

---

*Are there Investment and M&A Opportunities  
in the Wake of the Recovery Act Broadband  
Infrastructure Stimulus Program?*

---

## ***Are there Investment and M&A Opportunities in the Wake of the Recovery Act Broadband Infrastructure Stimulus Program?***

Steve Mooney, Managing Director, *The McLean Group, LLC.*  
*November, 2010.*

Much has been written about the impact of the \$7 billion American Recovery Act of 2009 (ARRA) Broadband Initiative investment program. Administered by the Commerce Department's National Telecommunications and Information Administration (NTIA) and the Agriculture Department's Rural Utilities Service (RUS), these grant and loan programs are poised to launch the largest investment in infrastructure since the competitive telecommunications and commercialization of the Internet millennial boom. As of the end of fiscal year 2010 this past September 30, much of the grant and loan funds already have been committed.

The scope and scale of the programs truly is staggering:

- The NTIA claims 233 Broadband Technology Opportunities Program (BTOP) projects funding 120,000 miles of networks, connecting 24,000 anchor institutions (3,000 hospitals/clinics, 5,000 public safety entities, 7,600 K-12 and community colleges, and 8,400 government buildings and universities).
- The RUS Broadband Initiative Program (BIP) has made 296 combined grant/loan awards for construction and deployment of broadband infrastructure primarily devoted to last mile<sup>i</sup> projects in 45<sup>ii</sup> states. The BIP awardees plan to deploy a wide variety of technologies including unlicensed wireless spectrum, DSL<sup>iii</sup> and fiber-to-the-premises technology. Also, 19 awardees were funded to assist with economic development planning and training in highly impoverished areas.

Since most of the investments will be directed toward the country's rural and impoverished areas, the mainstream telecommunications and technology investor community generally has dismissed many of these projects as wasteful "networks to nowhere." Many believe that the underlying business cases are too dependent on government subsidy and that there is no demand in the private sector for bandwidth along these networks. Most telecommunications players and investors are focusing on the 4G mobile broadband play in the metropolitan and international markets where strong demand already is established.

There are sustainable (and superior) return on investment opportunities for the private sector to support deployment of these networks and, once completed, to leverage broadband applications from these platforms. (e.g. telemedicine, virtual classroom and virtual call centers).

Below is a brief overview of the grant and loan awardees' profiles:

**Incumbent Carriers:** These large, established firms, include: TDS (NYSE: TDS \$97 million in awards), Windstream (NYSE: WIN; \$67 million in awards) and such rural co-ops as the Mid-Atlantic Broadband Cooperative. Many of these carriers were long-time borrowers from the RUS prior to the BIP program. They use these grants and loans to upgrade their existing wireline and DSL networks to maintain and grow market share.

**CLECs:** Among the largest and most prominent of this diverse, nationwide group of competitive carriers and cable companies are General Communications (NASDAQ: GNCMA) in Alaska, Atlantic Telenetworks (NASDAQ: ATNI) in Upstate New York and Vermont and RCN (acquired by ABRY) through its Open Cape project in Massachusetts, Allegiance Communications in Kansas, Oklahoma and Arkansas and DeltaCom in Tennessee. These large projects (ranging from \$30 million to \$180 million) extend the CLEC and cable footprints with a combination digital microwave and fiber optic cable to contiguous rural areas in their service territories. Through LEC subsidiaries, CLECs most often are long-time RUS borrowers having significant experience with government sponsored programs.

**Wireless Broadband:** Several companies will be deploying low cost wireless broadband using the emerging WiMax 4G protocol. Among these are Digital Bridge Communications (DBC), Keystone Wireless (PA), KeyOn (NV) and Utopian Wireless. DBC has a widely-publicized strategic partnership with the National Rural Communications Cooperative (NRTC) and several private equity firms. While these players received some grant monies, it was clear that the RUS and NTIA favored middle-mile fiber projects over WiMax-based networks most likely because of technical considerations and uncertainty regarding which 4G wireless standard (WiMax vs. LTE) ultimately will dominate the marketplace. Some grants also were made to such satellite players as Hughes Networks and Wildblue Networks. These projects are relatively small and confined to very isolated areas of the country.

**Broadband Pure Plays:** A number of well-funded emerging players specializing in long haul and middle-mile broadband fiber and microwave construction have either won stimulus grants or are partnering with awardees to construct new networks. Examples include Zayo Bandwidth and Conterra Broadband. Their business plans are supplemented by wholesale services to large wireless carriers (AT&T, VZ Wireless, T-Mobile, and Sprint) that need tower backhaul for their out-of-region networks.

