

# Building Community Broadband: Barriers and Opportunities for Community-Based Organizations in the Federal BTOP and BIP Broadband Development Programs

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## ABSTRACT

Despite \$7.2 billion of recent federal investments in broadband infrastructure through the Broadband Technology Opportunities and Broadband Initiatives Programs (BTOP and BIP), questions around the effectiveness of such national-scale initiatives at the local level remain. Drawing on ethnographic interviews, observation, and documentary evidence, this paper charts the experience of twenty-seven grassroots and community-based organizations (CBOs) from around the country that have engaged the BTOP and BIP process. We explore the challenges CBOs have faced in initiating, developing partnerships, and executing BTOP and BIP grant applications. We find that CBOs often struggled to define the effective scope of potential BTOP projects; to align these with traditional organizational goals; to develop effective project partnerships, including with larger and more institutionalized partners; and to meet the formal evaluation, reporting, and management requirements of a large-scale and sensitive federal program. Despite these barriers, several community-based organizations have engaged in successful BTOP and BIP applications, which are now moving into operational stage. This paper documents these experiences, and concludes with recommendations for reform of the BTOP, BIP, or possible successor programs that could improve the inclusion and effectiveness of community-based organizations as agents of broadband development and social change.

## Keywords

Broadband, Community Based Organizations, BTOP, BIP

## INTRODUCTION

In February 2009, U.S. President Barack Obama signed into the law the American Recovery and Reinvestment Act (ARRA). Included in the Act were provisions for \$7.2 billion to be spent to improve performance, access, and social benefit from the nation's broadband infrastructure. On April 13, 2009, the National Telecommunications and Information Administration (NTIA) – along with the US Department of Agriculture's Rural Utility Service (RUS) the federal

point agency for broadband development efforts – issued its request for public comments on how best to distribute the federal broadband monies. On July 1 2009, the NTIA and RUS issued a joint Notice of Funds Availability for the NTIA-administered Broadband Technology Opportunities Program (BTOP) and the RUS-managed Broadband Initiatives Program (BIP). The deadline for first-round proposals came six weeks later, on Aug 14, 2009.

The present paper offers an early assessment of how the BTOP and BIP initiatives engaged (and failed to engage) a key stakeholder in meeting the aims of federal broadband development: namely, community-based organizations with existing roots and networks in the under-served and marginalized communities identified as a key target of federal broadband dollars. These ranged from groups with significant broadband and networking experience (i.e., who had been active in community networking and digital divide activities for years or decades prior to the BTOP and BIP programs) to those relatively new to network development and IT access activities (but with longer roots in fields ranging from economic development to environmental justice to AIDS activism). All had significant and long-standing roots in the types of marginalized communities targeted under the BTOP and BIP initiatives.<sup>1</sup>

In this paper we report findings from documentary evidence, participant observation in a number of local broadband organizing efforts, and semi-structured interviews conducted between June 2010 and March 2011 with twenty-seven community-based organizations from around the country. These fall into three rough categories: those who applied for and received BTOP or BIP funding; those who applied for but were turned down for funding; and those who went partway through the process of preparing an application

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<sup>1</sup> For purposes of our analysis, we have excluded more institutionalized actors like libraries, universities, municipal governments, and large social service agencies (though these come up as key partner organizations, as discussed below).

but abandoned the effort prior to final submission. While interviews were tailored to the circumstances of each group, and followed an open-ended structure oriented to story telling and the self-articulation of individual and group experiences (per precepts of ethnographic and qualitative interviewing (Weiss, 1995)), all included discussion of: groups and individuals' prior histories of grassroots organizing; how groups became involved in BTOP or BIP application activities; the nature of partnerships and coalitions entered into; tensions and challenges in the BTOP organizing process; early experiences in executing successful BTOP or BIP applications (for those receiving funding); and recommendations for improving the design of BTOP, BIP, or possible successor programs to better meet the needs of local community-based organizations. Interviews and fieldnotes were transcribed and coded, per grounded theory principles (Glaser and Strauss, 1967; Charmaz, 2006) through successive rounds of open and structured coding.

## **BACKGROUND**

While the BTOP and BIP programs responded to the extraordinary opportunity posed by the economic crisis and stimulus response, they also drew from other roots. The first of these was the emphasis of the Obama administration on information technology as a key contributor to wider social and economic policy goals. Under Obama's campaign platform, investment in networking and information technology would help drive reform across a wide spectrum of public life, from government and education to health care, employment, and public safety. These visions reached their fullest articulation under the National Broadband Plan issued in March 2010 (but whose drafting proceeded more or less concurrently with the development of the BTOP and BIP programs).

