

Producing Value Through Effective Broadband Governance

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Operating a community broadband network entails complex technical, financial, and strategic business considerations—and those decisions are all made within a governance framework.

Effective governance enables a locality to organize its decision-making to produce the greatest value. While value is measured in terms unique to that community, the key to good governance is that the network's value will reflect the community's needs. For example, a local government might construct a broadband network to lower the cost of its internal communications services, promote economic development, or serve local schools and libraries. In each of those scenarios, the locality's governance should ensure that the network delivers on its stated goals.



Figure 1 - Drivers to Value in a Governance Framework

In this brief white paper, we describe a high-level approach to adapting a governance process to support identified needs and produce effective value.

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Identify Key Goals and Objectives

Starting out with some key goals and objectives gives focus and energy to a community broadband project. Some of these goals derive almost directly from the drivers that motivate sponsors to take on the project.

For example, several central Maryland counties concentrated around the Baltimore-Washington corridor collaborated with the State of Maryland to apply for federal broadband stimulus funds for a middle-mile network to serve community anchor sites. The grant requirements prescribed large regional initiatives, connectivity to community anchor institutions, and leasing middle-mile builds to qualified private parties. Such drivers naturally translated to goals for the Maryland network, such as connecting underserved communities and promoting economic development.

As a project unfolds and stakeholders and needs are identified, goals and objectives are often added and shaped in the context of what is realistically achievable with available resources.

Identify Key Stakeholders

While a more comprehensive stakeholder analysis needs to be completed as a project's objectives and operational model are fleshed out, the initial core goals and objectives point to natural leaders, advocates, and stakeholders who need to be active participants in the project.

In the Commonwealth of Kentucky, for example, a statewide fiber initiative was initially funded through a combination of sources—state funds to build fiber to promote economic development and meet internal government needs, federal funds allocated to building fiber in underdeveloped rural regions—which meant that the project required a combination of goals and a partnership that clearly identified the lead agencies. A comprehensive joint effort to identify needs, goals, and objectives broadened the stakeholder groups to higher education, private partners, and a variety of government agencies.

Focus on Needs and Value

Periodic re-checks help to keep your governance development aligned with the issues that matter to your community—and to ensure that you have the right stakeholders engaged in the right roles. What priorities matter? The illustration to the right lists some of the major benefits we have seen community broadband projects pursue, and to which governance was adapted.

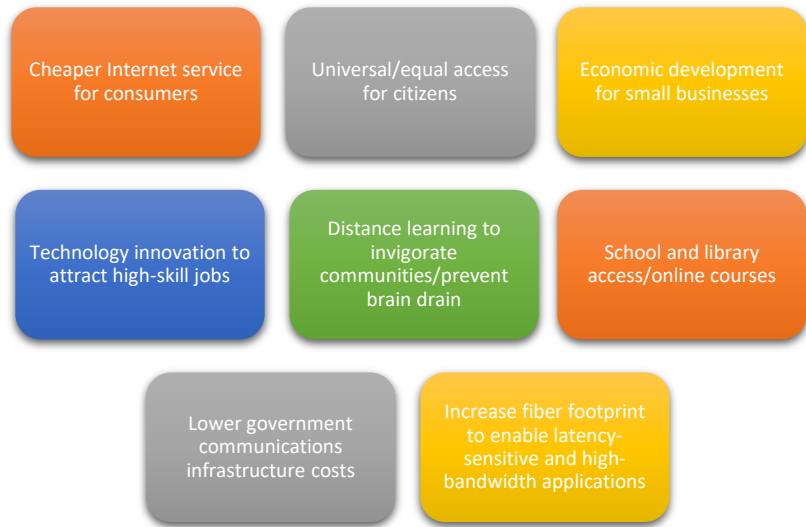


Figure 2 - Popular Community Broadband Goals

Identify Strengths and Weaknesses

In suburban Maryland, an extensive middle-mile fiber network was constructed through Harford County as part of a statewide broadband stimulus-funded project. The County CIO quickly took advantage of the new fiber to streamline the County’s IT infrastructure by accelerating cloud-first initiatives, virtualizing applications, and converting aging equipment into thin clients that could be more efficiently managed and take advantage of off-site processing and applications.

