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Community Broadband Snapshot Report™

The Broadband-Driven Economy: How to Plan It, Fund It, Measure It.



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Executive Summary

Broadband has consistently been described as an asset to help communities improve economic development. In the past two years, much emphasis has gone into positioning broadband as our newest utility, vital as our mainstay electric, gas and water utilities.

This year's survey asks members of the International Economic Development Council (IEDC), the largest professional association of economic developers, key questions regarding broadband's impact on local economies. These test some general assumptions made about broadband's potential benefits, and also enable survey respondents to assess the current value broadband brings to their communities.

242 IEDC members responded to the survey, the majority of which are senior executives, managers and staff for economic development agencies or departments in local or county governments. Some respondents are economic development consultants and managers of nonprofits that contribute to improving local economies.

Some of this year's findings include:

- 55% report their jurisdictions are under monopoly or duopoly telecom condition with no meaningful competition to drive prices down or quality up.
- 18% have fiber networks, 24% plan to build one and 20% might in the future.
- Overall, 35% of total respondents report good broadband availability, 17% report having bad or no availability (28% of rural respondents have bad availability.
- 26% say residences and businesses pay too much and get too little broadband value, 50% indicate current services may not be a good value in several years.
- Broadband-driven healthcare delivery is the sleeping giant of economic development, and 43% of respondents see this as a major economic issue.
- Economic developers need to really push the envelope aggressively when it comes to evaluating ways to fund broadband.
- There are significant differences between the responses of respondents from rural jurisdictions compared to total respondents when assessing broadband policies such as net neutrality and increasing competition.

Survey topics

The survey questions were grouped into four main sections.

The first asks members to report on the current state of highspeed Internet access in

their jurisdictions. The second section poses questions about how sufficient is broadband in their communities for improving existing businesses, attracting new companies, improving education and healthcare delivery.

The third section asks respondents to assess options for funding broadband networks, as well as models for communities to own and operate the business of broadband, even if a community doesn't own the infrastructure. The fourth addresses key broadband policy issues such as facilitating competition and providing consumer protections.

Special thanks

<u>IEDC</u> has been a wonderful partner since 2006. Their support has been invaluable to the success of these annual supports.

<u>Broadband Communities Magazine</u> contributed valuable logistics support that helped make this report possible.

I. Survey Background

I began working with the International Economic Development Council (IEDC) in 2006 to survey their members about how broadband was impacting local economies. The driving force behind this effort was pretty basic – skepticism. As a broadband business strategy consultant, I doubted many politicians and policymakers fully understood broadband cause and effect.

Mayors across the country and around the globe preached the gospel of broadband's ability to produce certain economic outcomes. Initially, elected officials told constituents, "we need muni WiFi to convince kids who've gone away to college to move back." "Muni WiFi will help increase our convention business." In the past year, a frequent refrain is, "we need broadband so low-income people can find jobs." Surveying those in the economic development profession often reveals where incorrect assumptions are made.

When some in the media, industry and even communities promote expectations that broadband cannot meet, or miss important outcomes the technology can produce, they set constituents up for big disappointments. Broadband subsequently could miss its potential to become a community asset. Eventually local and federal governments could end up spending a lot of money the wrong way and expecting the wrong outcomes.

The surveys that I conduct, therefore, attempt to uncover answers to questions such as:

- do economic developers understand the full scope of how broadband can improve local economies;
- do those not in the profession understand the various programs that need to be in place, that the network alone does not lead to certain economic outcomes;
- will some of the main national and state broadband policy decisions help or hinder the technology's role as an economic development driver?

This year the survey departed from questions about types of broadband technologies and Internet access speeds to focus on how these networks are used to influence more than just business development and company retention. It also probes more into how communities fund these networks.

In addition to gathering quantitative data, the survey also gathered qualitative feedback through open-ended question that respondents answer with their opinions: "What are two things economic development professionals such as yourself need to do to help the network impact specific outcomes?" These comments are included in a separate document. Reading these has given broadband stakeholders subjective information that expands on what the survey numbers represent.

This report concludes with my analysis of the data. I also draw upon my expertise working with communities on their needs assessments, as well as conversations with dozens of broadband project leaders around the U.S. to formulate my analysis.

II. Profile of Survey Respondents

242 economic development professionals and consultants from the United States completed the survey. As shown in **Figure 1**, the largest percentage (39%) is comprised of economic development agencies, and another 29% work in economic development departments within mostly local government. Nonprofits dedicated to facilitating local economic growth and consultants comprise the remaining respondents.

Figure 1.

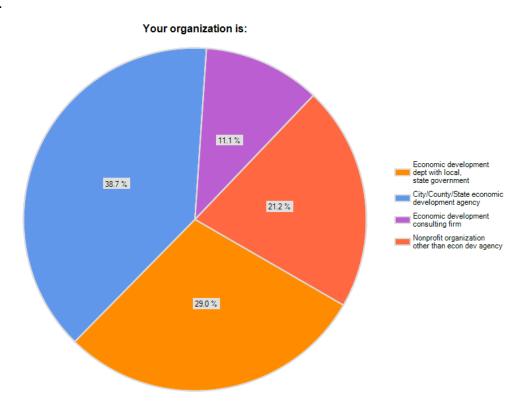


Figure 2 shows that the majority of survey respondents are collectively presidents and administrators (41%), managers (25%) and regular staff (13%). The remaining respondents have consulting or other roles within their respective organizations.