A second factor motivating federal broadband investments was the precipitous decline of U.S. broadband performance over the first decade of the twenty-first century, as viewed in comparative perspective. From a position of early global leadership in each of the key variables that define network performance – upload and download speeds, price, use, accessibility, and quality of service – by 2009 the United States had fallen to a distinctly middle-of-the-pack position, trailing the performance of traditional and even some non-traditional peers by sizeable margins. The public Internet in the home of the Internet revolution had become, by global standards, patchy, expensive, and slow.

Finally, the BTOP and BIP programs build from a considerable, albeit uneven, history of federal, state,

and municipal investments in network development. This point runs somewhat counter to prevailing accounts of U.S. telecoms exceptionalism, which emphasize the market-driven nature of U.S. network development (with allowances made for research investments like those which led to the early ARPANet). Without disputing this general characterization – and it's true that no U.S. programs including BTOP and BIP can match the scale and coordination of public network investments undertaken by Korea, the Netherlands, France, and other OECD competitors – it's important to recognize the history of public investment in this space that does exist. This includes a series of aggressive state-level networking initiatives through the early and middle 2000s; a series of municipal broadband development efforts, of both the wireline and wireless varieties; and a number of precursor programs at the federal level. The most immediate of these, the Clinton-era Technology Opportunities Program, appears to have served as partial inspiration in the shaping and naming of the eventual BTOP initiative.

## **COMMUNITY-BASED ORGANIZATIONS AND THE BTOP PROCESS**

As laid out in the April 2009 program announcement, the Broadband Technology Opportunities Program was divided into three main funding categories: infrastructure (dedicated primarily to backbone and middle-mile network extension); public computing centers (emphasizing broadband access for low-income and marginalized populations through computing centers in schools, libraries, community centers, and other locations); and sustainable broadband adoption (promoting broadband uptake among traditional non-adopters, including through training and awareness initiatives). Most of the community-based groups we spoke with fell under the BTOP umbrella, and had developed projects around the last two project categories. The BIP, more focused on rural infrastructure development, incorporated middle- and last-mile projects in both wireline and wireless infrastructure, and had no separately targeted categories for public computing or sustainable adoption. Per language in the initial program announcement and the National Broadband Plan, both programs focused on scalable, sustainable projects that provided broadband to “unserved” or “underserved” locations (U.S. Dept. of Commerce, 2009).

For the purposes of this research we defined community-based organizations as mostly independent non-profit groups with roots in the local community. While we recognize the integral contribution that schools and libraries make to local communities, we focused this research on groups that are less institutionalized and function on a primarily grassroots

and activist model. Below is a brief summary of a few of the successfully awarded BTOP projects involving community-based organizations.

### **Detroit Digital Justice Coalition**

In partnership with Michigan State University's "Cities of Promise" BTOP Award, the Detroit Digital Justice Coalition (DDJC) received \$2 Million of BTOP money to develop Sustainable Broadband Adoption in Detroit, Highland Park and Hamtramck, Michigan through the Detroit Media Economy Collaborative. The DDJC is comprised of "community organizations, artists, educators, technologists and entrepreneurs in Detroit who believe that communication is a fundamental human right" (Detroit Digital Justice Coalition, 2009)

While these groups had a history of working together, their decision to partner around community broadband development began at a meeting of the Allied Media Conference in Detroit in 2008. Even before the announcement of the BTOP program, the groups that became the DDJC had committed to developing a common set of Digital Justice principles and working together to expand access to communication in the Detroit-area, irrespective of funding. During the NTIA sponsored BTOP Workshop in Dearborn in February of 2010, the DDJC connected with Michigan State University and, with the help of the DC-based New America Foundation's Open Technology Initiative (OTI), developed a BTOP proposal that the NTIA awarded in September of 2010.

### **Philadelphia Digital Justice Coalition**

Philadelphia's successful BTOP proposal, the Freedom Rings Partnership, developed from relationships between Philadelphia-based community organizations and Wireless Philadelphia, a group at one point charged with developing Philadelphia's Earthlink Municipal Wireless Network. Also with support from the OTI and others in the Media and Democracy Coalition, the groups in Philadelphia developed a Sustainable Broadband Adoption and Public Computing Center approach in advance of the first BTOP NOFA.

