



## **A strategy for State broadband mapping that serves the Public interest**

By Mitch Shapiro

According to July 7 blog post by Art Brodsky of Public Knowledge, the North Carolina state legislature was in early July on the verge of joining a number of other states that had succumbed to political pressure and expediency in their approach to broadband mapping.

According to Brodsky, the North Carolina legislature was poised to abandon the mapping efforts of e-NC, a pioneering state agency that was being stonewalled by incumbent service providers unwilling to supply it the same data they make available to Connected Nation (CN), their preferred recipient of broadband mapping funds.

This would make North Carolina the latest state in which the economic and political clout of incumbent service providers is being exercised at cross-purposes to the public interest goals of broadband mapping. This is especially troubling today, since very large amounts of public money will soon be spent to generate data, maps and analysis that are supposed to serve the public interest.

The good news is that the mapping NOFA opens the door to a solution that could strike a healthy balance between public and private interests, and between the idealistic goals and often harsh realities of politics and government decision-making.

The big question now is how many states will have the institutional will to walk through that door. To do so, state decision-makers will need to understand and embrace an approach to broadband mapping that shifts the balance toward the public interest, and away from the sway of deep-pocket political pressure and poorly-informed expediency.

If state leaders do respond, the NOFA can trigger a movement among states to cooperate in crafting and adopting solutions that truly do serve the public interest. These would be based on a shared sense of purpose and a common set of data specifications that serve the needs of each state, the NTIA's national broadband map, and the FCC's effort to craft a future-ready national broadband strategy.

As many have noted, carriers' gnashing of teeth around the issue of confidentiality seems largely disingenuous. The reality is that their competitors will and do find ways to know exactly where their networks are, what kind of service they deliver, and at what price. The notion that this information, which they make available on their web sites and through other means, is confidential is truly hard to

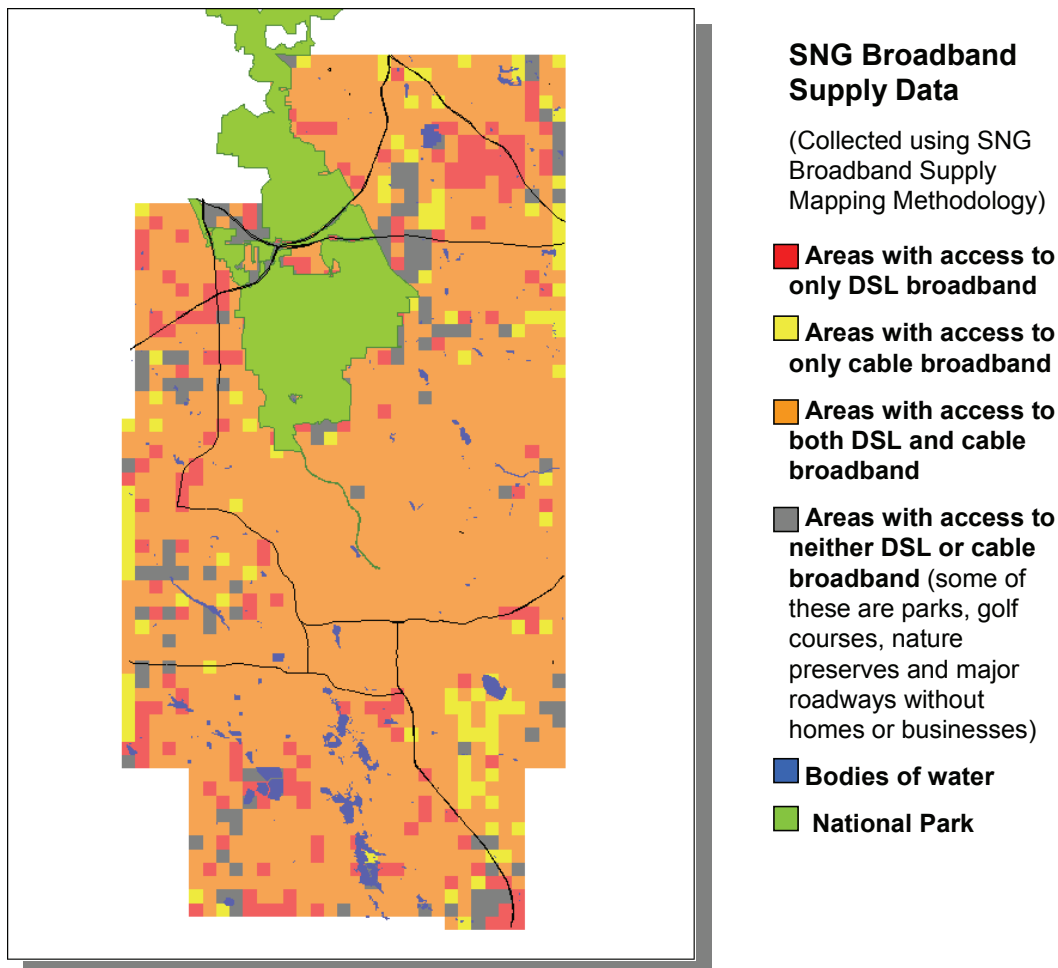
swallow. It is therefore puzzling that so many, including many in government, accept this argument as a compelling one.

