



# **Broadband in West Virginia**

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## **A Legal Guide for Local Governments**

**WVU**LAW

**Land Use and Sustainable Development Law Clinic**

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# Acknowledgements

Broadband in West Virginia: A Legal Guide for Local Governments is the culmination of the efforts of numerous individuals and organizations.

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## Consultation with Experts

The law is constantly evolving. This toolkit does not provide an exhaustive list of legal barriers or solutions and should not be construed as legal advice. Instead of relying solely on this toolkit, community leaders are strongly advised to consult with an attorney and other experts prior to implementing any of these legal tools. All tools included in this toolkit are currently enabled under West Virginia law.

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# Introduction

While many resources discuss the benefits of broadband or aspects of broadband expansion, this particular toolkit seeks to introduce legal issues relevant to local governments and local government partners in West Virginia as the state seeks improved broadband access.

West Virginia ranks 44th among all states for internet connectivity, and only 39.3% of West Virginia residents have affordable internet access.<sup>1</sup> Local governments and partners must think creatively about how to expand broadband. Although this toolkit identifies useful resources on developing partnerships and feasibility studies, the focus of the toolkit is on legal issues and legal tools.

*“The importance of the availability of high-speed internet and cellular telephone service cannot be underestimated. The availability of high-speed internet is important for businesses to operate effectively, for residents to be able to telecommute and access information, and for students to access digital learning tools.”*

***Doddridge County Comprehensive Plan***

## Defining Broadband

This toolkit defines “Broadband” or “broadband service” as internet access with a download speed of at least 25 Megabits per second (Mbps) and a minimum upload speed of 3 Mbps, often referenced with a short-hand of 25/3 Mbps. This definition is used by the Federal Communications Commission (FCC).

<sup>1</sup> Internet Access in West Virginia, Broadband Now, <https://broadbandnow.com/West-Virginia>.

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## Themes to Keep in Mind

### Affordability

Sixteen percent of West Virginians live in poverty,<sup>2</sup> as compared to the national average of 10.5%.<sup>3</sup> Solutions must consider households' ability to pay and opportunities to support low-income families.

### Geography

The mountainous and remote nature of many West Virginia communities make broadband expansion complicated. Middle-mile strategies challenging to other states prove even more complex with steep slopes and additional mileage. Population per square mile is only 77.1 in West Virginia,<sup>4</sup> compared to the national average of 92.9.

### Partnerships

Broadband presents a complex infrastructure challenge with technical, financial, and social issues to consider. Collaboration and effective communication with partners and providers are key to implementation of a successful project.

### Regionalism

Given low population density and economies of scale, combining forces with other local governments and regional partners may be necessary to attract broadband resources and achieve the economies of scale necessary for broadband expansion to make business sense. Many regions and leaders share the same goals. For example, the Region 1 Planning and Development Council's 2017 Comprehensive Economic Development Strategy included a regional goal "[t]o achieve a diversified and balanced economy within the Region," including development of "broadband infrastructure in preferred development areas and in unserved and underserved areas."

<sup>2</sup> West Virginia Quick Facts, US Census, <https://www.census.gov/quickfacts/WV>.

<sup>3</sup> 2020 Current Population Survey Annual Social and Economic Supplement (CPS ASEC), <https://www.census.gov/data/datasets/time-series/demo/cps/cps-asec.html>.

<sup>4</sup> West Virginia Quick Facts, supra n. 2.