As in Detroit, the Philadelphia groups grew from a prior history of collaboration, and by 2008 had begun to articulate a broadband development vision for the city oriented to digital justice for underserved urban neighborhoods. As these groups developed their strategy they reached out to the Philadelphia Free Library and the City of Philadelphia's Division of Technology for greater institutional support. This led to a formal BTOP application which in July 2010 was awarded \$6.4 million in funding (Liang, 2010).

### **Mission Economic Development Agency**

The San Francisco-based Mission Economic Development Agency (MEDA) is a community-based non-profit that focuses on asset development for low and moderate income Latino families (<http://medasf.org/english/about/>). While they had no prior history with broadband development, in 2009 they leveraged their experience and networks in Bay-area Latino communities and relationships with organizations in other cities to participate in a multi-site proposal to create 12 new public computing centers and augment 5 others in 13 communities across the country. In 2009, MEDA and its partners were provided \$3.4 million in BTOP funds to provide bilingual technological training to increase access to economic opportunity in low-income Latino communities.

### **Broker Organizations**

In addition to these leading local initiatives, a number of important broker organizations emerged to facilitate BTOP and BIP applications across a number of communities. Zerodivide, a San Francisco-based organization that works to support non-profits and community organizations to bridge the digital-divide in underserved communities, was one group that brought a number of local groups together for a successful BTOP grant (<http://zerodivide.org>). While their work historically focused inside California, in the second round of funding, they partnered with 7 community-based organizations in California, Hawaii, New Mexico, Oregon, Utah, and Washington. This second round application was awarded \$2 million dollars to support youth technology adoption in underserved communities and comprehensive broadband development on Tribal Lands in partnership with the Southern California Tribal Chairmen's Association (SCTCA) ([http://zerodivide.org/zerodivide\\_grantees#bg](http://zerodivide.org/zerodivide_grantees#bg)).

OneCommunity is a Cleveland-based capacity-building organization that facilitates access to technology and tools that support the operations of non-profits and government entities. OneCommunity's Connect Your Community Sustainable Broadband Adoption BTOP proposal received \$18.7 million in the first round to train 33,000 individuals and provide neighbor-to-neighbor broadband awareness and adoption that plans to reach 334,000 low-income individuals in 7 communities throughout 5 states (Ohio, Florida, Michigan, Kentucky and Mississippi) (<http://www.onecommunity.org/about>).

Finally, the New America Foundation's Open Technology Initiative (OTI) has provided CBOs with guidance through the BTOP application, convened discussions where groups could strategize and combine resources, and supported the Detroit, Philadelphia, and other groups through the proposal development and

grant-writing stages. The OTI continues to play an important role in supporting groups as they move into BTOP implementation and in convening wider discussions among community-based organizations around broadband development efforts at the national level.

### **STRAINS, TENSIONS AND CHALLENGES**

If the above examples represent instances of successful BTOP organizing among community-based organizations, these – and less successful efforts – have also faced significant tensions and challenges. These came through clearly in our interviews with community-based organizations of all types, and are documented below.

#### **Challenges at the Individual CBO level**

##### *Compressed timelines*

An important challenge faced by virtually all of our interviewees lay in the remarkably short (45 day) window between the formal BTOP announcement and the deadline for first round applications. Under the best of circumstances, this would be stretch, given the amount of staff time required to compile the extensive information required under BTOP guidelines and execute a competent grant (respondents put this figure in the range of 300-800 staff hours). This window was even more daunting in cases where partnering groups needed time to get to know each other's programs and staff well enough to produce a comprehensive and competitive grant application. As one interviewee stated: "It was a backwards situation where you had your partners identified before you had your project defined, so you had to go through the process of defining a project that was somewhat unified, but was going to be beneficial to the partners that were already identified".

As we will see, the dependence of smaller groups on larger institutional partners made the necessity of short-order partnerships a significant challenge to the application process; as the above quoted interviewee continued: "All the expectations they put on you for partnerships and coming up with larger projects...coinciding with the short turn around" made it very difficult. For several of the groups we spoke with, the need to spend this much additional time above and beyond already stretched daily operations was a barrier that led to early abandonment of potentially promising BTOP application ideas and partnerships.

To further complicate matters, while the first round was a challenging beginning to the BTOP or BIP for community-based organizations, the time between the first and the second round was not long enough for

lessons to be learned and applications to be improved. Multiple interviewees remarked that many of the applications from the first round were still pending decision by the time that the second round of applications were due, leaving many groups without the feedback they could have used to improve their request for funding in the second round.

