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Ready or Not, 5G is Coming: Governments Need To Be Prepared Today.

5G will revolutionize government operations. State and local governments must start preparing for it now to ensure they can maximize its benefits.

The implementation of 5G wireless and broadband protocol technology around the world is well underway. Before the coronavirus pandemic, approximately 45% of the world's population was slated to have access to 5G-enabled technology by 2024. While the pandemic has decelerated the rate of 5G growth, leading developers of 5G technological equipment, backed by the federal government, are ramping up spending and deployment to meet a sharply increased demand for faster and better internet speed connections.

5G is enterprise-focused, technologically unmatched and geared toward empowering businesses, consumers and governments in ways unimaginable. It will bring enormous benefits to local governments to expand and leverage digital connectivity. For example, 5G will deliver wireless broadband speeds of up 100 times faster than 4G LTE, meaning that governments adequately prepared for it can expect 5G to make their digital operations run much more smoothly and efficiently.

Similarly, energy providers will be able to analyze consumer energy use to make it more efficient, internet of things devices can identify issues with home appliances, vehicles, traffic flow, weather, flight patterns and so on. By some estimates, 5G could spur \$13.2 trillion in economic activity by 2035. For local governments, that could lead to major increases in revenue, both from the application and renewal fees for 5G infrastructure devices (30,000 5G units for a 100,000 population city could mean up to more than \$8 million in new, annual renewed right-of-way fees alone) and from the tax revenue generated by new industries and businesses.

But it won't be easy for governments to get the most out of 5G without proper understanding and compliance with federal law. If they don't start preparing now to adopt, place, deploy and monitor compliance with federal laws they will find themselves quickly and easily overwhelmed by the significant policy and operational challenges required to build for the 5G future.

The stakes of successfully making the switch to 5G are monumental. State and local governments can't afford to be passive. The problem, however, is that reaping the benefits of 5G will require local governments to tackle several difficult policy and operational challenges.

First, 5G will substantially increase the administrative and management workload for local governments. Most of America's 5G hardware has yet to be built and deployed (despite the commercial ads). With the coronavirus pandemic already elevating the workload and stretching the public sector labor force and localities' tax bases to the breaking point, cities and counties could easily be overwhelmed by the influx of administrative work generated by 5G implementation and possibly miss out on the revenues.

Governments can start preparing for the massive workload and administrative demands from 5G by

streamlining their operations, automating their internal processes and upgrading their technology infrastructure to manage renewal fee revenues for system upgrades for regulatory compliance. With the right internal systems in place, governments will find they have the flexibility and efficiency to handle whatever 5G will throw at them. Public-private partnerships could certainly help with this, and governments may want to consider bringing in private sector vendors to help them.

Another challenge related to 5G is the enormous amounts of data that will be created. Governments will have to make hard decisions about how much data they will collect and how they will maintain and protect it. Retaining large amounts of data will dramatically increase the potential harms associated with a data breach. It doesn't matter whether that data is stored on a device or in the cloud, larger data stores present a more attractive target for data thieves. But thieves cannot steal data that has either been deleted after serving its purpose, properly secured or not even collected in the first place. That's why governments need to plan how they will prioritize, organize and potentially minimize the data they collect from their 5G-enabled jurisdictions and cities.

5G has the potential to usher in a new era of tech-savvy, data-driven governance. Governments should take the initiative to capitalize on these innovations and lean into the challenges so that they are best positioned to benefit from the impending 5G transformation. 5G is coming, and in many instances, already here. It's up to state and local governments to be ready for it.

Route Fifty

By Jonathan Gerth

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Jonathan Gerth is vice president of tax and audit services at Avenu Insights & Analytics.