In terms of where they serve, the majority of respondents shown in **Figure 3** are from cities, towns and counties. 18% have regional responsibilities.

Figure 2

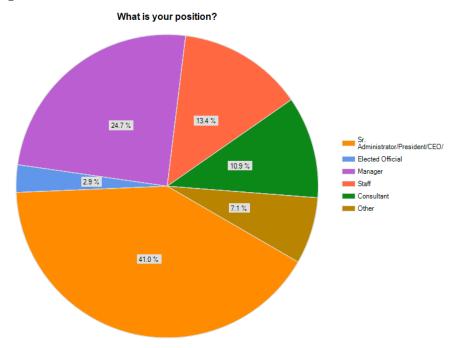
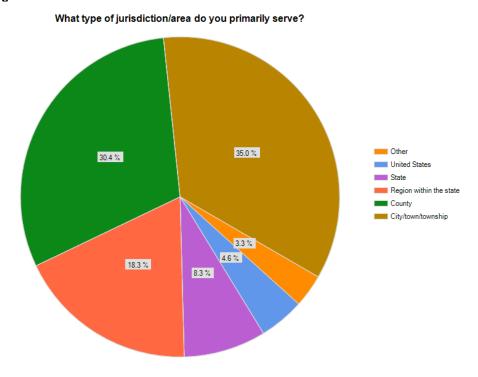


Figure 3.



31% describe the jurisdictions they serve as rural, and while 13% serve urban communities (**Figure 4**). 25% of respondents' jurisdictions are a mix of rural, urban and suburban. Respondents in the remaining categories are fairly evenly distributed. **Figure 5** shows the population breakdown of respondents' jurisdictions.

Figure 4.

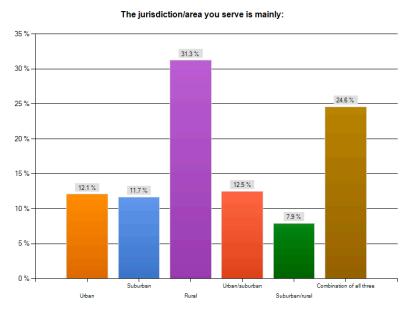
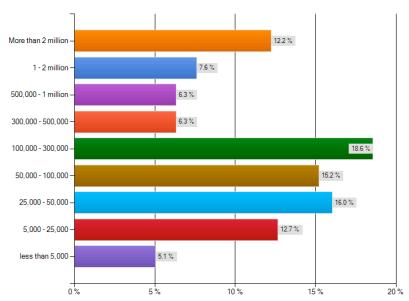


Figure 5.





III. The current state of broadband in respondents' jurisdictions

In the 2012 survey, 44% of respondents reported that their jurisdictions exist under duopoly conditions, with just one cable and one telecom company, and not enough competitors to either to impact pricing or service quality. 16% were in more difficult monopoly conditions. 37% reported that they had at two or more telecom providers, or two or more cable companies that are all strong enough to provide sufficient competition. 4% feel that their community-owned networks encourage a competitive marketplace.

In this year's survey, two of the categories moved a little. Only 40% report duopoly conditions, but 43% feel there is sufficient competition to keep prices down (**Figure 6**). The percentages of those who live under monopoly conditions or have a community network to keep competitive pressure on incumbents are about the same.

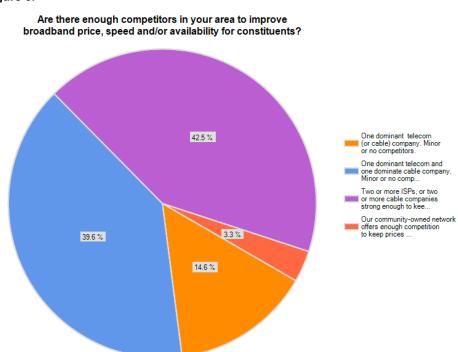


Figure 6.

After asking what the broadband competitive picture is like in respondents' jurisdiction, the survey asked if their communities had plans to alter the landscape by introducing new competition via a community broadband network. I define community networks as those built, owned and operated by local government, a public utility or any nonprofit or for-profit organization owned by community members, either alone or in a public private partnership.

Figure 7.

If a city/area-wide community wireless network doesn't exist, are there plans for local government, a public utility or a community organization to begin building one?

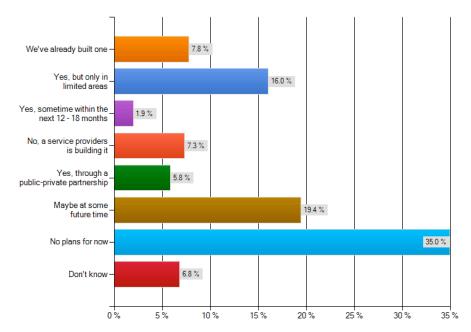
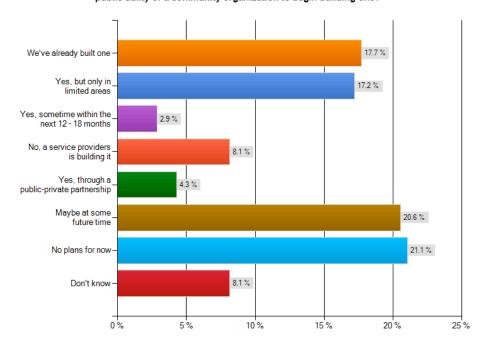


Figure 8.