These process improvements led the CIO to question what changes needed to be made in terms of organization and staffing to effectively manage the new operations. Managing an extensive fiber optic infrastructure and aligning the network with government goals clearly required new skills. An organizational review of strengths and weaknesses showed a need to accelerate skill sets oriented toward business process, contracts management, and architecture, and less toward routine technical skills. But the review also found that the network required the application of established internal capabilities, such as project management expertise and business process analysis, outside of the IT department.

Develop Appropriate Organizational Structure

Strengths and weaknesses are always relative to something—some idea of what the network should deliver, and to what extent the necessary pieces for delivery exist. Such a review will often already have a few organizational models in mind, such as an independent nonprofit, a network housed within a government agency (usually IT), a quasi-governmental entity, or an education and research network.

When considering, for example, whether a government or nonprofit should lead, reviewing the strategic goals and objectives, current assets, and operational capabilities will determine what makes the most sense. When one large North American city wanted to find ways to more efficiently utilize and expand its fiber optic network to support internal communications needs, and to monetize its existing fiber assets to fund maintenance and network expansion, it quickly became clear that the city had assets, skills, and even many of the organizational enablers (such as a strong relationship and coordination between the technology and public works departments) that would lead to project success.

The city was best positioned to leverage its own conduit system to drive down operating costs. Choosing to outsource its fiber optic network to a new nonprofit organization would entail larger operating costs because all of the support functions and roles would need to be created from scratch. Further, a third party, such as a nonprofit, would have its own goals and objectives that would not necessarily align with those of the city. Keeping the network in-house made the most sense, and streamlining and dedicating its team of fiber optic engineers to support the network and its expansion constituted fairly modest changes to the city's organizational chart.

Sometimes, however, organizational structure is driven by the external risk and opportunity environment that can include funding, regulatory, or legal requirements. For example, several cities and counties are pursuing new federal E-rate funding opportunities that allow libraries and schools to purchase dark fiber instead of leasing costly bandwidth from telecommunications providers. This funding, which is awarded based on a competitive bid process, might present a golden opportunity for a community to build up its infrastructure. But the fiber procurer (for example, a school district) requires a rigorous separation from the offeror (such as a city or a nonprofit) to maintain the integrity of the competitive bidding process. That separation needs to be built in to the offeror's governance, and must extend to decisions about who should hold the project's advisory, steering, or service provider roles.

Manage Strategic Governance

The strategic governance framework is usually comprised of three major groupings:

- **Operations/Management** provides management and operations of the network within the adopted organizational structure.
- **Steering Committee** provides internal oversight and links internal stakeholders to the network to ensure operations aligns with strategic goals. If part of a city or county and focused on internal city function needs, this can be composed of line managers in other business units. If part of a nonprofit, it can be a board representing key stakeholders reflecting its charter.
- **Advisory Committee** consists of customers, clients, community representatives and others to ensure goals and objectives continually reflected, and provides strategic advice regarding risks and opportunities.

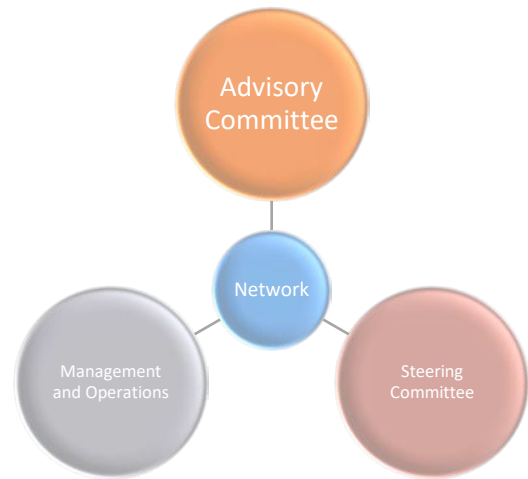


Figure 3 – Strategic Governance Framework

Which stakeholder sits in which grouping depends on role, fiduciary and risk accountability, asset ownership; whether the stakeholder represents a service provider, service partner, or client; and what resources and information the stakeholder brings to the table.