##### *Bureaucratic and accounting requirements*

Smaller community groups also reported difficulties in accessing and providing the required information the NTIA requested through the application. As one interviewee put it: "It's still such a complicated process and the kind of information that you have to track down is so very individualized that for a lot of smaller organizations, it's just impossible to ferret out all of the information they required for the proposal. A lot of it was very technical as well...a lot of groups got booted out because they could not provide that information". As another respondent told us: "We didn't have the data to prove that our neighborhoods were underserved because that data is private data owned by AT&T... and we didn't have time to [get that data]". These specific requirements came on top of the more generic set of hurdles that accompany all efforts at formal grant writing, especially for groups relatively inexperienced or understaffed in the grant writing area.

Given these timelines and application requirements, successful partnerships developed primarily where resources for or experience in grant writing existed prior to the announcement of the BTOP or BIP. As one (successful) respondent explained, "Because we had so many projects involved...it ended up just being the projects that [were ready to go and] could put staff towards that determined what we were going to do." Based on these constraints, projects that had good ideas but lacked time and resources (including promising projects in New Mexico or Minnesota among our study set) quickly lost traction and fell to the sideline. This represented a loss in the form of potential BTOP projects, but also the local networking and partnership effects that engagement with the BTOP process, successful or otherwise, could be expected to bring.

##### *Scale and mission alignment*

Along with the constraints imposed by lack of time and resources, many groups struggled to bring their distinctive organizational missions (economic development, environmental justice, etc.) into alignment with BTOP goals and priorities. Several groups we spoke to struggled at times to explain how their work with immigrant populations, homeless populations or other social justice issues connected to or benefited from the national broadband agenda. For groups in Southern California and the Bay Area, there

was a question of how, for example, a group that works primarily with job training for low-income immigrant workers might frame their projects more specifically around broadband development without compromising the core mission of their organization. Other groups attempting to build coalitions around broadband deployment found it difficult to convince groups they had worked with in the past that broadband could help them better implement their mission.

In addition, several of the community-based organizations we spoke with noted a serious mismatch in scale between the typical or anticipated size of BTOP grants and the generally smaller budgets of non-profits and community-based organizations; in some cases, projected BTOP grant sizes exceeded groups annual operational budgets by a factor of ten. Under such circumstances, and lacking a clearly-identified small grants category, groups were faced with a choice of asking for amounts that they may have lacked the organizational resources to successfully administer (or would significantly distort organizational structure and priorities to absorb), or asking for more modest but reasonable sums, including those dedicated to the expansion of existing activities, that (they perceived) BTOP reviewers would find insufficient to merit serious attention.

#### *The limits of BIP*

In addition to the limits noted above, primarily rural-based groups exploring funding under BIP faced additional barriers. Many of these stemmed from the fact that BIP, unlike BTOP, had no explicit adoption or training component – the primary point of entry for community-based organizations under the BTOP program – and were much more centered on basic network development. In addition, the BIP awards relied more heavily on loans that would need to be repaid – a point that in itself kept most small, independent non-profits from applying. Several of our interviewees expressed concern that the BIP was geared primarily to the assistance of incumbent service providers, with limited (or at best indirect) ambitions for extending access and adoption among underserved communities. As one interviewee explained: “The RUS is traditionally the phone bank, they’re the place where phone companies go to borrow money, and have been for decades: everything is loan-based...The new kid on the block doesn’t get the grant from them...it’s the people that are established, the people that are already doing stuff and the people already not deploying in [Tribal] communities”.

Another interviewee argued there was little or no focus on what local, community networks could do to support broadband infrastructure development and adoption in

rural areas, favoring instead the larger, absentee incumbents. As he explained, “there was a lot of discussion about the fact that the stimulus would go to...that the community networks would get the first crack at it before the for-profit carriers, and then of course that kind of changed”. The BIP’s focus on hard infrastructure development also tended to increase the requirements for highly specialized technical network expertise – a further barrier to community-based organizations seeking to engage the BIP application process. Although there were cases where groups like Northern California’s Access Humboldt or North Carolina’s Mountain Area Information Network started as Rural Community Media Access groups that turned into bona fide internet access providers, this was an exception and not the rule for groups applying for BIP funding. Even in those cases, such groups found it difficult to compete with incumbent Internet Service providers for BIP grants.

#### **Strategic responses**

In response to these limits and challenges, community-based organizations seeking to engage the BTOP and BIP processes adopted, with mixed success, a number of characteristic strategies.

