

Key Issues in Public-Private Partnerships

When a city negotiates a broadband contract with a private-sector partner, what should it ask for? And what is it likely to get?

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The following was adapted from “The Next Generation Network Connectivity Handbook: A Guide for Community Leaders Seeking Affordable, Abundant Bandwidth,” published by Gig.U in association with the Benton Foundation. Read the full report at www.gig-u.org.

For cities that choose public-private partnership models, diverse issues arise in network negotiations. Every municipality will have unique challenges, but it helps to know how others have approached these arrangements.

NEGOTIATING WITH PARTNERS

The Kansas City–Google Fiber negotiations created a new model for how cities can facilitate upgrades to next-generation networks – a model that later Google Fiber negotiations advanced, as did negotiations involving other cities and providers. These negotiations – over provisions that affect city operations, personnel, property and finances – can become very complex.

There are assets and levers that city officials can use at little or no cost to improve network construction economics for providers. Understanding these helps parties reach win-win positions more efficiently.

WHERE TO BUILD

One primary concern is the geographic areas that the network will cover. The network builder’s construction costs and risk of recouping those costs must be balanced against the community’s economic development and spillovers. The builder will naturally lean toward deploying first (or exclusively, if the

municipality will allow that) to areas in which the risk of recovering upfront costs is lowest and the potential for profitability is highest. The municipality likely will want to bring access to as many residents and businesses as possible, perhaps even prioritizing certain areas in which the city believes the economic and social benefits to the entire city are the greatest. The parties can resolve these divergent interests in a number of ways.

WHERE TO BUILD: KEY CONSIDERATIONS FOR COMMUNITIES

- Are there areas of the city that the provider must connect and, if so, on what timetable?
- Are there public facilities the provider must connect? How many and on what timetable?
- Is there a minimum coverage area that the provider must commit to as part of the agreement?

CITIES HAVE REQUESTED ...	EXAMPLES
Universal coverage	Los Angeles RFI
Open-access, wholesale network	Macquarie-UTOPIA, iTV3-UC2B, Los Angeles RFI
Connections for anchor institutions	Los Angeles RFI
A free basic service tier	Los Angeles RFI, Google Fiber-Kansas City, Macquarie-UTOPIA, NCNGN RFP, Portland-Google franchise agreement
Free public Wi-Fi hot spots	Portland-Google franchise agreement, Los Angeles RFI
Subsidized connections for public housing	Austin, Texas
Ownership of the network	Macquarie-UTOPIA, SiFi-Louisville franchise agreement
A designated franchise fee	Portland-Google franchise agreement
Funding/program support for digital literacy	Google Fiber-Kansas City
Geographic priorities/schedules for buildout	NCNGN RFP
A flexible menu of service options	NCNGN RFP

Figure 1: City requests in negotiations with ISPs

CITIES HAVE OFFERED TO ...	EXAMPLES
Be an anchor tenant of the service	Los Angeles RFI
Provide space and power	Google Fiber-Kansas City, Los Angeles RFI, NCNGN RFP
Provide data and asset inventory	Los Angeles RFI, NCNGN RFP
House fiber huts on city property	San Antonio-AT&T lease agreement, San Antonio-Google Fiber lease agreement
Provide a single point of contact	Google Fiber-Kansas City, NCNGN RFP
Streamline communication and permitting	Google Fiber-Kansas City, Los Angeles RFI, NCNGN RFP
Give access to city dark fiber and/or conduit	Los Angeles RFI
Designate a team within local government to work with the partner	Google Fiber-Kansas City
Conduct a consumer outreach and marketing campaign	Google Fiber-Kansas City
Provide funding through a utility fee	Macquarie-UTOPIA
Give partner sole discretion over buildout plan and schedule	Google Fiber-Kansas City, Portland-Google franchise agreement

Figure 2: City offers in negotiations with ISPs

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A city has some leverage to ensure that a private partner doesn't cherry-pick – but the buildout may be less complete, and slower, than the city would like.

Mutual consultation. Google and Kansas City left the question of initial build sites open to continuing negotiation; Google retained the right to base future build locations on purely economic calculations.

