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GLOBAL INNOVATION + TECHNOLOGY RESEARCH

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Net Stimulus: Building Broadband Bridges . . . But To Where?

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The new "American Recovery and Reinvestment Act" provides $7.2 billion in broadband loans and grants. Of this sum, $2.5 billion goes to the Rural Utility Service of the Agriculture Department, which has administered previous broadband funds over the past decade. The Commerce Department's National Telecommunications and Information Administration will now distribute an additional $4.7 billion to help "unserved" and "underserved" geographies.

Some question whether these grants, loans, and loan guarantees are the most effective way to boost broadband investment. The somewhat slothful and inefficient history of the RUS broadband program is not encouraging. American communications companies already invest more than $60 billion per year in the U.S. The $7.2 billion is thus a drop in the bucket.

Nevertheless, if the money is going to be spent, it makes sense to spend it in those places where private capital truly has the toughest time economically justifying the investment. Furthermore, what would be the logic of building duplicate or triplicate networks when some areas go without broadband entirely? The analogy is clear. If the government is going to spend money on new roads or bridges, should it build a third bridge immediately next to two existing bridges that already well serve the geography? Or should it build in a place desperately in need of its first bridge?

Total U.S. Broadband Lines
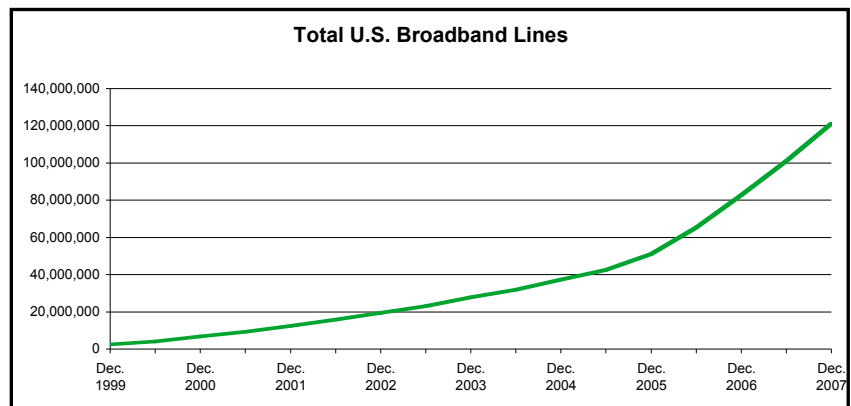
In 2004, I prepared an internal critique of the existing RUS Broadband Program. It was clear the RUS did not have the manpower to evaluate the hundreds of applications then arriving in its offices. There was extreme variability in the applicants' business plans, technology choices, managements, geographies, and financial structures. RUS found evaluating even one application difficult, let alone wading through hundreds, and comparing and contrasting competing claims. Moreover, RUS, which had never lost a penny in its longstanding rural telecom program, worried that in the newer, riskier, more competitive world of broadband, its perfect record could be compromised. (One of its earliest awardees went bust because its business plan depended on the then-extant federal line-sharing regulations designed to help CLECs.)

RUS found itself confronted with a number of dilemmas. Should it make loans and grants to the most rural of areas – the "unserved" – but with questionable investment prospects? Or should it reward an applicant targeting a more densely populated area, already served by at least one broadband competitor, yet still offering possibly better investment returns? Should it support a large number of inexpensive wireless projects that could reach more consumers but with slower data speeds? Or should it fund just a few expensive fiber-optic projects that could reach a smaller number of consumers with very high speeds?

Another historical analogy may be useful: In the late-1990s and early 2000s, the U.S. mandated six mobile phone carriers in each market. The idea was that more service providers is always better. "Competition" keeps prices low and encourages good customer service. But in the name of "competition," we diluted capital spending. Six or more wireless carriers spent tens of billions of dollars building duplicative networks in the same high-value geographies. This slowed the roll-out of faster 3G networks and shrunk the total geographic area covered by wireless service. The U.S. fell behind Europe and Asia in mobile coverage and speeds. As wireless carriers consolidated after the telecom
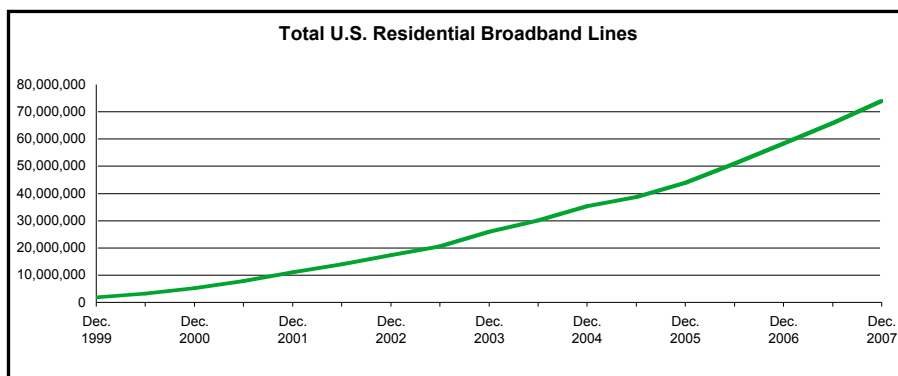
crash, the smaller number of wireless service providers made huge strides in 3G mobile broadband speeds and coverage areas.

So the questions for today's RUS and NTIA: Where are America's broadband holes? Which ones should we fill? With what technologies? At what speed? At what cost? With which business plans? Which entrepreneurial teams? Or which established companies prepared to execute immediately and efficiently? Can any of these questions be answered from Washington, especially when this time around experts expect not hundreds but maybe tens of thousands of applications? And when the new stimulus law mandates all these loans and grants be made in just the next year?

Even with long-time FCC Commissioner Jonathan Adelstein moving to head the Rural Utility Service portion of this effort, it is unlikely Washington can effectively and speedily allocate the funds.

Local knowledge, local decisions

There is an obvious solution to this dilemma of an understaffed central authority trying to make thousands of decisions about varied technologies, business plans, and geographies: Go to the source. Many states have already pinpointed the areas most in need of broadband infrastructure. Local companies and entrepreneurs are likely to best know where broadband needs to be deployed – and to aggressively deliver it with the most appropriate, cost-effective technology that meets the needs of the particular market. Using the states as smart conduits is also likely to get the money to network builders more quickly.

Total U.S. Residential Broadband Lines

It is likely that if the decisions are made in Washington, it will be the companies with the best lobbyists or access that get the attention of the decision-makers at RUS and NTIA. Local authorities are of course not immune to such pressure, but the more granular nature of local knowledge is likely to minimize mistakes and large-scale blunders and produce better decisions overall. Local decisions will likely produce better decisions – and faster decisions.

After falling seriously behind foreign nations in broadband and in our favored measure of "bandwidth-per-capita" in the early 2000s, the U.S. got its act together and is now on the right path. In the last decade, total U.S. broadband lines grew from around 5 million to over 120 million, while residential broadband grew from under 5 million to 75 million. By far the most important broadband policy point is not to discourage or distort the annual $60+ billion that private companies already invest.

– Bret Swanson