If a city/area-wide community fiber network doesn't exist, are there plans for local government, a public utility or a community organization to begin building one?

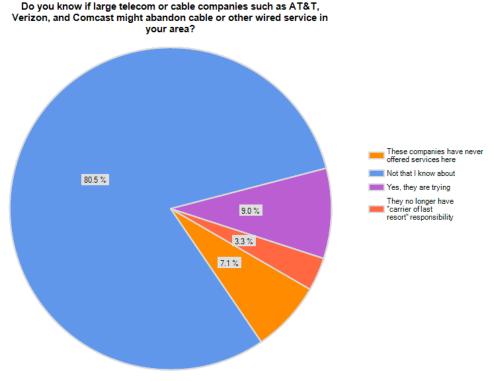


The responses shown in **Figure 7** regarding plans to build a wireless network are pretty much unchanged from responses in the 2012 IEDC survey. The responses to the question about building a fiber network presented in **Figure 8**, however, have changed noticeably in two results. This year, 17% of respondents indicate they plan to build a fiber network in limited areas, up six percentage points from 2012. The percentage of respondents that say they have no plans to build a fiber network has dropped significantly from 39% in 2012 to 21% this year.

Take note that, while media articles tend to cover communities that plan to build citywide or countywide networks, quite a few communities have built or intend to build what I call limited-reach networks for targeted parts of their community. For example, Champaign-Urbana built its fiber network primarily for low-income neighborhoods. Benicia, CA is one of numerous cities that want to build fiber specifically in its industrial park. When assessing, projecting and measuring local economic impacts, limited-reach networks should be factored into the process.

Most of rural respondents' answers to the question of future fiber builds are within two percentage points of answers from all respondents combined. Two exceptions are 23% of rural respondents already have a community fiber network of some sort, five percentage points more than total respondents, and 21% have plans to build a limited-reach network, four percentage points more than total respondents.

Figure 9.



The question in **Figure 9** was added this year because several large telecom carriers are threatening in numerous states to abandon their responsibilities to serve small and rural markets. This is a major development because if these actions are successful, they will have a significant negative impact on small and rural communities. Communities likely will lose telephone services and the hope for even basic Internet services.

The fact that 80% of respondents say they are not aware of such developments could be because these efforts by AT&T, Verizon and others to rescind their obligation to "carrier of last resort" requirements are not getting much local coverage. News coverage to date in industry media outlets has been fairly significant.

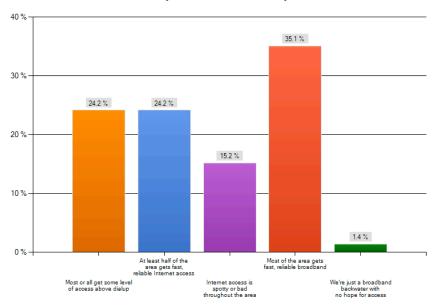
Availability vs. Affordability

In discussing broadband availability, it is important to frame the question in terms of what constituents are actually receiving. Incumbent-supplied data measured in terms of "speeds up to" or "where advertised" are weak indicators. In the question in **Figure 10** on actual availability, 35% of respondents feel most of their constituents have good availability, and almost 25% believe at least half of constituents have good broadband.

Another 25% feel most constituents have at least basic broadband above dial-up and a notable 16% feel they have poor to no broadband everywhere. 28% of rural respondents, however, say they have spotty availability everywhere.

Figure 10.

In terms of Internet access the homes and businesses of your jurisdiction ACTUALLY receive, how do you rate broadband availability?



Broadband availability is important, of course, but it is also important that broadband be so subscribers get good value for the amount they spend for services. A sizeable number of respondents report that their constituents have at least basic broadband speed available. But they paint a less cheery picture of the value subscribers get for their money.

Figure 11 shows that 26% of respondents feel their business constituents pay too much for too little value, while 50% feel constituents are only getting adequate value. It seems safe to expect that current broadband services in these latter communities will not be able to keep pace with increasing needs for speed and capacity. Rural respondents, as many would expect, have a much higher level of dissatisfaction, with 40% saying their constituents paying too much for too little.

Reviewing the responses to the question as to what kind of value residential broadband subscribers in their jurisdictions receive (**Figure 12**), we see that see numbers similar to those for business subscribers. There is a higher percentage (30%) that feels home users pay too much and get too little in return. When broken out by rural respondents, the percentages are pretty close to those regarding business subscribers, with 40% also saying residential services are overpriced.