As a matter of practice, Google agrees to build out in the entire city, but the actual construction obligation kicks in only when a certain percentage of a “fiberhood” signs up for service. Google sets the boundaries of the fiberhood and the minimum percentage at its sole discretion. This approach can be viewed as a win-win in that the city has a voice in negotiating initial build locations and the ISP retains control over expansion locations thereafter. However, if the city falls short of getting agreement on its planned network sites during initial negotiations, turning over control of expansion planning to the ISP can end up resulting in a buildout to fewer areas than the city may have wished.

Need-based quotas. Raleigh agreed upfront to let AT&T base its build locations purely on cost-recovery calculations in return for a quota of additional locations that the city could choose based on need. The city may not reach all its need-based sites initially, but it can ensure that the network eventually expands to cover some of its highest-priority areas.

Competitive response. So long as the new network reaches a critical mass of the city, it is likely to drive a competitive response. For example, the deployment of fiber by the incumbent telco or a new entrant with significant resources, such as Google, will likely compel responses by a cable provider. Because a cable upgrade will be done system by system, rather than

neighborhood by neighborhood, facilitating an upgrade or a new entrant can result in a geographically broader upgrade through third-party providers not involved in the initial agreement. Further, as pricing is generally consistent throughout an entire jurisdiction, the competitive response will likely mean that all residents receive the benefits of price competition even if the new network does not extend to every area.

HOW TO BUILD

Network construction methods are largely standardized, so the primary decision is whether to build above or below ground (or whether to use a combination of both approaches). Making this determination can involve considerable cost calculations and complex policy issues, such as pole attachment rights and equipment placement.

Aboveground vs. underground construction. Aboveground network construction tends to be less expensive from a labor and equipment cost perspective, so it is most commonly used. Aboveground construction also minimizes the digging up of roadways and the consequent impact on traffic.

The main benefit of underground construction is weatherproofing the

network – protecting it from wind and ice, which topple utility lines and poles. It is in the city's interest to assess these costs and risks while planning and negotiating a network construction partnership.

Pole attachment access and costs. Labor and equipment costs are not the only costs to consider – pole attachment costs can potentially dominate the calculation. For municipalities that lack a public utility or other means for easily accessing poles, the costs of negotiating and accessing privately owned poles can quickly make aboveground construction more costly than running fiber underground. This was the situation with Champaign-Urbana, which decided to build completely underground to avoid pole attachment costs and headaches.

The FCC's recent order on the classification of broadband addressed this issue in part. The commission held that ISPs should be entitled to fair access to poles and conduits under Section 224 of the federal communications law. The long-term value of that decision depends, in part, on how court challenges and potential congressional legislation play out. Another way of addressing this issue is by having a single pole administrator. Connecticut recently implemented a single administrator through state legislation. Google addressed the issue in its first project by initially going to Kansas City, Kan., which had a municipal electric company, and then leveraging the public reaction to strike a deal with private pole providers in Kansas City, Mo., which did not want

HOW TO BUILD: KEY CONSIDERATIONS FOR COMMUNITIES

- If there is no municipal pole ownership, do the private pole owners support the project?
- How many different parties must the city negotiate with to gain access to the pole space needed for this project? Does the city have a history of negotiating with them?

INFRASTRUCTURE AND RIGHT-OF-WAY ACCESS: KEY CONSIDERATIONS FOR COMMUNITIES

- What parts of the fees reflect actual costs to the city, and what parts reflect an implicit charge for scarcity value of the use?
- What is the impact on prior agreements with others of changing the fee schedule for one provider?

to be seen as obstacles to Google Fiber expansion in their city.

ACCESS TO INFRASTRUCTURE AND RIGHTS OF WAY (ROW)

Access to infrastructure and ROW is a big lever for a city but must be used with great care and diplomacy. Though cities have the economic leverage to charge fees beyond their costs for the use of ROWs and existing ducting or conduit, they must compare the value of such fees to the value of the economic benefits that a next-generation network is likely to deliver.

Use a fee schedule. Google's contract with Kansas City includes a separate fee schedule that details which infrastructure and ROW activities require fees. Activities that do not require a fee include use of collocation space, office space, pole attachments in utility/power space, conduit, existing fiber, geographic information systems data, computer tools, permit processing and inspections. Activities that do require a fee are use of pole attachments in telecom space, traffic control, and access to city rights of way for construction and installation of outdoor network equipment.