## Positive signs

The good news regarding confidentiality and other issues is that the NOFA appears to leave room for truly public-interest-focused approaches to broadband mapping and related planning activities. But to make this happen, state leaders need to step up to the plate with vision and integrity. And those of us who can, need to help them.

The mapping NOFA appears to draw the “confidentiality” line at the point where a particular company is associated with availability, technology, speed and other data provided by ISPs (or the FCC).

The NOFA makes clear that, to be eligible for funding, a mapping project must provide data on “technologies used to provide broadband service.” That’s a step in the right direction. It is also consistent with the approach taken by SNG in a recent project in Summit County, OH. As part of that project, we generated the following map showing areas with access to neither cable nor DSL broadband service, as well as those areas with access to only one or both of the two dominant broadband technologies.



Importantly, the NOFA goes on to say that “[a]s a condition of grant funding under this Program, awardees may not agree to a more restrictive definition of Confidential Information than the definition adopted by this Program.” This appears to mean that, to receive funding, state projects must collect, and make available for mapping, data that distinguishes “availability status” by specific technologies. Projects that simply distinguish between areas with “no broadband” and areas with “some broadband” will presumably not be eligible for NTIA funding.

Another positive step is that NTIA appears to require that the accuracy of data used in maps be verified using multiple methods. As the NOFA explains, projects that “do not provide more than one way to determine the accuracy of availability data at any given location will not receive high scores.”

This provision appears to be an acknowledgement of those who have argued that data received from service providers by CN is not currently verifiable in any meaningful and coordinated way. But it does not answer the question of whether states and the NTIA will take this multi-source verification requirement seriously, or accept a brief and non-prominent online invitation to submit corrections as sufficient to satisfy the NOFA's verification requirement.

## **Public funds should serve the public interest**

Some might view the recent action of the North Carolina legislature as simply a matter of preference, with no impact on the quality, content and value of the data collected or the maps and analysis they enable. But many see it as a fundamental conflict-of-interest problem. According to reporting by Brodsky and others, there’s evidence to support this claim.

It seems logical to assume that CN’s economic interests are closely tied to keeping service providers happy so the organization will continue to enjoy their favor in getting access to data and valuable political support in other states wanting to launch mapping projects.

Evidence and logic also support the notion that there are times when incumbents’ economic interests diverge from the public interest when it comes to making broadband data available to public entities responsible for crafting broadband policy and allocating public funds among competing network investment proposals. As they will generally admit, the primary focus (and legal duty) of ISP management is to serve their shareholders, not the public interest. When it comes to allocating public funds, it’s important that public officials keep this distinction clearly in mind.

This chain of related interests seems likely to result in chronic conflicts between the public interest and the direction and results of the CN approach to broadband mapping.

This point was brought home at the March meeting of Minnesota’s broadband task force (caution: video of meeting is long and audio is very poor). Among other things, the meeting highlighted the importance of states having “hands-on” access to broadband data rather than having to rely on a middleman like CN.

Part of the meeting focused on “map mashups” that attempted to combine some of CN’s broadband availability data with economic data provided by a Minnesota state agency. But the maps and the task force’s discussion of them made it clear that their value was minimal. A key reason for this appeared to be that the state didn’t have access to the underlying data, and had to rely too much on CN, whose staff expressed cooperative words, but appeared unwilling or unable to integrate the data in ways that made it truly useful for policy analysis and planning.

The good news is that some states have made real progress in working out arrangements with carriers for provision of data for maps developed by the states themselves. This gives the state more control over how the data is used and analyzed, including efforts to integrate broadband data with other data available to state planners. As the Minnesota task force meeting made clear, this is important for broadband policymaking and planning, as well as economic development and other types of public planning.

One such state is Virginia, which recently released a statewide broadband map. According to a May 14 press release issued by the Governor’s office: “The map is the product of a collaborative effort between the Center for Innovative Technology (CIT), the Virginia Information Technology Agency (VITA), the Office of Telework Promotion and Broadband Assistance, and the voluntary participation of more than 25 broadband providers throughout the Commonwealth.”