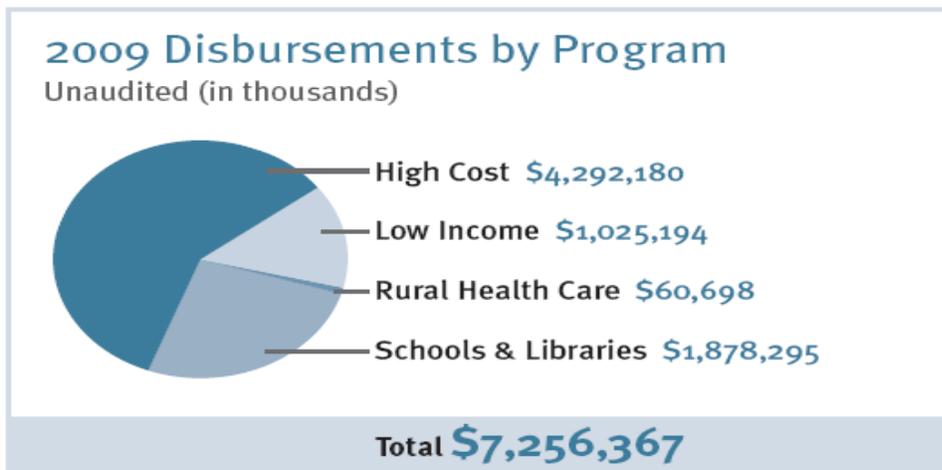
**Quasi Public/Private Consortia:** Most challenging from an investment and management perspective are the number of “Community Infrastructure” grants awarded to public/private partnerships that comprise a large portion of the broadband grants. These partnerships are often not-for-profit university systems, state agencies, tribal entities and public utility districts. Examples include the Merit Network across Michigan, University of Illinois Urbana-Champaign Broadband, NoaNet in Washington State, and a host of other community development, healthcare and education systems. Significant and long-term investment and contracting opportunities may be available in this arena for systems integrators and government contractors.

**Sustainability Programs:** The NTIA awarded approximately \$110 million in grants to “sustainability” programs including adoption, training and education programs. These grants went largely to such non-profits as One Economy that provides technology to low-income people primarily through government contracts. As with the public/private consortia, over time, many of these programs will likely be outsourced to the private sector.

**The National Broadband Plan and USF Reform:** Based on a sample of reviewed business cases and assumptions driven by typical metrics (e.g. number of anchor tenants, small business and households passed, etc.), the grant funded investments are demonstrated to provide sufficient revenue necessary to sustain network investments’ operating expenses.

Participants in the programs expect higher penetration rates because many beneficiaries likely will be gaining access to broadband services for the first time. The assumed penetration rates and bandwidth expenditures are somewhat aggressive based on historic rates for similar competitive telecommunications projects. These rates are unlikely to pass muster from a private investment perspective.

However, these business cases do not appear to take into full account rural America’s true driver of successful operations—the Universal Service Fund. The \$7.3 billion annual fund is a self-sustaining tax on existing telecommunication services that subsidize high cost services in low income areas as well as rural healthcare, schools and libraries. (See chart below). Historically, the fund has paid for wired and cellular phone services and such high speed data services as telehealth. Although controversial, the National Broadband Plan issued by the FCC in early 2010 demonstrates that the Obama Administration recognizes the USF modification needs to re-direct the \$4.3 billion high cost services in the low income areas subsidies portion of the USF to the newly created Connect America Fund to pay for data, video and voice services over the newly constructed broadband infrastructure.



Source: USAC 2009 Financial Reports

This proposed policy shift is made clear in the government’s objectives. The government can influence the broadband ecosystem in four ways:

1. Establish policies to ensure robust competition that maximizes consumer welfare, innovation and investment.
2. Ensure efficient allocation and management of assets that the government controls or influences (including spectrum, poles and rights-of-way) to encourage network upgrades and competitive entry.
3. Reform current universal service mechanisms to support deployment of broadband and voice services in high-cost areas; ensure that low-income Americans can afford broadband, and support efforts to boost adoption and utilization.
4. Reform laws, policies, standards and incentives to maximize broadband benefits in such influential government sectors as public education, healthcare and government operations.

(Source: **National Broadband Plan, February 2010**).

An experienced managed broadband provider believes the typical telehealth program is highly successful, generating 40%+ EBITDA margins. On a macro level, assuming that 20% of the USF subsidy migrates to support broadband services, it is estimated that approximately \$1.5 billion of new revenue will be generated to bolster broadband grant awardees’ business cases. We estimate a simple industry-wide ROE model as follows<sup>iv</sup>:

Overall BTOP/BIP Investments	\$ 7.0 billion
Funded by Grants (~ 75%)	-\$5.2 billion
Net Equity and Loan Investments	\$1.8 billion
Incremental Annual Revenue from USF for Broadband	\$1.5 billion
30% EBITDA margin on Managed Broadband	\$435 million
Debt Service on RUS Loans 3.3% interest rate, net of tax	-\$30 million
After tax Return on Equity (assuming a 30% tax rate)	\$284 million
<b>After-Tax Return on Equity</b> (\$900 million invested; 30% tax rate)	<b>32%</b>