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## Planning for Broadband

In order to complement the best practices already recommended by other sources, this toolkit focuses on legal issues specific to West Virginia. Ideally, this toolkit will be used in combination with other resources. For example, key recommendations to plan for broadband expansion include development of partners, assessing broadband resources, engaging stakeholders, evaluating technology and service options, and then creating a project plan. This toolkit does not discuss those issues, but existing resources assist with these steps, as listed below:

1. Appalachian Regional Commission Broadband Toolkit<sup>5</sup>
2. National Telecommunications Information Administration Community Broadband Roadmap<sup>6</sup>

## Structure of the Toolkit

Part 1 discusses local government's role in providing internet service, including partnerships with other local entities or public private partnerships. Part 2 then identifies common legal issues a local government may encounter with different partnership models, such as leasing, differences in taxation, and insurance. In Part 3, the toolkit explains a local government's role as regulator. This section introduces the ordinances that local governments can adopt related to broadband infrastructure. Part 4 delves into remaining legal issues, including federal permitting and funding. Finally, the appendices provide examples of ordinances, leases, and partnership agreements referenced in the toolkit. The appendices also provide a list of funding sources, compiled by the WVU Entrepreneurship and Innovation Law Clinic, as well as resources from other technical assistance providers, including the Broadband Enhancement Council.

## Research Process

This toolkit was drafted by attorneys at the Land Use and Sustainable Development Law Clinic and informed by interviews with experts and local leaders across the state of West Virginia. In the Fall of 2019, the Clinic began interviewing experts and local government officials. Ironically, with the COVID-19 pandemic and travel restrictions imposed by the state, much of the research transitioned to online discussions in 2020 and early 2021. Key partners included the Broadband Enhancement Council, the Regional Planning and Development Councils, and Generation West Virginia.

<sup>5</sup> Broadband Planning Primer and Toolkit, Appalachian Regional Commission (2016), <https://www.nado.org/wp-content/uploads/2016/10/ARCBroadbandPlanningPrimerToolkit.pdf>.

<sup>6</sup> Resources, Broadband USA, <https://broadbandusa.ntia.doc.gov/ntia-resources/publications>.

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## Examples of Broadband

A community can gain access to broadband via several high-speed transmission technologies: digital subscriber line (“DSL”), cable line, fiber, wireless, satellite, and broadband over power lines (“BPL”).<sup>7</sup> Depending on individual community needs, one or more of these technologies may be a good fit for bringing broadband access to rural communities.

### DSL

DSL is a broadband option that can be purchased through a telephone company. It can be convenient for users because the Internet access is provided through telephone lines that are already installed.<sup>8</sup> DSL speed depends on proximity to the closest telephone company facility.<sup>9</sup>



### Cable Lines

Cable broadband can be purchased through a cable company. It provides Internet access by using the same cable lines that deliver the audio and video to television sets, a convenient option for users if these cable lines are already installed.<sup>10</sup> The speed of cable is typically much faster than DSL and can be ideal for video conferencing and video streaming.<sup>11</sup>



### Fiber

Fiber broadband, offered through telephone and cable companies, is often the fastest option for users.<sup>12</sup> If fiber-optic cable is not already installed through the telephone or cable companies, fiber broadband can be more



<sup>7</sup> Federal Communications Commission, <https://www.fcc.gov/general/types-broadband-connections>.

<sup>8</sup> Business Internet, Cable One Business, <https://business.cableone.net/business-resources/business-internet/5-types-broadband-internet-connection>.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*



difficult to obtain.<sup>13</sup> However, “if the fiber-optic cable has been run to the curb outside or to a location somewhere between your [location] and the provider’s facility,” subscription to a fiber Internet connection may still be possible.<sup>14</sup>

### Wireless

Wireless broadband (different from Wi-Fi) allows users to connect to the Internet “using a radio link between the customer’s location and the service provider’s facility.”<sup>15</sup> Wireless broadband is a good option for users in remote locations without telephone or cable connections.<sup>16</sup>



### Satellite

Satellite broadband provides another wireless option for users to connect to the Internet via satellite that orbits the earth.<sup>17</sup> Satellite broadband is also a good option for users in remote locations due to its wireless nature.<sup>18</sup> However, while faster than dial-up, satellite Internet connections may slow down or even be disrupted completely in severe weather conditions.<sup>19</sup>



Recent developments have occurred to implement low-earth orbit (LEO) satellite arrays that provide far higher internet speeds at much lower latencies than more traditional satellite internet providers, making this wireless option even more compelling for remote rural areas.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> *Supra*, n.1.