While it represents yet another step in the right direction, the Virginia map (at least the published version) appears to lack the level of “technology” and “speed” granularity mandated by the NTIA. This suggests that the non-disclosure agreements (NDAs) used to create the map are more restrictive than the confidentiality threshold set by NTIA. If that is in fact the case, it means that to win NTIA mapping grants, states will need to employ NDAs that are less restrictive than the one used in Virginia.

## **A public interest strategy for state officials**

In light of the above, we strongly recommend that:

**1. States pool their resources to craft an NDA template that conforms to the confidentiality terms laid out in the mapping NOFA, and allows for collection of the address-level data elements mandated by NTIA. This includes availability, technology, spectrum and speeds.**

Such cooperation among states would ensure broad NOFA-compliance and increase each state’s leverage and efficiency in negotiating and executing data-access agreements with service providers. It would also facilitate a threshold level of data standardization across state mapping projects, which is a key factor in efficiently developing an accurate and valuable national map, as mandated by the ARRA.

**2. States either handle data collection and mapping duties in house, or hire a GIS specialist to handle these tasks, under the state’s direction and in a way that ensures state planners have ready**

**access to the underlying data, as defined by their standardized and NOFA-compliant NDAs. There's no shortage of GIS specialists that can handle the requisite tasks, so the competition for this GIS contracting job should be healthy and lead to high-quality and cost-effective deliverables.**

An important distinction between this approach and the Connected Nation approach is that the GIS specialist would NOT control the data, nor the terms of the NDA. Its job, as a contractor to the state, would be to insure that the data was collected and integrated in ways that complied with the state's NOFA-compliant NDA, and that the maps and underlying data were available to state and other public policymakers and planners in formats that were as easy-to-use and valuable as possible. Achieving the latter goals should be an important criterion for a state's selection of a GIS vendor, especially given the history of frustration with CN's deliverables and its responses to requests for additional data, maps, analysis, verification and transparency.

**3. States should designate a state agency as the "eligible entity" for federal broadband mapping funding. Who better than a state agency is positioned and motivated to direct mapping and planning activities in ways that serve the public interest within that state?**

Taking this approach will free states to hire the most competent and cost-effective GIS firm to handle mapping and related data and analysis tasks. It will also help ensure that state officials have sufficient access to data and control of the process, as contrasted with the experience in Minnesota and other states, where CN controlled the data and access to it in ways that conflicted with the public interest.

If states don't take this approach, they'll be forced to farm out the key role of "eligible entity" to a non-profit entity. Unfortunately, the number of non-profit entities with experience in this area is probably very small and perhaps just one—Connected Nation. If state officials take this route, their message to constituents will in essence be "what's good for Connected Nation and AT&T is good for our state." And they'll be ignoring the fact that there are profit-making companies with more experience and better qualifications than Connected Nation to undertake the necessary mapping and analysis tasks. In short, they'll be shirking their responsibilities to serve the public interest and their constituents.

**4. State proposals should include plans and budgets to support "more than one way to determine the accuracy of availability data," as mandated by NTIA.**

This can and should include end-user surveys and web sites designed to gather relevant data from the public (a.k.a. "crowdsourcing"), as well as accuracy checks based on data available from company and independent web sites, as well as other publicly-available sources. These different methodologies and data sources should be carefully integrated to provide a rigorous multi-source verification process that meets both the letter and spirit of the NOFA's verification requirement.

**5. States to use the additional "non-confidential" data sources not only to verify the accuracy of carrier-provided data, but also to augment it with data not restricted by carrier confidentiality agreements.**

The NOFA indicates that data collected by other means (e.g., via surveys or public-input web sites) would NOT have to be treated as confidential. In Footnote 19, the document says its confidentiality requirement “applies only to information submitted by the FCC or a broadband provider to carry out the provisions of the BDIA and shall not otherwise limit or affect the rules governing public disclosure of information collected by any federal or state entity under any other federal or state law or regulation.”

This might include detailed data on pricing and bundling, the names of ISPs serving particular areas, as well as data rates measured by various types of speed test software and hardware.

**6. The use of end-user surveys to verify and augment carrier-provided availability data also opens up avenues for cost-effective and value-adding integration of demand data (e.g., usage and benefits) with the supply data mandated by NTIA.**

This integration of demand and supply data—in terms of collection, mapping and analysis—has great potential to help states integrate “broadband planning activities” within their mapping projects. And the NOFA seems to encourage this, indicating that NTIA will fund “planning” activities up to \$500,000 per project, but only if these are integrated within a state’s mapping proposal.

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This close integration of supply and demand data is a key feature of the approach taken by SNG, including a recent project on behalf of the Knight Center for Digital Excellence in Summit County, Ohio.

Building on that approach and 14 years experience helping communities and regions maximize the benefits of broadband investments, we are eager to work with partners that have compatible skills and expertise, and share our goal of helping states extract the maximum public interest value from the funding opportunity provided by the stimulus bill.

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