Though a city has considerable discretion to impose or forbear from imposing a fee, the key consideration is whether a reduction in fees can lead to a network that will increase the economic activity within, and attractiveness of, the city.

Ensure equal treatment of all providers. AT&T's contract with Raleigh contains language that generally ensures AT&T is treated like any other party seeking access to such

infrastructure and rights-of-way. It states: "Such access will be provided in accordance with all applicable regulations and ordinances and the City's standard processes and practices generally made available to all third parties." In addition, the contract contains a most-favored-nation (MFN) clause that provides "the City will ... license AT&T to utilize such space for those purposes at rates or fees and other terms no less favorable than those granted to any other similar commercial service provider." Incumbents and new entrants alike frequently request MFN clauses to guarantee a level playing field on fees and rates.

PERMIT APPROVALS

Any network builder will need to obtain permits for construction tasks as the project progresses over months and years. Cities should work with network partners to ensure these permits are processed as efficiently and quickly as possible to reduce construction costs and time.

Setting timelines. Though permitting approval timelines benefit the network builder by providing certainty and expediency, the city should retain flexibility so it is not on the hook for every permitting delay. For example, the AT&T-Raleigh contract reads:

"The City will provide diligent and expeditious review and determinations of all applications for permits submitted by AT&T and will attempt ... to approve or respond within one week from the date of the submission of the request."

Waiving permit fees. Another way to streamline the permitting process is to waive fees, although financial implications should not be overlooked. The Google contract reflects this approach. Before adopting this approach, city officials should review how payment processing affects permit process timing. If the effect is negligible, so will be the benefit.

PERSONNEL COMMITMENTS

Identifying specific city personnel who can focus partially or primarily on network-related issues will speed up not only permit processing but also the resolution of issues that come up throughout long, complex construction projects. The level of specificity in personnel provisions can vary.

The contract between AT&T and Raleigh uses general language; in contrast, Google's contract with Kansas City spells out personnel requirements in more detail, going as far as creating new job roles. For example, Google's contract requires the creation of an "Executive Sponsor for the Project at the most senior level of City" and a "Single Point of Contact (SPOC) ... responsible for addressing all issues related to the Project."

OPEN ACCESS

The term "open access" refers to a network management policy that permits multiple service providers to offer services over the same physical

PERMIT APPROVALS: KEY CONSIDERATIONS FOR COMMUNITIES

- Has the city internally reviewed its permitting process?
- Can the city's permitting be improved or streamlined through digital processing?

PERSONNEL COMMITMENTS: KEY CONSIDERATION FOR COMMUNITIES

- How will dedicating such a team affect city resources and other high-priority construction processes?

network. The network owner offers access to its physical network on nondiscriminatory terms to any requesting service provider that can plug its equipment into the network and offer services. South Portland, Maine, and Champaign-Urbana, Ill., require their private partners to offer open access to service providers.

From the city's perspective, an open-access policy has the advantage of promoting service competition because it prevents the owner of the physical network from dominating the market for network services. From the network builder/owner's perspective, open access may reduce profits because competition will likely lower market prices for network services. This means the network owner will take longer to recover its costs and turn a profit, which could mean no new buildout ever occurs.

But if a party is willing to invest in a next-generation network with an open-access requirement, such a policy could, in the long run, result in more innovative services, lower prices and greater access for residents and businesses.

When Google announced its Kansas City fiber deployment, it initially suggested the network would be open-access. Later, however, it reversed its position, saying that, after the company had studied the economics of deployment and consumer behavior, the advantages of open access were not sufficient to justify the increased costs and risks of that business model. Google has said the costs of obtaining traditional programming packages and the need to offer a multichannel video package make open access economically nonviable.

In contrast, Champaign-Urbana's fiber network embraces the open-access

ideal. Champaign-Urbana's network originated under a federal BTOP grant that came with an open-access requirement. As the network operator evolved into a nonprofit (UC2B) and then a partnership between UC2B and private service provider iTV-3, open access remained a core principle. The BTOP grant made open access a precondition when UC2B went looking for an expansion partner.