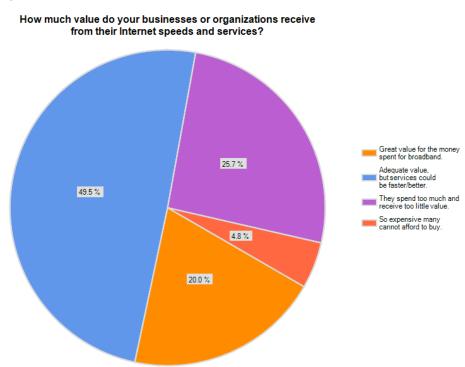
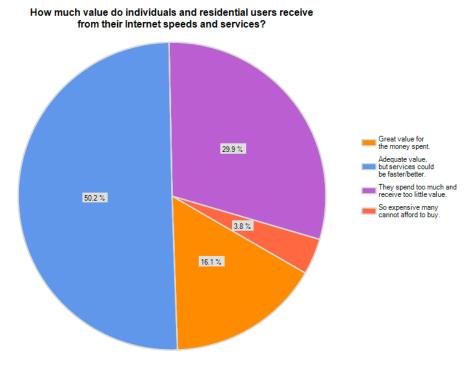


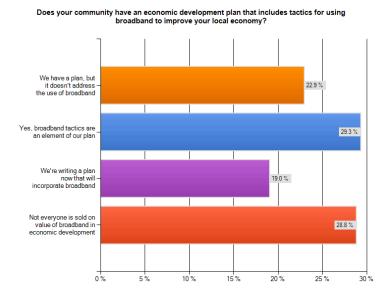
Figure 11.

Figure 12.



Questioning whether communities have an economic development plan that includes broadband tactics reveals a glass is half full or half empty, depending on one's philosophical view. 48% have a plan with broadband or are writing one, 52% do not. 61% of rural respondents have or are writing a plan that includes broadband tactics.

Figure 13.



IV. **Broadband Sufficiency for Business, Education and Healthcare**

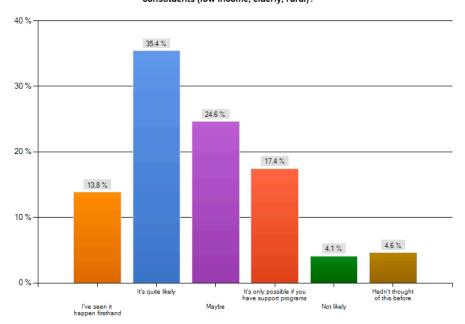
Previous surveys focused on how different broadband technologies and speeds impact specific economic outcomes. This year's respondents weighed in on how broadband is impacting a variety of factors that contribute to a community's economic well being.

Figure 14. Are the Internet speeds and service quality that constituents

ACTUALLY receive sufficient to:

	Yes	Yes, but could be better	Depends on area of town	No
Attract new big businesses.	28%	28%	29%	15%
Recruit mid size businesses.	35%	28%	27%	10%
Improve local companies' business operations.	34%	33%	24%	9%
Increase home-based businesses.	30%	23%	36%	12%
Enable Individuals to telecommute.	29%	29%	33%	9%
Increase startup companies (excluding home-based).	27%	29%	32%	12%

Figure 15. Can a broadband network encourage individual entrepreneurship among underserved constituents (low income, elderly, rural)?



Having established in prior years that broadband impacts certain outcomes, this year I wanted to get some indication of whether and to what extent IEDC members are experiencing some of the benefits broadband can deliver. An interesting conclusion that can be drawn from **Figure 14** is that broadband speed and quality could be better for nearly two-thirds of respondents. Rural members answering "yes" in all categories fall about five percentage points behind the total number of respondents, and those who answered "no" is between five and seven percentage points higher than all respondents.

An interesting aspect of the results in **Figure 15** is that compared to 2012 responses to the same question, there is a 15 percentage-point drop in those who feel broadband can contribute to an increase of entrepreneurs among underserved constituents. The percentage that answered "maybe" doubled this year.

To provide perspective for questions about how sufficient is respondents' broadband speeds to impact certain outcomes, **Figure 16** shows minimum broadband speeds IEDC members in 2012 felt were necessary to produce business outcomes. Rural respondents in that survey had greater percentages than all respondents combined picking 25 – 100 Mbps as the minimum speeds required for these outcomes.

Figure 16.

	2-4 Mbps	10-12	25-50	100-120	500	1 Gigabit
Lure businesses	4%	7%	14%	32%	16%	28%
Grow local businesses	4%	12%	24%	32%	13%	15%
Revive businesses	7%	14%	21%	29%	11%	16%
Revive communities	8%	16%	24%	26%	10%	15%
Boost worker training	6%	16%	27%	27%	12%	12%
Home businesses	8%	16%	28%	27%	12%	9%
Improve individuals	4%	15%	25%	32%	15%	9%

Besides superfast networks, support programs are needed to get more businesses online, and to make business owners and staff can effectively use the technology. In **Figure 17** respondents assess common programs some communities find effective. Mentoring entrepreneurs is the hands-down favorite program among respondents.

Figure 17. What extras are important to maximize broadband's benefit to startups and home-based businesses?

	Not very important	Important, hard to finance	Important , we can make happen	Don't know
Training in business management.	6%	38%	40%	17%
Tech training.	3%	41%	44%	12%
Mentoring program for entrepreneurs.	3%	35%	52%	11%

Education – economic development's stepchild?

