



LegisBrief

A QUICK LOOK INTO IMPORTANT ISSUES OF THE DAY

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5G: The Future of Wireless Technology

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The next upgrade in wireless technology will be provided by fifth-generation, or 5G, systems. This emerging technology promises faster speeds, lower latency and greater capacity. The potential of 5G is wide-ranging, enabling advances in health care, transportation, public safety and other areas. It also will impact sustainability across the burgeoning internet of things (IoT) environment, in which devices are becoming increasingly interconnected.

To deploy this technology, new infrastructure called small cells will be used. As defined by CTIA, the U.S. wireless industry association, "A **small cell** installation consists of small radio equipment and antennas that can be placed on structures such as streetlights, the sides of buildings, or poles.

They are about the size of a pizza box, and are essential for transmitting data to and from a wireless device." Small cells generate less power and collect and transmit signals in a short range from one another.

To make it economically feasible for wireless companies to deploy small cells across communities, an updated regulatory regime that moves away from an era dominated by large macro-cell towers is needed. However, states often must strike a balance between quickly and efficiently installing

the infrastructure necessary to deploy 5G and local concerns about how the new infrastructure will affect communities, aesthetics and property values.

State Action

State regulatory reform laws, often referred to as small cell laws, take into consideration the unique circumstances of their state and local environments. Some states mandate stringent requirements for state agencies and local governments responsible for developing small wireless facilities. Others provide a loose framework as guidance for local governments and agencies. However, across all small cell legislation, baseline principles can be established that are consistent with wireless standards.

■ **Streamlined Rights of Way (RoW) and Permitting.** Twenty state legislatures have enacted small cell legislation that streamlines regulations to facilitate the deployment of 5G small cells. Those states are [Arizona](#), [Colorado](#), [Delaware](#), [Florida](#), [Hawaii](#), [Illinois](#), [Indiana](#), [Iowa](#), [Kansas](#), [Minnesota](#), [North Carolina](#), [New Mexico](#), [Ohio](#), [Oklahoma](#), [Rhode Island](#), [Tennessee](#), [Texas](#), [Utah](#), [Virginia](#) and [Washington](#). Additionally, the [Missouri](#) legislature passed a small cell bill that is awaiting the governor's signature.

Did You Know?

- 5G stands for the fifth generation of wireless technology, which will provide faster data transmission for phones, tablets and interconnected devices.
- Twenty state legislatures enacted small cell legislation to streamline state and local regulations to encourage industry deployment of 5G infrastructure.
- State small cell laws address rights of way access, limitations on fees and time limits for processing applications.

State legislatures seek to balance the interests of local communities and local agency authority to regulate public spaces with the industry’s need for regulatory certainty and efficiency in deploying small cell infrastructure.

All states that enacted small cell legislation allow providers to place poles and facilities in public rights of way. In some states, such as [Delaware](#), [Florida](#) and [Virginia](#), the laws give jurisdiction over care, management and control of the RoW to the department of transportation. They also allow state or local authorities to impose limited restrictions on that access.

All enacted legislation includes nondiscrimination provisions, prohibiting local jurisdictions from treating wireless providers differently than other applicants seeking access to public rights of way.