<sup>16</sup> *Supra*, n.3.

<sup>17</sup> *Supra*, n.1.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

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### BPL

BPL is an emerging technology that provides broadband using electrical connections and outlets.<sup>20</sup> Although access is currently limited, BPL can be a great option for cheap Internet because it “alleviat[es] the need to build new broadband facilities for every customer” since power lines are already in place “virtually everywhere.”



<sup>20</sup> *Id.*

# Broadband Providers

The introduction describes a range of broadband technologies. This section describes the range of broadband providers, more commonly referred to as Internet service providers (ISPs):

- Private Internet Service Providers
- Public Internet Service Providers
- Public Private Partnerships

The Broadband Enhancement Council (BEC) tracks both broadband speeds and broadband service, in terms of provider options and availability within the state.

## Private Internet Service Providers

Private ISPs are the most common method for businesses and individuals to access the internet. Private companies are profit driven and typically need some population density for providing service to make business sense.

The BEC Interactive Map highlights whether a community is served, underserved, and also what providers are working in the area. This map of Welch, West Virginia, shows that Frontier provides service in parts of the region.

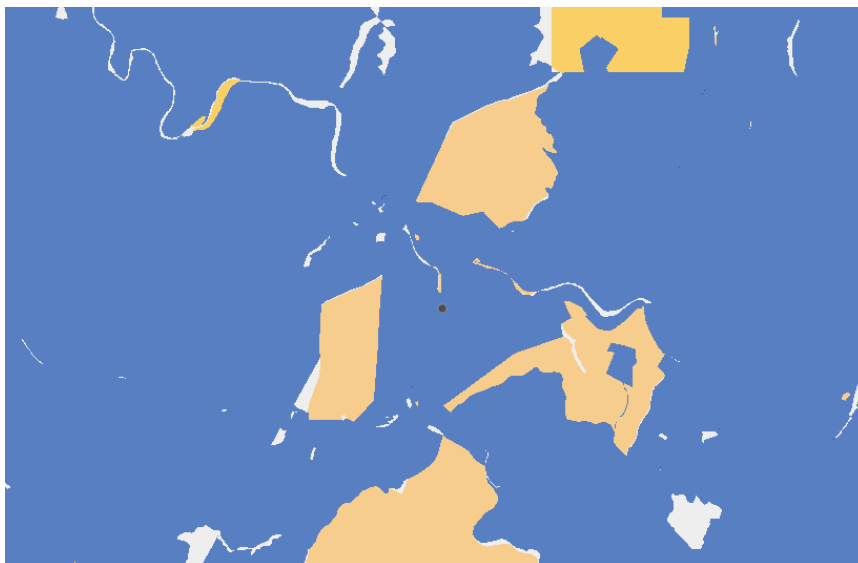


Figure 1: BEC Interactive Map

The following ISPs provide some level of service in West Virginia as of March 2020:

Alpha Technologies  
Armstrong  
AT&T  
ArxWeb  
Charter Spectrum  
Citynet  
ClearFiber  
Comcast  
Digital Connections-Prodigi  
Frontier  
HardyNet  
Hughes Net  
Micrologic  
Raven Rock Networks  
Rt21.Net  
Shentel  
Sprint  
Sprint Forward-Boost  
Mobile  
Starlink  
Suddenlink (Altice USA)  
T-Mobile  
VerizonViasat

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## Public Internet Service Providers

Broadband has been slow to move into certain parts of West Virginia due to topography and low population density. Local governments not wanting to wait for conditions to change have several options. Most directly, local governments can build broadband infrastructure and provide service to residents acting as an Internet service provider. Currently, no local governments are operating independently as ISPs in West Virginia due, in part, to a lack of authority. However, in many cases, local governments also lack the capacity to both build and manage infrastructure and provide service. More frequently, a local government will develop a partnership with an existing ISP. The focus of this chapter is the various other models under the West Virginia Code that would allow a local government to play a role in providing Internet service in the community.