#### *Working with larger organizations*

The act of partnering with or gaining support from larger institutional players helped smaller community based-organizations navigate the application process. A number of successful CBO interviewees reported that it would not have been possible to navigate the application process and secure BTOP or BIP funding without the support of a larger institution. This was true for a number of reasons. Larger institutions brought more staff resources and grant-writing expertise to the table, skills that local CBOs often lacked. They also brought the capacity to do the evaluation work that small CBOs would have difficulty producing themselves. This ensured satisfactory reporting to the NTIA as well as the creation of statistics that the CBOs could use in future planning efforts and for other grant opportunities. Partnerships with large organizations included small CBOs working with municipalities and city government, CBOs working with foundations like the New America, Blandin, and Knight Foundations, CBO partnerships with universities, and collaborations with larger-scale organizations (Zerodivide, OneEconomy, and OneCommunity) that sought partnerships with CBOs across several different cities and geographic locations.

Some of these partnerships were developed out of histories of working together. Others were established through intermediaries that connected smaller groups with larger institutional players. Still others developed

or were aided by workshops, meetings, and other matching efforts supported by the NTIA. There were also a limited number of instances in which large institutions reached out to local groups despite a lack of history.

#### *Building coalitions*

The building of coalitions between CBOs, with or without larger institutional players, was an important factor in the success of projects like those of the Detroit and Philadelphia groups. Other similar initiatives – for example, digital justice coalitions in Minnesota and New Mexico – did not receive BTOP awards. In all four cases, coalitions developed from existing networks of community groups that had worked together in the past and had developed relationships with each other prior to the announcement of the BTOP and BIP programs.

In the Philadelphia case, relationships between groups like Wireless Philadelphia and the Media Mobilizing Project and other grassroots organizations (e.g. Philadelphia FIGHT!, a local AIDS support network) went back many years, long-predating the BTOP notice of funds availability. The depth and strength of these connections, in conjunction with an effective partnership with the City of Philadelphia, played a vital role in supporting partnerships able to navigate the strains and timelines of the application process. Collaborations in Detroit showed similar depth and history, growing from long-standing relationships among social and environmental justice advocates and more immediately from conversations at the 2008 Allied Media Conference resulting in a set of Digital Justice Principles and commitments to a series of digital inclusion projects in advance and indeed irrespective of any specific funding calls. Conversely, in the Minnesota case, efforts to organize a Digital Justice Coalition did not lead to successful BTOP funding. In New Mexico, BTOP money was projected as a catalyst for wider coalition organizing activities. The failure to secure BTOP funding stalled efforts to organize a local digital justice coalition for more than a year.

#### **Challenges of Grantee Partnerships**

As noted above, partnership and coalition building turned out to be a central strategy for CBOs seeking federal broadband dollars. This move was actively encouraged by the NTIA, which encouraged groups in meetings, communications, and through its own web portal to partner with others in the process of seeking BTOP funding (<http://match.broadbandusa.gov/>). Because small community-based organizations needed larger institutions to help them take on the process of engaging a multi-million dollar federal grant, building and maintaining effective partnerships was an

inevitable task facing many of the groups we spoke with. These posed challenges in their own right.

#### *Histories of trust*

One of the components that made for successful applications involving community-based organizations was the presence of partnerships based on established histories of trust built through relationships and collaborations long pre-dating BTOP or BIP, and often developed through interactions well outside of the broadband space – for example, environmental justice, anti-poverty, and AIDS activism. Such histories played a number of important roles. Where familiarities already existed, groups did not have to spend time learning each other's skills and capacities, and there was already a basis for knowing who could do what in the partnership. Established histories of trust also meant that the immediate funding relationship was less likely to be the center of gravity for the partnership, creating spaces for compromise and the articulation of mutual benefit and public good above and beyond immediate project goals. As one of our interviewees stated: “Histories of trust bridge differences between vision and goals” creating cohesion between groups that might have significantly different approaches and organizational structures but share overarching missions, constituencies, and ethical or political commitments.

At the same time, histories of working together (often under resource-constrained conditions and in the hothouse of local community politics) could also raise barriers and impediments. Several groups we spoke with noted that established relationships sometimes raised unnecessary “baggage” and “political issues” around broadband-directed collaborations. Fixed political relationships could also shape the conversation in undesirable ways, including by excluding groups not previously involved in the development of local infrastructure. As put by a New Mexico interviewee: “It’s super political, it’s all these people who know people and there’s so much around who has money to gain from [broadband development]...and there are certain institutions that have a lot of power.” Thus, when something like BTOP appears, “that opens the door for major players to step in and ... decide where infrastructure is going to go”.