Program	Service Providers
High Cost	1,865 eligible telecommunications carriers
Low Income	1,901 eligible telecommunications carriers
Rural Health Care	544 service providers* (telecom and Internet access)
Schools and Libraries	3,878 service and equipment providers*

**The 10-Year Clause.** One highly publicized objection to the program was a clause preventing speculators from taking advantage of government financed projects by requiring recipients to hold their investments 10 years. Any change of control of grant awardees would require government approval for grant funding to continue. This was included in the grant contracts in the aftermath of the late 1990s' wireless spectrum auctions that allegedly unjustly enriched a number of speculative investors who subsequently sold their spectrum licenses to operating carriers. Both XO Communications and Qwest made public protests to the FCC and Congress to modify this requirement in the BTOP/BIP programs asserting that the 10 year holding period would impede investments. XO Communications' and Qwest's protests appear to be a bit of a red-herring as the RUS has never denied a change of control approval request for a merger or acquisition from its grant and loan recipients and indicate they will continue to do so as long as the transaction is in the "public's best interest."

**Investment Thesis:** There still appears to be enormous follow-on investment and M&A opportunities for private sector investors and strategic players who did not directly participate in the grant application and award process. Here are some options:

- **Private Equity.** The preponderance of thinly-capitalized, small private sector award winners requires professional investors and operating managers. Their project applications typically are based on 75% grant and 25% equity provided by the applicant. These grant recipients likely have largely underestimated their projects' working capital requirements. Based on current grant recipients' experiences, working capital requirements could exceed six months to a year between actual expenditure and reimbursement from the RUS and NTIA. As a rule of thumb, the awardees should have 25 to 50 cents of working capital in reserve for each dollar of grant and loan funds. The McLean Group is advising several clients in the southeast who received NTIA grants and are seeking strategic or private equity funding in advance of starting the project. There likely are about 10 to 20 other grant awardees that fit this profile.

- **Integrators and Business Process Outsourcers (BPO).** As noted earlier, a large segment of the grant programs were awarded to quasi private/public consortia. While it appears unlikely that there are private sector investment or M&A opportunities directly in these partnerships, a significant number of private companies managing these projects will require significant working capital to mobilize. In the long-term, it is likely the government BPO and contracting companies will be interested in this segment to gain access to future potential broadband outsourcing contract or privatization opportunities. Systems integrators likely will want to build managed broadband practices in cloud computing, scientific collaboration, telehealth, public safety, K-12 and higher education among other emerging broadband applications.
- **Deployment Providers.** As construction expenditures ramp up, it is anticipated that a number of independent engineering and construction service providers will require investment or seek consolidation. As much as 20% (\$1.4 billion) will be spent on engineering and construction of fiber cables, inside and outside plant, microwave tower and radio installation and maintenance. While such large construction firms as Siemens, Black & Veatch, Bechtel and others dominate this market, there are a number of specialty and niche players that will see dramatic increases in backlog and revenue and make excellent investment opportunities.

### Summary

The \$7 billion ARRA Broadband Stimulus program has been controversial from its outset. Many industry experts and public policy pundits have deemed it a colossal boondoggle because of its federal government sponsorship and focus on thinly populated and often poor communities. For these same reasons, many traditional investors and strategic players have shunned the programs particularly in light of alternative investment opportunities such as 4G mobile broadband in US metropolitan areas and other international telecommunications venues. However, it appears that a number of managed broadband providers and systems integrators will prosper in this environment. Those who successfully navigate the FCC, NTIA, RUS and emerging USF Connect America Fund programs will make excellent investment and M&A targets for private equity investors, traditional telecommunications firms, government contractors and systems integrators interested in participating in the coming cloud computing and managed broadband boom.

*About the Author.* Steve Mooney is a Managing Director at The McLean Group, LLC, a national middle market investment bank headquartered in McLean, Virginia. Steve has held various executive corporate development and venture investment roles with Verizon, WorldCom and MCI

Contact info: [smooney@mcleanllc.com](mailto:smooney@mcleanllc.com) (703) 827-0200 x140

Sources: Broadband Initiatives Program (BIP) <http://www.broadbandusa.gov/BIPportal/>  
**Broadband Technology Opportunities Program** <http://www.btop@ntia.doc.gov>

---

<sup>i</sup> Last mile is generally defined as the fiber optic or wireless connections between the end-user and the middle-mile network. The middle-mile network are the fiber cables or microwave links that connect the last mile to the carrier's core or backbone network

<sup>ii</sup> 45 states and American Samoa

<sup>iii</sup> Digital Subscriber Line (DSL) is a copper-based broadband connection technology

<sup>iv</sup> Given the uncertainty surrounding the USF subsidy reallocation including the political and legislative processes, investors should understand that there likely will be a materially uneven distribution to the eligible recipients and service providers.