## Public Private Partnerships (PPP)

Local governments wanting to expand broadband but lacking the population density or market to attract private infrastructure investment may wish to develop partnerships in order to facilitate broadband expansion. The expertise required to design, construct, and finance broadband services may be beyond a local government to develop on its own. In addition to expertise, capital may simply not be available in a local government's budget for this level of undertaking.

The PPP model emphasizes the strengths of both the public and private sectors. The PPP draws upon private sector expertise in the construction, maintenance, and management of rural broadband, while retaining public-sector ownership of certain assets. Partnerships can be structured in various ways, from very passive involvement to significant involvement.

As of March 2021, no local government operates as an ISP in the state. However, a few efforts are underway. In each of these efforts, a private ISP participates in the project. The private ISP offers expertise and capacity that local governments typically do not possess.

### Public Promotion or Facilitation

In some cases, minimal public involvement may be enough to attract private investment. Some examples include:

- Providing efficient permitting
- Sharing data on the demographics of potential users, existing public rights-of-way, or existing utilities
- Allowing access to existing government fiber
- Allowing access to existing government real estate, where equipment could be placed

- 
- Implementing dig once policies<sup>21</sup>

In order to reduce cost and improve efficiencies during broadband expansion, West Virginia has adopted "dig once" policies. Dig once policies promote the installation of multiple utilities as roads and rights-of-way are re-paved or altered. The Broadband Enhancement Council and the West Virginia Department of Highways partnered to develop the Dig Once 2020 Policy Guide and the Dig Once Checklist, included in online appendices.<sup>22</sup>

### *Public Funding, Private Implementation*

Public funding and public guarantees are another way to attract investments. First, many federal grant regimes require public sector ownership of some broadband assets. To benefit from subsidies, a private ISP can partner with a local government that owns land or existing infrastructure needed for broadband deployment. Both parties benefit from the financing assistance: the local government retains ownership interests in land or facilities, and the private company benefits from reduced cost and increased access.

Next, a local government could directly fund or guarantee investments in broadband, whether contracting to build infrastructure or building the infrastructure in-house.

Another PPP arrangement particularly relating to telecommunications towers is leasing. The local government might lease land from a private resident or company to construct a tower. Then, the local government may lease space on a tower to telecommunications providers.

### *Local Government Authority to Participate in a PPP*

West Virginia does not have a state statute that specifically addresses local government participation in a PPP for broadband. Instead, local governments should look to the traditional powers authorized in Chapters 7 and 8 of the West Virginia Code to determine if a contract or other arrangement is appropriate. In some cases, a local government may not have the authority independently but can work with another organization—such as a development authority, joint development entity, or broadband cooperative association—to achieve its goals.

<sup>21</sup> The Emerging World of Broadband Public-Private Partnerships: A Business Strategy and Legal Guide, Coalition for Local Internet Choice (May 2017), [https://www.benton.org/sites/default/files/partnerships\\_0.pdf](https://www.benton.org/sites/default/files/partnerships_0.pdf).

<sup>22</sup> West Virginia Dig Once Policy, Broadband Enhancement Council, <https://broadband.wv.gov/resources/west-virginia-dig-once-policy/>.



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### Development Authorities

Development authorities possess the ability to own broadband infrastructure and to operate as internet service providers. Both municipalities and counties may form development authorities, which are public corporations separate from the local government.<sup>23</sup> Boards appointed by the governing body of the county or municipality govern the affairs of the development authority.<sup>24</sup>

County development authorities hold broader powers than municipal development authorities. County development authorities hold the right of eminent domain.<sup>25</sup> In addition, three or more county development authorities may engage in joint projects and share tax revenues and other revenues and expenses, regardless of the location of the project.<sup>26</sup> Each county development authority must contribute at least \$15,000 in cash to a joint economic development project.<sup>27</sup> Joint economic development projects are not defined, but appear to include joint projects to operate an ISP. Importantly, a private ISP cannot have ownership in a county joint economic development project. A private ISP could only be involved as a contractor or in some other subordinate capacity.