One potential (but untried) compromise is to allow the network builder a limited grace period during which it can be the sole service provider – which would allow it to recoup upfront costs more quickly – followed by an open-access policy thereafter. This grace period can be negotiated as a number of years or pegged directly to cost recoupment.

FREE NETWORK SERVICES

Every contract analyzed mandates the ISP to provide free services for the city and/or other public facilities. This is often an important negotiating point for city officials because free network services can save costs for the city or serve some other policy objective. City officials should examine their existing IT costs and either try to minimize them by procuring as many free services as possible or leverage them to stimulate the buildout of the network.

Google's contract with Kansas City allots free Internet connection service, of the same kind offered to the general public, to 130 locations, including city facilities, public utility sites and school districts. One caveat is that such free service facilities will be connected only as they are passed by the natural progression of the network's construction. Another caveat is that Google will cover the cost of connection only if it is "commercially reasonable." Otherwise, "Google and Kansas City will discuss options to address that issue." Most important, following such connection, these locations will receive Internet services free of charge.

AT&T's contract with Raleigh similarly uses a quota to provide service to "public or non-profit facilities that provide access and services directly to citizens." The agreement specifies that 100 sites can be chosen across the six municipalities that form the North Carolina Next Generation Network. The relevant city must pay for the cost of connection (estimated to be \$300–\$500), and schools and libraries are not included unless they qualify for funding through E-Rate, the federal program that subsidizes broadband connections for low-income schools and libraries.

Another free service that can be negotiated, particularly in the case of a dark fiber network such as the one GWI provides in South Portland, Maine, is an Internet point of presence. Without this, the city could still pay a significant sum of money to connect its facilities to the Internet despite having high-speed fiber connections internally. GWI's contract stipulates that it will provide an Internet connection at a termination point designated by the city, capable of at least 100 Mbps

OPEN ACCESS: KEY CONSIDERATIONS FOR COMMUNITIES

- Does the city want to try an open-access model?
- Have ISPs expressed initial interest in working with the city to implement an open-access network policy?

symmetrical, free of charge for the remainder of the contract term. Thus, although the South Portland model does not focus on free services, it does enable the city to enjoy lower costs over time while accelerating the deployment of a next-generation network.

REVENUE SHARING

Depending on the financial model or models under consideration, revenue sharing is worth exploring during negotiations. Some network models do not make room for such provisions; other models make revenue sharing a central provision. In return for becoming an anchor tenant of the new network and paying for 20 years of service up front (approximately \$150,000), South Portland is entitled to a share of revenues generated from retail services provided by GWI.

The important note here is how to define the profits from which to calculate the city's share because the network provider must account for numerous costs.

OTHER PROVISIONS

Other topics that have been the subject of negotiations include the following:

- **Make-ready work:** The network builder will want the city to commit to doing most or all of the make-ready work on city facilities (such as on poles) to lower the cost of the buildout.
- **Access to city facilities for network node equipment:** The network builder will want access to city facilities for locating network equipment. This is particularly valuable in areas where appropriate facilities are scarce.
- **Service to city, schools and other anchor institutions:** In both the Kansas City–Google Fiber and the North Carolina–AT&T agreements, the cities were able to negotiate for fiber connections to certain public facilities.
- **Service to low-income housing:** Cities can ask for a minimum number of connections to low-income housing facilities.

- **Service to small and medium businesses:** In the same way, cities can ask for a minimum number of connections or geographic coverage in areas with small and medium-sized businesses.
- **Public Wi-Fi:** A fiber buildout improves the economics for deploying a robust, cost-effective Wi-Fi network. Cities can negotiate for some Wi-Fi hot spots to be available for public use instead of just for service providers.
- **Education/marketing:** Service providers have asked for certain kinds of assistance in making educational and marketing materials available to relevant segments of the public.
- **Digital literacy:** Cities have asked for assistance with digital literacy efforts.
- **Interconnections:** Service providers have requested settlement-

free interconnections with anchor institutions within cities that have existing fiber connections.

- **Smart-grid support:** Cities have asked service providers to make efforts to ensure that the new network supports the city's smart-grid program.

Additional provisions might request that the parties negotiate an agreement in which the city agrees to reinvest any resulting cost savings back into the network. ❖

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