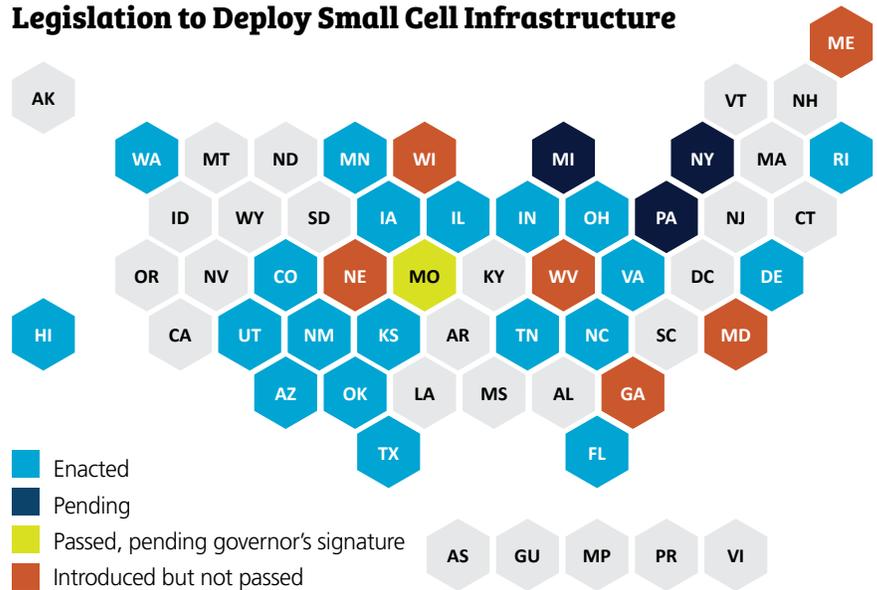
While most states prescribe specific rules to which local authorities must adhere, [Washington](#) provides a loose framework. Its law is deferential to local governments, “encouraging” them to allow wireless service providers to file single applications and permits for multiple facilities. It also encourages decisions regarding land use permits to be made in a single proceeding. The law does not include certain provisions found in other state laws, such as RoW access and limits on fees. The state considered legislation that was more aligned with other states’ laws, including [HB 2592](#), which passed out of committee before the legislative session adjourned.

■ **Limits on fees.** States have a fundamental interest in how local governments administer and use public spaces. Localities, meanwhile, incur costs to maintain rights of way and must respond to residents’ aesthetic and other concerns.

All states that enacted small cell bills charge application processing fees and impose annual fees on new attachments to public structures. At least four states—[Arizona](#), [Kansas](#), [North Carolina](#) and [Virginia](#)—impose annual fees for access to rights of way and requires those fees be related to reasonable and direct costs for managing the RoW.

[Utah](#) permits local discretion on zoning, land use, planning and permitting on a nondiscriminatory basis. Localities may impose an RoW fee if the provider does not currently pay the state’s municipal telecom tax, but local authorities are prohibited from requiring providers to perform a service unrelated to the collocation permit. [Virginia](#) is more prescriptive, prohibiting fees except for applications, and setting limits on how much a locality can charge. The law requires annual recurring costs charged by the locality to be actual, direct and reasonably related to the use of the space. The local government authority has burden of proof in disputes over whether costs are reasonable.

Legislation to Deploy Small Cell Infrastructure



Source: NCSL

■ **Time Limits on Applications and Deemed Granted Provisions.** All enacted legislation establishes timelines for reviewing, approving or rejecting small cell applications. Fourteen states—Arizona, Colorado, Delaware, Florida, Kansas, Indiana, Iowa, Minnesota, North Carolina, New Mexico, Rhode Island, Texas, Utah and Virginia—provide for a ‘deemed granted’ provision: If the authorizing agency fails to approve or deny the application within the established period, the application is deemed approved.

Federal Action

U.S. Representative Richard Hudson (R-N.C.) introduced a resolution declaring support for prioritizing federal funding for wireless broadband providers in states that have enacted [wireless small cell facility reforms](#). U.S. Representative Anna Eshoo (D-Calif.) introduced a bill that directs the Federal Communications Commission (FCC) to publish best practices and model policy for a state implementing a “[one touch make ready](#)” policy.

The FCC is also considering what role the agency should have in paving the way for 5G deployment. In forming the Broadband Deployment Advisory Committee (BDAC), the agency is seeking recommendations in the form of a [model state code](#) for streamlining application fees, access to RoW and deployment of broadband. FCC Chairman Ajit Pai [announced](#) that the BDAC recommendations would be a basis for FCC action. FCC Commissioner Brendan Carr, in an April speech at the [CTIA’s Race to 5G Summit](#), said he will focus on state and local review processes for deploying 5G equipment.

Additional Resources

- [NCSL webpage, Mobile 5G and Small Cell Legislation](#)
- [Federal Communications Commission, Broadband Deployment Advisory Committee](#)
- [CTIA, The Race to 5G](#)
- [Wireless Infrastructure Association, The State Wireless Association Program \(SWAP\)](#)
- [National Rural Electric Cooperative Association \(NRECA\), Making Way for 5G](#)

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