### Joint Development Entities

Any combination of county commissions, town or city councils, or municipal or county development authorities may also form a business entity to develop and own a joint economic development project.<sup>28</sup> The project may be developed in the form of a corporation, partnership, or limited liability company.<sup>29</sup> Although this structure allows for collaboration among local governments and development authorities, no private ISP may participate as an owner.<sup>30</sup> Similar to the previously discussed arrangement, the private ISP would only participate as a contractor or in some other capacity.

### Cooperative Associations

Another way local government may provide internet service is as a member of a cooperative association.<sup>31</sup> A broadband cooperative association may provide internet service or engage in

<sup>23</sup> W. Va. Code §§7-12-1; 7-12-6.

<sup>24</sup> *Id.* §7-12-3, 3a.

<sup>25</sup> *Id.* §7-12-7a.

<sup>26</sup> *Id.* §7-12-9a(a)-(b).

<sup>27</sup> *Id.* §7-12-9a(c).

<sup>28</sup> *Id.* §7-12-9b(b).

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> W. Va. Code §31G-2-1 et seq.

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any activity connected to internet service.<sup>32</sup> A cooperative, unlike a traditional ISP, is owned by the users of the internet services, called members. At least twenty users of internet services are necessary to form a cooperative.<sup>33</sup> Local governments that use internet services may be members.<sup>34</sup> However, local governments would only have one vote in managing the association, just like any other member of the cooperative association.<sup>35</sup>

Members share profits, but their liability is limited to the amount of unpaid membership fees.<sup>36</sup> The cooperative may also execute marketing contracts, requiring members for not more than five years to use or provide all or a portion of internet services through the association.<sup>37</sup> The affairs of the cooperative are governed by a board of directors elected by the members or shareholders.<sup>38</sup> For more information on cooperatives, see the Entrepreneurship and Innovation Law Clinic's Broadband Cooperative Toolkit, at Appendix G.

Currently there are no broadband cooperatives in West Virginia. For more information, refer to the following resource: Guide to Broadband Co-ops, <https://broadband.wv.gov/resources/broadband-cooperative-associations/>

#### Area Development Corporations

Municipalities and county commissions may also become members and participate in area development corporations.<sup>39</sup> These corporations are nonprofit corporations that seek to promote business prosperity and economic development in the state.<sup>40</sup> Member local governments may contribute to the cost of projects and transfer property to the corporation.<sup>41</sup> Area development corporations must agree, as a condition to monetary contributions or property transfers, to provide an accounting and receipts and disbursements upon demand of the local government.<sup>42</sup> A Class II advertisement and public hearing must precede any transfer of real property.<sup>43</sup>

The following table summarizes the various structures within which a local government may collaborate. The organizations differ in a number of ways, and the best type of organization depends on specific local government needs.

<sup>32</sup> *Id.* §31G-2-4(1).

<sup>33</sup> *Id.* §31G-2-2.

<sup>34</sup> *Id.* §31G-2-1.

<sup>35</sup> *Id.* §31G-2-13(d).

<sup>36</sup> *Id.* §31G-2-12.

<sup>37</sup> *Id.* §31G-2-16.

<sup>38</sup> *Id.* §31G-2-10(a).

<sup>39</sup> *Id.* §§7-5-18, 8-32-2.

