bingham.com, 202-373-6033

Andrew provides some tips on things you may want to avoid doing.

1. The broadband funding programs provide exciting opportunities to expand broadband access, but a project that does so without creating any jobs may have little chance of winning an award.

2. If you haven't lined up partners and contractors, do so now because you may not get funded if there's no plan to start quickly after funding and finish as soon as possible.
3. Don't ignore your business plan, operational needs and the adoption rate you need to sustain your project several years from now
4. You shouldn't assume you'll get federal or state help later, so be clear on stating alternative sources of funding
5. Even though the final legislation does not require public/private partnerships, that doesn't mean you should go it alone since NTIA and RUS may still favor those leveraging each partner's best capabilities
6. Don't assume that just any partner will work, but choose a reliable, reputable, financially sound organization.
7. Remember to make reliable, interoperable technology with adequate speeds is part of the sustainability consideration
8. Avoid proposing to build *more* network than you need because a high-end network that is unaffordable may raise concerns about sustainability and adoptability
9. Don't build *less* network than you need trying to save costs since speed is still a major consideration with the agencies, but try to strike a careful balance between speed and affordability
10. You can't ignore the policy implications of municipal networks since the economic development and private sector impacts are still hotly debated

VII. Conclusion

This report addresses just a few of the important issues in what is a multi-step process. It should be distributed to everyone working with you to prepare broadband proposals and projects to help get all involved on the same page. I often tell people that these reports are not written to give readers all the right answers, but to get them to ask a lot of the right questions so they find the best answers to address their unique situations. This is particularly true as I assist communities, service providers and vendors address a process about which a lot is still unknown.

In the upcoming weeks it's important that everyone tackling this great broadband undertaking keep a close eye on developments in D.C. with the various agency and Congressional players. You need to be prepared to act swiftly and with purpose. Now is the time for getting your ducks in a row, so don't waste it.

For more information

About the sponsor

REW Broadband Networks' mission is to provide wireless broadband services to "un-served and underserved" markets in rural America. Through strategic partnerships, this company has new technology, an experienced network deployment team and veteran wireless executive management to efficiently and effectively provide, new and enhanced services to rural community schools, public utilities/safety and health organizations. <http://rewnetworks.com>

About the author

For over 20 years Craig Settles' consulting services, books and workshops have helped organizations worldwide understand how to use technology to save money, increase revenue and run a better business operation. Since 2005, Mr. Settles has specialized in using broadband to improve government efficiency and boosting economic development within their communities. He authored two books and many special reports, national surveys and articles on the subject.

Don't miss these great muni broadband resources

Keep track of broadband stimulus developments through Craig Settles' blog – <http://roisforyou.wordpress.com>

Get valuable on-site workshops to help you stakeholders develop strategy plans for using broadband to improve economic development. Visit <http://www.successful.com/services/speaker.html>

Call 510-536-4522, e-mail craig@successful.com or visit www.successful.com/snapshot.html to get details about future Municipal Broadband Snapshot Reports. Your feedback and suggestions for future topics is always welcome.