#### *Affordances and asymmetries*

Community-based organizations engaging the BTOP and BIP processes also faced significant challenges stemming from the distinctive set of affordances, and relative asymmetries, between different organizational actors in wider project collaborations. As several pointed out, there are significant, perhaps profound, differences in the models of organizing commonly

found among small grassroots organizations and larger institutional partners. Appropriately managed, these could constitute a set of complementary institutional affordances, in which larger institutional partners supplied precisely those skills and capacities lacking in smaller CBOs, and vice versa: the logic impelling the NTIA's partnership strategy in the first place. At the same time, distinctive organizational styles could form a barrier to effective partnership. Some respondents questioned whether large institutions have what it takes to do community engagement work; or conversely if smaller organizations have what it takes to obtain funds for large-scale projects. As one of our interviewees observed "I wonder about...large institutions getting money to be able to do public engagement work...there is a comfort level that federal administrators have in working with large bureaucracies...and small non-profits don't have the ability to do federal procurement". As noted by another interviewee with a community-based non-profit, the challenge in all of this is creating projects that are in the "nitty-gritty" but also reportable to the NTIA, noting that it is the practice of larger groups to focus on efficiency of a project overall, perhaps at the expense of the low-level engagement provided by smaller, community-based groups.

#### *Transparency, legitimacy, and representation*

Because of these asymmetries, our interviewees, both successful and unsuccessful in obtaining broadband dollars, raised important questions about the relationship between those organizations executing BTOP and BIP projects and the communities they propose to serve. In particular, respondents questioned the depth and seriousness of engagement between certain institutional actors and/or agencies engaging with community development efforts or specific communities through the BTOP or BIP processes; this was particularly true in cases where there was little prior or sustained history of interaction. Under such circumstances, respondents argued, significant questions of transparency, legitimacy and representation arose. On what grounds could 'newcomer' organizations claim to represent or serve the types of under-served communities targeted under the federal broadband development effort (and how should application reviewers evaluate these claims)? How were these claims to be balanced against those of smaller organizations with fewer resources but perhaps stronger and more sustained track records of engagement in the communities in question?

One of our interviewees commenting on the process followed by a local university noted that there was a "lot of internal lack of communication, lot of weird bureaucratic stuff. People don't talk across programs as much as they could". This lack of communication

effectively sidelined community groups well placed and seeking to participate in local BTOP application efforts. Another interviewee noted that their local university (non)partner did not seek public input for their BTOP proposal before it was to be submitted because of a lack of time to do so. Groups raised similar questions around input, representation, and transparency with regard to potential city and state government BTOP partners. While some of our interviewees reported positive and productive relationships with city governments, including equitable partnerships that led to successful BTOP applications, many others had more negative stories to tell, including city governments who effectively excluded community-based partners from BTOP planning efforts, or chose exclusively service-oriented community groups to the neglect of well-established groups approaching community work from an activist or social justice perspective. One interviewee in California reported being excluded from city-led BTOP organizing efforts despite a long and successful relationship with city government around support for an existing public computer lab of exactly the sort being proposed under the proposed BTOP grant.

#### *Preemption, tokenism and control*

According to several of our interviewees, it was not uncommon for larger groups seeking BTOP funding to approach CBOs "at last call" to have them sign on to a BTOP proposal. This was done apparently out of the need for community stakeholders and groups with credible ties to marginalized communities and populations to be present on an application despite there being a basis for whether these groups would work well with each other or not and whether these groups would be able to properly execute a broadband project locally.

In addition to such last minute partnerships, we also heard of cases where national groups looking to develop a network of community projects might have disrupted the local convening of groups around a broadband project. One interviewee reported on cases where local organizing efforts were effectively sidelined by the entry of national groups who "sucked all the air out of the room, took all the funding and implemented their one-size fits all model and totally ignored the local model... the local organizers, the local history and capacity". Under such conditions, respondents reported cases of groups "jockeying" for position, hedging their bets, or otherwise "trying to figure out what was their best chance for getting funded." Respondents raised concerns that this sort of positioning activity might have crowded out more locally appropriate project designs and partnerships.

#### **NTIA and CBO Relationships**

A third common challenge facing CBOs pursuing BTOP and BIP funding had to do with mismatches, real and perceived, between the organizational structures and cultures of locally focused groups and those in place at the federal granting agencies.