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*

	Development Authority	Joint Development Entity	Cooperative Association	Development Corporation
Local Government as Co-Owner	No	Yes	Yes	Yes, can be a member
Private Entity as Co-Owner	No	No	Yes	Any person, majority must be residents of West Virginia; financial institutions may be members
Number of Collaborators Required	N/A	2	20	10
Owners Liable for Debts	Local governments not liable for debts; only property of development authority is subject to debts	Local governments not liable for debts; only property of development authority is subject to debts	Members not liable for debts, unless dissolving and assets distributed to members	Local governments not liable for debts
Taxation	Exempt from taxation; real and personal property also exempt from taxation	Exempt from taxation; real and personal property also exempt from taxation	Not specified	Exempt from license tax, business and occupation tax; taxed as banking institution
Business Entity	N/A	Partnership, Corporation or Limited Liability Company	Cooperative Association	Development Corporation
General Law Applicable	N/A	Governed by general partnership, corporation or LLC law; also granted certain powers of a Development Authority under W. Va. Code §§ 7-12-7, 8-12, 14	Nonprofit corporation laws (Chapter 31E West Virginia Code); detailed governing law in statute	General Corporation law, Chapter 31 of the Code of West Virginia
Public Corporation	Yes	Yes	No	No
Political Subdivision	No	Yes	No	No
Eminent Domain Authority	Yes	Yes	No	No
Authority to enter agreements in connection with obtaining funds	Yes	Yes	Not specified	Yes; may loan or borrow money
May accept transfers of property from local government with or without consideration	Yes	Yes	Not specified	Yes
May accept contributions	Yes	Yes	Not specified	Yes
Upon Dissolution	Assets revert to local government after debts paid	Presumably governed by partnership, corporation or LLC law, which generally distributes assets to owners after debts paid	Assets distributed to members after debts paid; Article 13, Chapter 31E of the W. Va. Code	Not specified
Workers Compensation	Yes	Yes	Yes	Not specified
Control	Board of Directors appointed by local government	Board of Directors elected by local government and development authority members	Board of Directors elected by members or stockholders	Board of Directors elected by members
Limitations on Ownership	N/A; created by local governments	Only local governments and development associations	User owners only; private or public	Any person, financial institution, or West Virginia local government; majority of members from area

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# Local Regulation

## Introduction

The regulation of telecommunications infrastructure is a mix of federal, state, and local control. The federal government has laid out the basic structure of telecommunications regulation under the Federal Telecommunications Act of 1996. However, Congress explicitly left some regulation to the state and local governments, while placing limits on that control. With respect to state and local control, the state generally holds authority. The state may delegate some of this authority to local governments but ultimately controls the scope of local authority.

Much of the authority to regulate telecommunications at the local level is through land use controls, particularly aesthetic controls. In West Virginia, as in many states, the state has delegated land use control, like zoning, to the local governments, with a few exceptions and limitations. The federal government likewise mostly defers to state and local authority to control land use.

This chapter first examines the regulation of macrocells, commonly referred to as cell phone towers. Next, this chapter separately addresses local regulation of “small cells,” known as 5G. The State of West Virginia has placed limits on local government authority to regulate small cells, necessitating special treatment. In addition, federal regulations differ slightly between macrocells and small cells. Sample local government ordinances regulating macrocells, through zoning, and small cells, as a standalone ordinance, are contained in the appendix to this toolkit.

Even with respect to land use, the Federal Telecommunications Act and associated regulations control much of the process, provide time constraints, and prohibit discrimination in certain respects. The subsequent sections of this chapter provide a detailed discussion of special considerations during the application and permitting process. These special considerations include making a “substantial change” determination, the varying “shot clocks” that place time limitations on local governments to approve or deny applications, and the Roswell case, which was recently decided by the United States Supreme Court and provides greater detail on the timing and form of issuing a denial of a telecommunications application.



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Please note that this chapter focuses on local government regulation. Local governments also own land and infrastructure. When in the role of a landowner, the local government holds broader authority to control the activities on its land. Just as a landowner may decide to prohibit certain activity, so too may a local government when dealing with its own property.

## Macrocells

### Definition

Telecommunications is communication by electricity, including telephone, mobile telephone, internet, telegraph, radio, cable television, and satellite. Macrocells are the large-scale infrastructure that provides far-reaching coverage for cellular services.

### Purpose

Congress enacted the Telecommunications Act of 1996, in part, to reduce impediments to the development of telecommunications facilities imposed by local governments. In furtherance of this purpose and as technology has developed, telecommunications facilities law has evolved with the Middle Class Tax Relief and Job Creation Act of 2012, as well as other acts, orders, and rulings largely to promote the development and rapid implementation of telecommunications facilities. Meanwhile, telecommunications facilities may involve significant and visually imposing infrastructure.