About half of respondents feel their current broadband speeds could be better in order to achieve these education outcomes. However, a much higher percentage feels their current broadband speeds are sufficient for these outcomes than for business outcomes.

Figure 18. Are the Internet speeds and service quality that constituents ACTUALLYreceive sufficient to impact these education outcomes:

	Depends on area of town	Yes	No	Yes, but could be better
Use Net to assist				
homework in K-12.	30%	42%	5%	23%
Enable students in multiple locations to				
collaborate.	28%	39%	9%	24%
Schools maximize education technologies.	19%	43%	8%	30%
Assist college work done off campus.	26%	39%	5%	30%
Increase K-12 student/teacher/parent collaboration.	22%	37%	7%	34%
Enable online continuing education/professional development.	25%	39%	5%	31%

Using broadband to improve education can create complications for economic developers because, even though it is a goal that enjoys widespread public support, it is not a job performance category for which these professionals are evaluated. Furthermore, to fully realize the benefits to education that broadband promises, homes must have sufficient broadband. Some communities intent on using these networks to improve the local economy focus heavily on wiring businesses but ignore residences.

Figure 19, similar to Figure 17, presents how respondents feel about the auxiliary programs that are required in addition to the physical network. The FCC and other federal and state agencies funding education-related broadband projects really should pay attention to the fact that their programs are deemed unimportant by 16% of respondents and considered difficult to implement by many.

Figure 19. To leverage broadband to improve education, how important

are the following?

	Not important	Important, but hard to implement	Very important
The FCC's eRate, other grant programs.	16%	45%	40%
Increase teachers' Internet skills.	3%	25%	72%
Improve libraries' tech resources.	6%	18%	76%
Inexpensive tech hardware, software.	8%	25%	66%
Teach parents how to use Internet, computers.	9%	38%	53%

Healthcare delivery – the sleeping economic development giant

On the national stage, there is much discussion about the potential for broadband to impact telemedicine, emergency medial treatment, home healthcare services and moving massive amounts of huge data files between doctors, medical facilities and patients. However, it seems there is not as much discussion about how these important developments can impact local economies.

In **Figure 20**, only 43% of respondents see broadband-driven healthcare and medical services delivery as important to economic development. The responses from rural IEDC

members are only a percentage point or two different from the total responses, which is itself interesting. Rural communities are seen as the ones most in need of these types of medical services, yet an equal percentage of members across the spectrum of rural, urban and suburban see the services as important for their economies.

Two-thirds of respondents' current broadband conditions are not great for producing healthcare-related outcomes that can help communities attract and retain both individuals and businesses (Figure 21). Furthermore, there are higher percentages of respondents who say broadband is insufficient for producing these outcomes than for business or education outcomes.



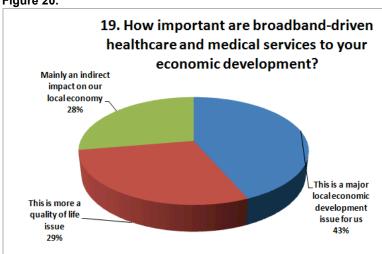


Figure 21. Are the Net speeds and service quality that constituents ACTUALLY receive sufficient to effect these healthcare outcomes?

	Yes	Depends on area of town	No	Yes, but could be better
Attract new doctors, medical professionals.	32%	27%	13%	28%
Monitor seniors' medical condition, treatment at home.	23%	37%	16%	24%
Medical facilities exchange video files with other cities.	34%	23%	12%	31%
Attract medical research grants.	30%	16%	28%	26%
Enable doctor/patient video conferences.	27%	32%	15%	26%

On the upside, the 43% percent of those who believe broadband-driven healthcare delivery is important for economic development appear to feel strongly enough to have members of their local medical community involved with broadband planning (Figure 22). On the other hand, the fact 28% are not including these representatives in planning might speak to a need to educate economic developers more extensively in this topic.

Figure 22. Are members of the local medical community actively involved with your broadband planning? 27.5 % I'm not sure Yes, they are participating in planning 1.0 %

27.5 %

17.6 %

26.4 %

Danville, VA and Loma Linda, CA are two communities in particular that economic developers should study to understand how broadband-driven healthcare and medical services can impact local economies. Each city used broadband to link their hospitals, clinics, physicians (including those with private practices) and other medical professionals such as radiologists together on a portion of the network, which in turn links to medical facilities elsewhere in the U.S. By uniting all of these resources on a single network, each city created a "super" medical care delivery system that their economic developers use as a major lure for new companies.

They are leading the broadband effort

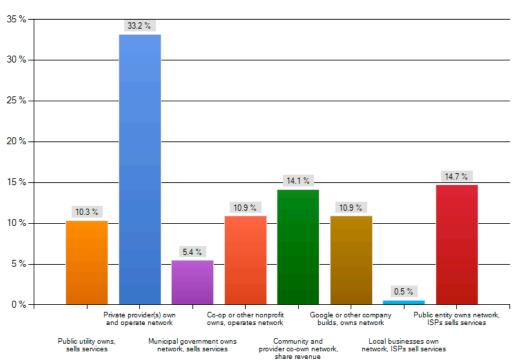
They will participate forward with planning

V. Affording to Deploy Faster, Better Broadband

In trying to move broadband projects forward that achieve the types of economic and related outcomes presented in this report, the big question communities face is how do they afford to get the type of network they need. These can easily cost several million dollars to build and operate.