Because many of the CBOs we spoke to took the strategy of partnering with larger institutions to manage the application requirements, groups were often buffered from working directly with the NTIA. In those cases, having an experienced intermediary to translate the terms and requirements of the NTIA often made the difference between getting funded or not. From the standpoint of small and local CBOs, NTIA requirements represented an “unbelievable” amount of overhead. Under such conditions, one interviewee explained, “we needed a larger, anchoring institution that could hold down the documentation process, the application process, all the paperwork in between, the coordination of all the different groups”.

Groups also raised frequent concerns around what they regarded as a basic mismatch between the criteria and statutory requirements of the NTIA and RUS, and the way that community based groups (as opposed to larger and more formalized institutions like schools and libraries) approach problems at the local level. One interviewee described the challenge of “fitting the community organization peg into the BTOP hole.” Another stated bluntly that “community groups were not even on the map in the NTIA’s picture”. Beyond application and operational challenges, it was feared that these constraints limited innovation, flexibility, and local experimentation through the BTOP process. As one interviewee summarized, “it seems like there is a big disconnect between some of what the administration talks about in terms of [focusing] on these very local solutions, very place-based solutions, small, innovative and an application process where you’re looking at such vast sums of money and such a complicated process that you need to have big organizations as part of it, and I think that creates some really weird power dynamics, ultimately”.

Other interviewees critiqued what they regarded as a lack of clarity (particularly in round one) around the kind and scale of projects eligible for NTIA funding. This included confusion around key terms (“underserved populations,” “adoption,” “anchor institutions,” etc.) that determined the scope and eligibility of projects. In some cases, the meaning of these terms was left inappropriately vague. In others, the meanings were clear but too narrowly scoped. A clear case of the latter were the “community anchor institutions” specified in the NOFA which turned out, in practice, to be primarily limited to schools, libraries,

and hospitals. This ran counter to the experience and alignments of many community-based groups, many of whom were involved in job and economic opportunity training centers, digital and media literacy training centers, tribal community institutions, public access broadcast stations, or homeless shelters. Without access to a sanctioned community anchor institution, these organizations found it difficult to engage the BTOP process. Similar confusion greeted the definition of “remote” – an issue for tribal groups in underserved areas that were nevertheless near to urban centers.

To its credit the NTIA and RUS did recognize many of these issues (partly based on critical responses following round one of the granting process). Changes introduced between round one and round two included going to a longer submission period; simplified application requirements and procedures; and providing more specific explanations of project criteria and terminology, including an online FAQ. Some interviewees suggested that the NTIA also showed some additional flexibility in the round two review process, including around the possible nature of “community anchor institutions” and the nature and meaning of “sustainable adoption.”

#### **Emergent Post-Funding Challenges**

As successful CBO applicants and coalitions move into the implementation stage, an additional set of challenges has begun to emerge, ranging from challenges of organizational expansion, to meeting data collection, reporting and evaluation requirements, to ensuring the sustainability and impact of programs beyond the life of the grant proper.

*Scaling up:* Following initial funding announcements, groups were required to move quickly to recruit and train staff and sign contracts with local entities to employ the BTOP funds. Scaling up also includes purchasing systems and software for tracking and reporting of their program. Inherent within this expansion are the challenges associated with building out an organization’s scope in a short time while ensuring that such expansion does not negatively impact the group’s ability to operate according to its culture and mission.

*Evaluation:* An ongoing concern for CBOs entering the implementation stage is how to collect data and conduct program evaluations adequate to NTIA and federal reporting requirements. For many of the activities CBOs have been involved in, this requires groups to develop metrics more complicated than simple network access or performance statistics, extending to the notoriously complicated question of ‘impact.’



*Sustainability:* On a longer timeline, CBOs, like other BTOP and BIP grantees, face the challenge of how to run and evaluate their programs in ways that will support long-term learning and sustainable impact through and beyond the life of the grant itself. While there is no formal NTIA or RUS requirement in this regard (and no current provisions for follow-up studies which might help unearth the longer-term lessons to be learned from the BTOP and BIP funding experiment), all of the CBO grantees we spoke with maintained a commitment to making BTOP investments into lasting contributors to broadband adoption and community development more broadly. Given the relatively short window of broadband stimulus funding, such long-term commitments stand outside and on top of the already significant demands of the formal BTOP process.