Retool Organizational Structures as Needed

The degree of organizational change necessary to support a fiber optic network can vary widely, and depends heavily on the phase of the project: If it is in its infancy as part of an entirely new organization, the change would be drastic—but as a fresh project it may be less encumbered by existing organizational dependencies. Conversely, a change in the scope of an existing network managed by a mature organization, such as a city, may entail only modest changes—but it could be deeply dependent on existing hierarchies, dependencies, and lines of report.

Our experience views organizational forms as enablers of existing functions and values. This is often the case in the government and nonprofit sectors, which have to be more concerned about issues of integrity, fairness, custodianship of the public good, continuity of operation, and risk avoidance—and less about branding, competitiveness, and aggressive innovation.

In the government sector, too, organizational logics often function to limit risk and manage scarce resources. Building on existing committees, hierarchies, and informal relationships is a much faster way to get things done when it comes to community and public broadband networks. This approach entails less risk of entering into messy politics, unintended consequences, or unsustainable initiatives.

Building on existing structures requires dialogue among stakeholders to identify organizational enablers and strengthen the relationships necessary to support needed changes. In the

National Capital Region (NCR), for example, a regional, interconnected, public safety-oriented network was greatly facilitated by the existence of the regional Metropolitan Washington Council of Governments (MWCOCG), which served to facilitate public safety coordination on a regional basis. The region’s CIOs were able to leverage the NCR/MWCOCG committee framework to receive funding for the network and add a liaison work committee with public safety and executive stakeholders to address technical and strategic issues.

Develop Key Performance Indicators

There are a variety of ways to ensure that you track your performance and manage relations to different constituencies so the network continues to be on sound and sustainable footing—with the stakeholder support necessary to reflect community needs and deliver effective and efficient value. The industry standard is the balanced scorecard, which considers leading and lagging indicators from different perspectives, and ties those back to strategic objectives and goals.

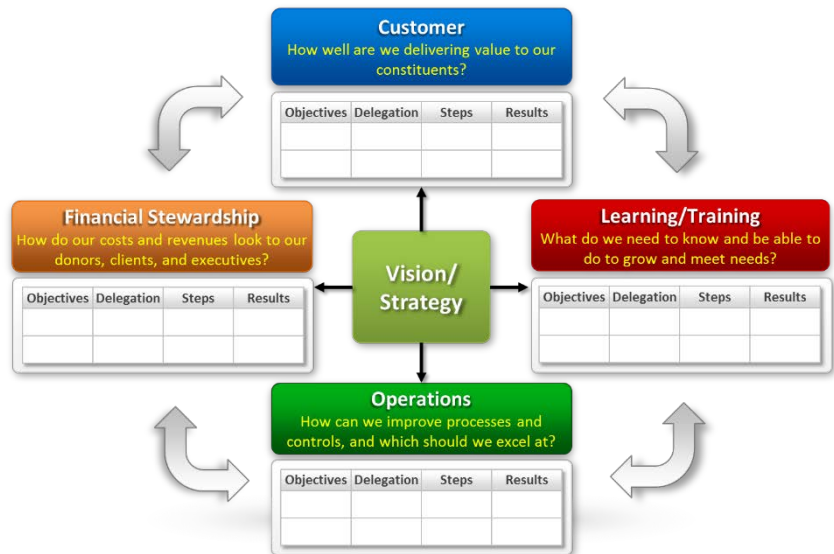


Figure 4 - Balanced Scorecard (Adapted from Kaplan & Norton, 1996)

In the for-profit sector, the financial perspective (i.e., “how do we look to our shareholders”) is king, but in the nonprofit and government world, it is actually the customer perspective (“how do we look to our customers”) that is the critical area. The relative importance of financial indicators, especially revenue, varies depending on context. What makes most sense for your network should be something you continually discuss with your stakeholders.

References

Robert S. Kaplan and David P. Norton, “Using the Balanced Scorecard as a Strategic Management System,” Harvard Business Review (January-February 1996): 76