Figure 23.

Which business ownership model might BEST enable your area to get broadband that produces economic development outcomes?



The responses to the question in **Figure 23** represent two long-standing realities of the issue of who should own the broadband network. One-third of respondents believe their community's interests would be served best if private service providers owned the network. In virtually every case of a community that wants better broadband, including the more than 300 communities that own their own networks, they begin by going to the current private providers. And most of these providers reject those requests. Even when pursuing various ownership options, some communities still wish private providers would step up.

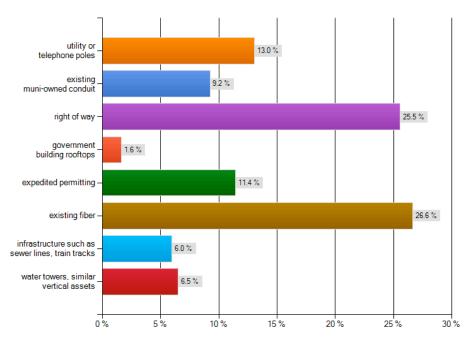
The second reality is that, when providers cannot or will not step up to provide better broadband, many communities look to some form of local ownership of the network infrastructure, either alone or in partnership with a provider. 55% of survey respondents

selected some form or community ownership as their preferred model. Only 11% indicate an interest in having Google or some other private company that's not a traditional provider build and own the network.

It is interesting to note that the 55% who prefer community ownership are close to evenly distributed among five variations of this model, including 11% who prefer a local co-op or other nonprofit own the network. However, among rural respondents alone, 25% believe the co-op ownership option is best. This is likely due to the long history of electric co-ops and later telephone co-ops being the primary entities that made these respective services possible in rural communities.

Besides choosing an ownership model that makes a network more affordable, another way to control costs is for a community to leverage its assets to attract a partner to share costs and/or lower the costs of building a network. Of the assets listed in **Figure 24**, existing fiber and right of way are considered the two most valuable. Utility poles, while considered most valuable by only 13% of total respondents, are tied with right of way for second place at 18% each among rural respondents. Existing fiber is considered most valuable by 23% of rural respondents. Even if a community ends up building its own network, these assess reduce buildout costs.





One option to raise money for broadband infrastructure that many may not be considering, as indicated by 57% of respondents in **Figure 25**, is to determine specific applications of the network that can qualify the network for government, university,

foundation or other grants. During the needs assessment is the primary time to explore this particular type of funding.

It is encouraging that 24% of respondents have tried this approach even though a fair number of then were not successful. This is an approach that communities can continue to pursue even after the network is built as a way to offset operating costs. 19% of total respondents are on board with this strategy (23% of rural respondents), and publicity created by communities' successes in this tactic will both educate and encourage others.

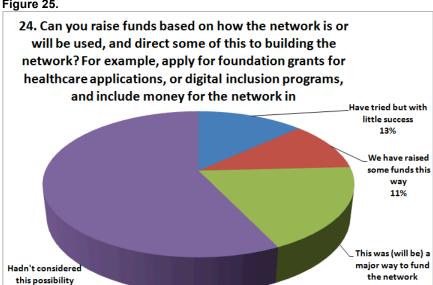


Figure 25.

Push the envelope

57%

Exploring network funding from yet another angle, economic developers should research what traditional and untraditional methods other communities have found to be effective. Some of these may not appear practical at first glance, but meetings with communities that successfully executed the tactics presented in Figure 26 and extensive needs assessment could reveal ways in which these tactics make sense.

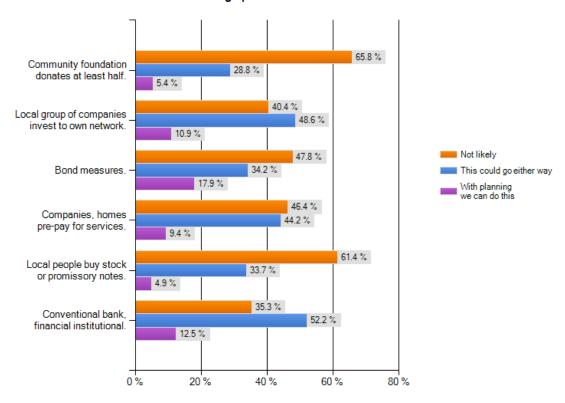
19%

It is interesting to note that the traditional methods of financing, bond measures and conventional financial institutions enjoy a decent amount of support and respondents' belief that there is a 50-50 chance of success. Conventional wisdom presented in media articles is that neither have much chance of success in the current economic climate. Getting a group of local business owners to invest in the network garnered almost as much support as financial institutions, which is odd considering that less than 1% or respondents selected this option when asked which ownership model they preferred.

Of course, most respondents would need to know more about their communities' needs and the successes other communities had with these tactics. The key is getting economic developers and community stakeholders to think outside the box.

Figure 26.

There are several options for financing community-owned and managed broadband networks. How likely is your community to succeed with each of the following options?