## **DISCUSSION AND RECOMMENDATIONS**

The tensions and challenges encountered by community-based organizations engaging federal broadband development efforts lead naturally towards a series of policy recommendations that could improve the design of such efforts, both present and future. In the section that follows, we detail some of the recommendations advanced by our interviewees and in separate comments forwarded directly to USDA and NTIA public hearings around the BTOP and BIP processes. These fall into four main categories: 1) those dealing with how the NTIA or RUS define key concepts like “adoption,” “underserved,” “anchor institution” and other terms-of-art; 2) those arguing for specialized CBO tiers or tracks through the broadband granting process; 3) those calling for increased *process* support on the part of the NTIA, USDA, or third party actors; and 4) those arguing for streamlining and/or extending application timelines to allow smaller groups to develop the types of coalitions and partnerships more likely to lead to equitable and successful funding applications.

### *Flexible review criteria to match the natural strengths of CBOs*

Based on the recent report by the Social Science Research Council, there is strong evidence that the needs of communities in adopting broadband would be better served by institutions that do not fall squarely within the NTIA rubric of an anchor institution (Dailey et al., 2010). According to many of our interviewees, spaces like community centers, churches and training centers might not be traditional anchor institutions, but they are often key throughways for broadband access because they provide sites in which members of the community already have local networks and trust invested in these organizations. Encouraging more CBOs to implement their projects through non-traditional anchor institutions could open the door to

new and widened forms of CBO engagement in federal broadband development efforts.

### *Special track(s) for CBOs*

In contrast to the current structure, where CBOs compete with the resources of larger and more institutionalized actors, a dedicated CBO stream or track could allow smaller and grassroots organizations to make better and more effective contributions to federal broadband development efforts. Smaller and dedicated funding pools geared towards CBOs could better engage the distinctive strengths and styles of these organizations, at levels more in line with the scales of funding and implementation where groups achieve their greatest local impact. Such pools would also encourage these groups to pursue (and the NTIA to fund) more efficient, innovative, and even experimental projects that could enhance broadband adoption and digital inclusion work in unforeseen ways (Media and Democracy Coalition, 2009). As one interviewee put it: “there have to be community-based solutions for providing national infrastructure; we can’t always rely on ISPs to be building that out for us”.

### *Increased assistance and mediation for CBOs*

We noted above that one of the key challenges among CBOs engaging the BTOP or BIP application processes was a lack of resources or experience in dealing with federal procurement processes. Accordingly, several of our interviewees urged the NTIA to install some form of community liaison, “ombudsmen” (Center for Social Inclusion, 2009) or other intermediary to support groups from vision to application. One version of this recommendation involves an individual selected from the local community and paid by the NTIA or BIP to help combine the efforts of groups across the community and step groups through processes and expectations of the federal funding organizations. Another strategy envisions working with underserved communities directly to announce broadband goals and visions; in addition to (eventual) support for more formal project initiatives, this could produce important externalities in the form of coordination and network building at the local level. A third version of this support might lie in supporting the public interest organizations and community foundations already performing some of this intermediation work, leveraging and extending existing activities and community partnerships (Breitbart et al., 2009). Post-grant, several interviewees argued that the NTIA should exercise some oversight and accountability in the case of multi-partner relationships that combine larger institutional actors (state or municipal governments, universities, etc.) with smaller community-based organizations to ensure that more powerful project partners are acting as responsible ‘trustees’ or ‘honest

brokers' of project funds and vision, and continue to execute grants in the interests of public and local communities.

*Streamline/provide more time for the application process*

Virtually all groups urged that there be more time allowed between the formal project announcement and grant application deadlines. This was a generic problem with specific implications for the smaller community groups studied here, given the frequent necessity for them to form multiple and sometimes complex partnerships with other organizational entities. As one interviewee stated: "It's just being realistic about the time constraints partnerships entail...to come together and develop something that is unified and cohesive" is a stretch even for a single organization. Relatedly, other respondents urged the NTIA and RUS to simplify their application process, consolidating steps, eliminating redundant or difficult to meet requirements, and/or shifting some of the reporting requirements currently placed on community groups to more public and easily accessible data on underserved communities (section 8 housing, free or reduced lunch rates, etc.).

## CONCLUSION

As made clear in the preceding discussions, community-based organizations have faced significant barriers in engaging federal broadband development efforts to date, including challenges of mission alignment, bureaucratic and reporting requirements, compressed timelines, mismatches between grassroots organizational styles and the requirements of a larger federal program, and the ever-delicate work of effective partnership and coalition building. Despite these limits, CBOs remain central and necessary players in meeting the goals of public broadband development as laid out in the National Broadband Plan, the BTOP and BIP initiatives, and indeed any future public investments in this space. We hope that the experience of BTOP and BIP investments, and the findings of this report and other research, will help improve the effectiveness of CBO engagements in the broadband development process.

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