



TACIR INSIGHT

TENNESSEE ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS

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SMALL CELL WIRELESS FACILITIES AND PUBLIC RIGHTS-OF-WAY: ASSESSING THE EFFECTS OF PUBLIC CHAPTER 819, ACTS OF 2018

Background

As our needs and expectations for mobile wireless service continue to evolve, so too are the networks that support them. The wireless industry is supplementing the large, several-hundred-foot-tall cell towers that characterized the first several generations of mobile wireless networks with smaller facilities—typically installed on utility poles, streetlights, or standalone poles no more than 50 feet tall. These small cells—so-named because of their relative size and range when compared to earlier wireless facilities—are being used to improve the performance of mobile wireless service.

Citing the benefits of Tennessee’s “long-standing policy of encouraging investment in technologically advanced infrastructure,” the General Assembly passed Public Chapter 819, Acts of 2018, which both created a framework governing the regulation of small cell wireless facilities in public rights-of-way and directed TACIR to study the effects of the Act. The Commission was further directed to make recommendations for any changes to the Act based on the study’s findings.

Findings and Recommendations

The Commission’s findings include:

- Initial small cell deployments have been located primarily in urban and suburban areas in need of added wireless capacity. Because broadband is more likely to exist in these areas already, the Act’s effect on broadband deployment in unserved areas has been minimal, though the wireless industry reports it has facilitated investment in Tennessee.
- Although several new or enhanced applications in transportation and other sectors likely could be supported by small cells, there is uncertainty about how soon advances in wireless service can fuel new products consumers are willing to pay for.
- Commission staff did not attempt to quantify the Act’s fiscal effect given the limited number of local governments that had received more than a dozen small cell applications at the time of their interviews. While some local officials raised concerns about the maximum fees authorized under the Act, a few said that the cost of complying with the Act has been minimal.
- The effect of small cells on community aesthetics is the most widespread concern among local officials interviewed. Although local governments already have authority under the Act to require that small cells conform to locally adopted aesthetic standards, this authority likely won’t fully address concerns that the installation of numerous, new poles to support small cells in public rights-of-way could create visual clutter, because aesthetic standards must comply with

provisions in the Act that—among others—prevent local governments from requiring small cells to be colocated on existing poles. Local governments are currently authorized to propose design alternatives—which could include colocation on existing poles—during the application review process, offering an opportunity for applicants to collaborate on solutions acceptable to both parties.

Because aesthetic concerns are unlikely to diminish as the number of small cells increases, the Commission makes two recommendations:

- As already authorized under the Act, local governments are encouraged to both update existing ordinances that set aesthetic standards for their communities to ensure their requirements apply to small cells and include small cells in any new standards they adopt.
- The General Assembly could consider authorizing local governments to require colocation of small cells in areas with existing poles. Care would need to be taken to ensure this authority could not be used to block the deployment of small cells in situations where applicants can demonstrate that colocation is not feasible either for technical reasons or because of added costs, similar to limitations on colocation requirements adopted in Georgia. Regardless, some new poles will be necessary to improve wireless service given the limited distance traveled by some of the wireless signals used by providers. And because colocation will likely involve the use of electric utility poles, any colocation requirements should also ensure the continued authority of local power companies to protect the safety and reliability of the electric grid.

See TACIR's full report at the following link for additional information: <https://www.tn.gov/tacir/tacir-publications.html>.