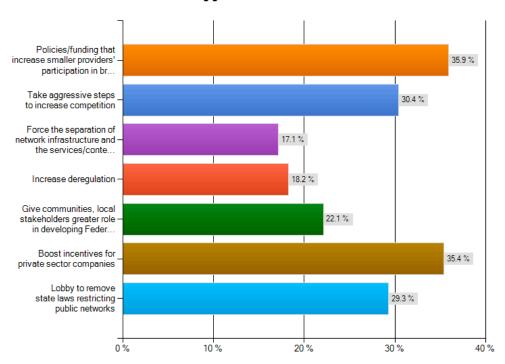
VI. Policies That Impact Broadband

It is good to pose several questions about federal or state policies that can impact local broadband efforts. The question posed in **Figure 27** presented respondents with a range of potential policy initiatives they might want to see pursued at the federal level.

Most of the previous survey questions produced fairly small variances in results between all respondents combined and the rural respondents alone, with the greatest gap being six to eight percentage points. However, the percentage of support for these policy options varied dramatically between total respondents and rural IEDC members. The results from the latter group are in **Figure 28**.

Figure 27.

Which TWO (2) of the following possible Federal actions or policy changes MOST likely would increase gigabit cities in each state?

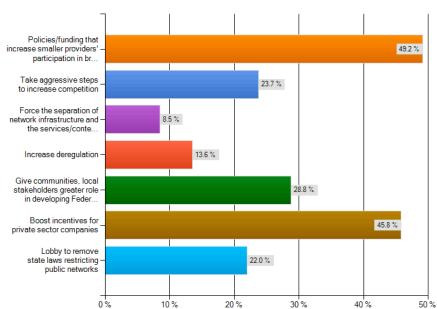


^{*} Percentages total more than 100% because respondents could select several answers.

Almost 50% of rural respondents support increasing smaller service providers while only 36% of total respondents support this. However, only 24% of rural respondents support federal policies that increase the number of competitors compared to 30% of all respondents. It is just a subtle difference between increasing small providers and increasing competitors of any size. Could it be that political philosophy sees Federal involvement in creating competition as intrusion versus a policy to create small ISPs?

Rural respondents who favor separating network infrastructure from services are half the percentage of total respondents favoring this. And clearly rural support (57%) for boosting incentives for private sector companies is greater than total respondents. The gap between rural and total respondents is closer (seven percentage points) when it comes to removing state restrictions on public networks. Most respondents support net neutrality (Figure 29), though only 45% of rural respondents do.

Figure 28. Which TWO (2) of the following possible Federal actions or policy changes MOST likely would increase gigabit cities in each state?





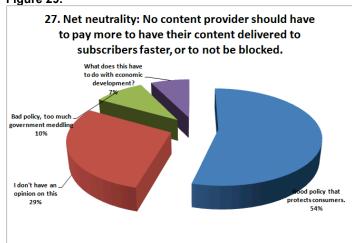
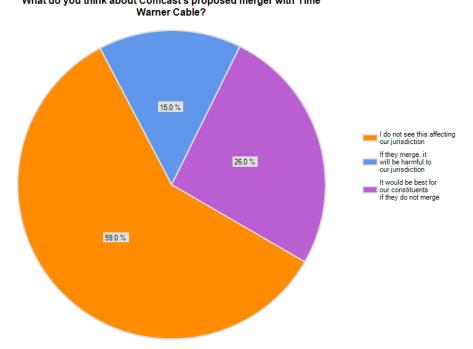


Figure 30.

What do you think about Comcast's proposed merger with Time



The majority sentiment regarding the potential Comcast-Time Warner merger (**Figure 30**) is that it will not affect their jurisdictions. For many people the jury may well be out for a while on this since it likely will be months before the case gets close to resolution.

I asked about various government grant programs that support broadband projects to see if I could get a bead on how these programs are performing. By and large, most of the respondents' communities did not receive any of these grants. Of those that did, the numbers are low and it is difficult to draw a lot of conclusions from them.

Figure 31. Did your jurisdiction receive money from any of these programs, and has the resulting broadband impacted the local economy?

	No	Yes, but it's too early to tell	Yes, seeing a direct impact	yes, but the impact seems mostly indirect
NTIA (Dept of Commerce)	78%	9%	7%	5%
Rural Utilities Service	81%	6%	8%	5%
FCC eRate program.	75%	7%	10%	9%
Broadband-related RUS	87%	4%	4%	5%
FCC Universal Service	85%	4%	7%	4%
Other Federal grant(s).	77%	10%	10%	4%
State broadband grant(s).	69%	14%	12%	5%

Advice from survey respondents

I close every survey with an open-ended question for respondents who are happy to add some additional thoughts to the discussion of broadband and economic development. This year's question was: What are two things economic development professionals such as yourself need to do to help the network impact specific outcomes?

There are quite a few great answers, insights and advice from respondents. You can read their unedited answers in full at (you may have to copy and paste in your browser): http://cjspeaks.com/wp/wp-content/uploads/2014/04/Comments.pdf

Additional statistics

The report is a synopsis of all the data collected. Economic developers can engage us to provide additional data from the survey, cross-tabulate data and provide additional analysis services. E-mail craig@cjspeaks.com for more details.

