Expanding Broadband Connectivity:
The Power of Collaborative Public-Private Partnerships

Modern connectivity is crucial for the work of state and local governments, from managing emergency operations to delivering digital services.

With the rapid shifts to remote work and distance learning, 2020 highlighted the importance of enhancing connectivity in communities across the country. However, many communities must still contend with legacy infrastructure that makes it more difficult to expand high-speed internet and broadband access. According to the Federal Communications Commission (FCC), 19 million Americans still lack access to broadband at what would constitute minimum threshold speeds. In rural areas, 14.5 million people don't have suitable broadband service, and 100 million Americans don't subscribe to this service — even when broadband is available in their area.[1]

Collaborative public-private partnerships are crucial for driving digital modernization within state and local governments, expanding broadband connectivity and fostering digital equity in communities. Two California cities — Morgan Hill and Santa Maria — exemplify how to structure these partnerships and work with telecom partners to address challenges and deliver results that can have a positive lasting impact on local economies and residents' quality of life.

How We Got Here: Current Connectivity Challenges for State and Local Governments

Governments deal with a range of connectivity challenges that hinder modernization, from legacy infrastructure to disparate technologies, such as fiber and microwave connections, that are difficult to manage.

"One of the main challenges they face is grappling with legacy infrastructure, which translates into that infrastructure not being able to support the speeds and capacity the community needs," says Dave Eller, senior director of the government and education vertical at Wave Business. Wave, RCN Business and Grande Communications Business operate as a single business solutions organization to deliver competitive fiber services to the public sector in eight of the top 10 largest metro areas throughout the United States.

Budget constraints often make it difficult to extend networks to other areas within a town or city, which creates digital gaps and equity issues.

"For some cities and counties, diverse routing is also an issue," says Eller. "They don't have diverse routes that allow for more robust coverage, network stability and reliability. With diverse routing, if one route goes down in their area, they can still get to the outside world and not be reliant on a single 'highway' for connectivity."

The challenges aren't just technological. Traditional franchise agreements between cable operators and local exchange providers haven't always served state and local governments well, Eller says, largely because of silos, a lack of common ground between these entities, and service that doesn't always align with a city or state's long-term vision.

Though the relationship between telecom providers and governments hasn't always been as collaborative as it should be, the need for government organizations to become more technology-enabled is transforming the nature of this relationship.

"It's such a complicated world today," Eller says. "Given the pace of technology, we have to work together."

As Eller suggests, truly collaborative public-private partnerships likely will be the way forward if state and local governments hope to expand broadband connectivity. The cities of Morgan Hill and Santa Maria illustrate how municipalities can forge effective partnerships that increase governments' agility, resilience and overall operations.

Driving Better Connectivity with Public-Private Partnerships
**Morgan Hill: A Cost-Effective Approach to Building Out Broadband**

Morgan Hill sits at the southern end of Silicon Valley. But the city of 45,000 has struggled with many of the same connectivity issues faced by municipalities throughout the country. Unreliable networks, limited coverage, legacy infrastructure and lack of redundancy were among them, according to John Lang, the city's economic development manager. Fiber lines for the city's telecom provider also have gone down several times over the last decade, which led to three major incidents and massive outages that lasted several days.

All of these issues prompted Morgan Hill to seek a new service provider. The city ultimately entered into a 20-year agreement with a telecom partner to build out conduit that will connect to publicly owned facilities. The provider is extending lateral connections into the city's business districts and industrial areas, and Morgan Hill will own empty conduit at the end of the agreement.

Lang says the city has worked to foster a collaborative relationship with the private sector. For example, Morgan Hill currently has an unofficial "Dig Once" policy that will be finalized in the near future. The intent is to have the private provider install conduit anytime the city opens the ground for other projects, minimizing disruptions while building up the broadband infrastructure.

"What it really did was foster the connection and a dialogue with our providers," Lang says of the "dig once" approach.
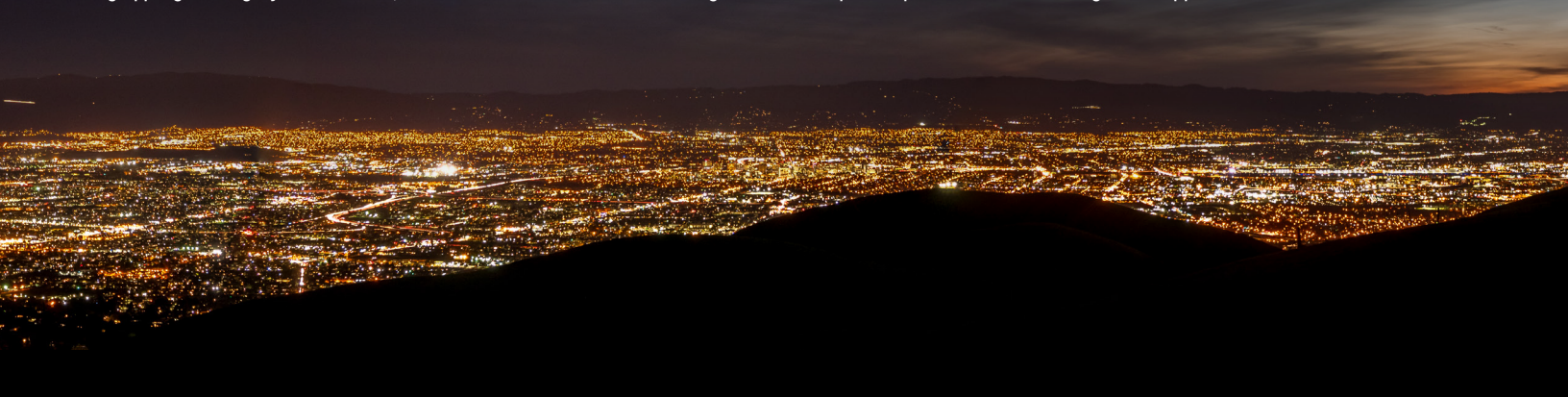
Morgan Hill also has streamlined its encroachment permit process, making it easier for providers to obtain a permit and aligning its fee structure to support conduit development throughout the community.