VII. In the final analysis

These are summaries of my assessment of the survey results. Contact me about further, more in-depth analysis.

- 1. When you get past the hype of the giant incumbents, the speed and quality of existing Internet access is not up to par when many communities consider what they want to accomplish with broadband as an economic development tool. Fiber is currently the broadband technology of choice, especially when the goal is bringing a gigabit to a community. However, wireless still has a valuable role to play. Ultimately, many subscribers do not care if they get their data wirelessly or by wire as long as it is fast enough, affordable and guaranteed secure.
- 2. Due to costs and time required to build a network, community stakeholders need to consider the option of building limited-reach networks. The leader of the broadband project in Emporia, KS and other project leaders I've spoken with recommend raising the funds to build 25% 35% of a full city- or countywide network. Then use the success of that buildout to leverage funds for the remainder of the network. If Google Fiber has proven anything, a community can draw a lot of new businesses and startups with a good-faith partial buildout as long as it is fairly certain the rest of the network will be built in a reasonable time.
- 3. When calculating the potential economic impact of broadband, keep in mind that in order for broadband to produce or influence economic outcomes, whoever is operating the network must have paid subscribers. You have to make the network affordable while at the same time ensuring the financial sustainability of the network. Survey respondents indicate that they are unhappy with the value offered by many current providers. Without instigating a price war, you have to be sure to deliver value for the money charged.
- 4. Currently rural communities are leading the pack in terms of having an economic development plan that incorporates broadband tactics. Larger cities need to get on the case, Grace. Another aspect the data on this topic makes clear a lot of work needs to be done to educate economic developers and their constituents about broadband's economic benefits. We are still in the infancy of broadband's role as an economic engine, so there is not the volume of quantitative proof of value we would like to see. Much of the case for broadband for your community must be built on anecdotal evidence and sound, competent needs assessments.
- 5. When making the case and developing strategy for using broadband as an economic driver, look at the many community networks achieving this goal so you understand what constitutes success. When you combine needs assessment

with research on the proven ways broadband in other communities impacts business development, education and healthcare delivery, you can develop a plan best suited for your specific community.

- 6. Much work must still be done to educate economic developers about the ways broadband-driven education and healthcare delivery influence the economy. The survey shows that economic developers understand how the technology influences the various outcomes listed. But do community stakeholders understand that to achieve broadband's full potential impact in education, healthcare delivery and startup generation, homes need access to highspeed broadband? When economic development is the primary stated goal for the network, community leaders usually feel their primary goal is to wire businesses. They may not want to bother with bringing broadband to homes.
- 7. Economic developers and other community stakeholders must be prepared for the fact that a range of support programs, many not involving technology, are needed in order for broadband to reach its full potential as an economic development engine. To ignore this fact courts failure at various levels.
- 8. There are at least 10 different ways to operate a broadband business in a way that the community retains some meaningful level of control over this asset WITHOUT putting taxpayer dollars at risk. There are five or six ways communities have successfully financed broadband buildouts. Despite how often others and I educate communities about these options, quite a few stakeholders seem constricted by conventional thinking. Some new, creative minds are needed in the planning stage to push everyone beyond their comfort zones.
- 9. I am not sure how to interpret the differences in policies that rural respondents support compared to everyone else. Additional research is needed to understand motivations for their stances. This could be another case where those of us in the industry and policymakers have made errant assumptions about what policies are in rural communities' best interests. As a representative of Three Lakes, WI told me several years ago, "people from big cities come out here to our small towns with their big-city take on things, and they miss what our real needs are."

Conclusion

This report is a snapshot of what is happening as economic developers accelerate the drive to derive significant economic value from broadband technology. The concept of broadband as an asset and economic engine is catching fire as more communities with their own networks or through partnerships take the reins to their broadband futures, many with the goal of boosting their local economies.

Consider these national surveys with IEDC as one pass at getting valuable data so broadband project teams and local stakeholders can make informed decisions. Much additional work has to be done locally to test the assumptions of the media, elected officials, policymakers, and community stakeholders, and then hone in on what local broadband strategies and tactics should be implemented.

Survey author

Communities call Craig Settles when they want to understand how to use broadband to cut costs, transform education and healthcare services delivery, improve businesses and increase local government efficiency. He is a <u>prominent thought leader</u> on effective broadband strategies. He currently hosts <u>Gigabit Nation</u>, a weekly Internet radio talk show, and is <u>Co-Director of Communities United for Broadband</u>. Follow him on Twitter.

Craig Settles has provided consulting services and workshops for communities in California and throughout the U.S., helping them leverage broadband as an asset and economic driver. On-site workshops educate community stakeholders. Mr. Settles doesn't have all the answers, he gets communities to ask the right questions so they find the best answers for their specific needs. Other services assist communities with marketing, building partnerships and creating broadband ecosystems within their communities. E-mail today for more information.

Survey partner

The International Economic Development Council (IEDC) is a non-profit professional membership association dedicated to helping economic developers do their job more effectively and raising the profile of the profession. When IEDC succeeds, their members create more high-quality jobs, develop more vibrant communities, and generally improve the quality of life in their regions.

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