The build-out, which hasn't yet begun, will take one year but the cost will be amortized over 20 years. Lang says this is critical because Morgan Hill has the lowest taxes per capita of any city in Santa Clara County, which means its general fund is the smallest in the area. This engagement demonstrates just one model for how providers and municipalities can work together to create flexible arrangements that allow governments to build out their broadband infrastructure more cost effectively.

"[The city] really didn't have the budget to do this," Lang says. "It really did create a win-win, allowing us to finance this over the time."

Santa Maria:
Accelerating Smart City Transformation

A mix of technologies and telecom providers led to several connectivity challenges in Santa Maria, a city of 106,000 near California's Central Coast in northern Santa Barbara County. The city had endured internet outages and ongoing issues with network reliability.

To expand broadband access and advance its Smart City-Safe City initiative, Santa Maria sought a partnership with a national telecom provider. The smart city initiative focuses on expanding network connectivity and speed across the city's various departments, including providing WiFi for public transit riders and expanding WiFi hotspots throughout the city for first responders and the public while at city facilities. Working with a telecom partner that could help the city modernize its communications infrastructure was crucial.

Jeffrey Marecic, Santa Maria's chief information officer, says the partnership involves minimal capital investment for the city because it is providing data center space to its telecom partner in exchange for the build-out — showcasing another example of a flexible and cost-effective partnership model.

Santa Maria has focused on expanding connectivity to its city departments and into

its city center. The build-out was completed in early 2021; Marecic says the city began seeing improvements even within the first six to eight weeks.

"Right away we recognized the reliability of it. We've made it through storms with no interruptions whatsoever," he says. "The speed of our network is now much faster."

The enhanced connectivity is facilitating remote work and streamlining operations for city departments, Marecic adds. That will expand as the city and its provider build out the network even further.

Santa Maria is now on the path to improve digital service delivery for constituents and fulfill the goals of its Smart City-Safe City initiative.

"Our vision is to create a city where residents, businesses and governments thrive through collaboration, culture, imagination and resolve," Marecic says. "One of our key drivers is to enrich the quality of life for residents and businesses. We're looking to the future, and we know we can accomplish this through technology."

Best Practices for Effective Public-Private Partnerships

As state and local governments take steps to build their broadband infrastructure, they should keep the following best practices in mind:

Set the vision

Governments should start by assessing their current infrastructure and network gaps. They should set a clear vision and identify the key strategic goals broadband will help them achieve, such as the Smart City-Safe City initiative in Santa Maria. Focus on specific goals rather than trying to do everything all at once, especially because any collaboration with a telecom provider likely will be an evolving, multi-year partnership.

Build buy-in

Before selecting a telecom partner, leaders must clearly communicate and cultivate their vision internally.

"It's really critical to have buy-in at multiple levels," says Eller. "To make the partnership work,

you need excellent leadership from the mayor or county executive on down. Then, make sure the city council is on board. They have to understand the vision, the benefits and why this is important to do now."

Find common ground

Governments should ensure a potential telecom partner understands their strategic goals and has a successful track record of collaborating with other public sector entities.

Governments and providers should work together to structure an agreement that is mutually beneficial, whether that means tapping into creative funding strategies (including federal funding sources) or reducing bureaucratic hurdles to accelerate build-outs, as Morgan Hill did by streamlining its permitting process.

Learn and adjust

Because of the scale and long-term commitment broadband projects involve, challenges likely will arise at some point. In these moments, it's important for everyone to keep the project's overarching goals in mind. For example, in Santa Maria, once the telecom company began digging into the ground, it discovered some areas with damaged conduit and others with no conduit at all. Nonetheless, says Marecic, "the partnership kept its eye on what the vision was" rather than getting bogged down by setbacks.

In this era of digital transformation and remote work, it's critical that state and local governments move forward with broadband modernization. Collaborative partnerships with private providers are essential for building out this vital network infrastructure.

"You need to have a foundational technology standard in place if you expect to have a vibrant community in the future," Eller says. "There's no time like right now to get started."

This piece was developed and written by the Government Technology Content Studio, with information and input from Wave.

1. https://www.fcc.gov/reports-research/reports/broadband-progress-reports/eighth-broadband-progress-report