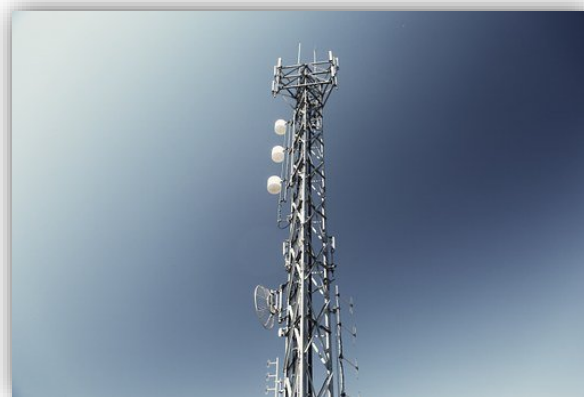
### Implementation

Local governments retain the ability to regulate the installation, location, and placement of macrocell telecommunications towers, antennas, and related facilities through zoning. More specifically, zoning may include restrictions on height, fencing, setback, screening, painting, and landscaping. Beyond these tools, local governments may require the camouflaging of macrocell telecommunications facilities to minimize their visual impact.

Through zoning, large telecommunications towers and antennas may be regulated as a use permitted by right or as a conditional use. However, denial of conditional use permits may not be based on generalized fears related to safety, property values, or aesthetics, but instead



*Macrocell Telecommunications Facilities*



*Cell towers are a raised structure with antennas for one or more cellular providers, usually accompanied by a base station.*



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must be based on findings related to the ordinance criteria for approval and supported by substantial evidence on record.

Notably, regulation cannot unreasonably discriminate among providers of functionally equivalent services.<sup>44</sup> These limitations mean that a local government cannot give preferential treatment to one cell service provider over another. So long as the services offered are similar (for example, broadband service or cell phone service), each carrier must be treated the similarly.

In addition, regulation cannot ban or effectively ban wireless services.<sup>45</sup> The best way to protect the local government's authority to deny cell phone towers in unwanted locations while allowing the facilities in other locations is to (1) include preferred locations within the comprehensive plan and (2) use zoning to delineate how facilities may manifest in those preferred locations. Courts look upon local and regional planning favorably, as the comprehensive plan indicates where the facilities are preferred and prove that the regulations do not amount to a ban.<sup>46</sup>

### Collocation

Local governments may require collocation to ensure both that new antennas locate on existing towers, where feasible, and that new towers are constructed and designed to accommodate multiple users. Additionally, local governments may require proof that a proposed antenna cannot be accommodated on an existing tower before permitting a new tower to be constructed.

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### Collocation

The practice of locating multiple wireless broadcast facilities or providers within or on the same facility.

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<sup>44</sup> 47 U.S.C. §332(c)(7)(B)(i)(I).

<sup>45</sup> 47 U.S.C. §332(c)(7)(B)(i)(II).

<sup>46</sup> See, e.g., *USCOC of Virginia RSA #3 v. Montgomery County Bd. Of Supervisors*, 343 F.3d 262 (4th Cir. 2003).

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### Substantive Limitations

Local governments *may not*...

- unreasonably discriminate against providers of functionally equivalent services
- regulate facilities such that personal wireless services are actually or effectively prohibited
- regulate on the basis of environmental effects of radio frequency emission inconsistent with FCC regulations

### Procedural Limitations

Local governments *must*...

- review an application within a “reasonable period of time”
- issue a denial in writing, supported by substantial evidence contained in a written record

Any person adversely affected by the final decision made on an application may bring a court action, which must be considered on an expedited basis.

The FCC has clarified the “reasonable period of time” that local governments are afforded to act on telecommunications applications. These time frames, known as “shot clocks,” are the amount of time within which local officials should ordinarily be able to decide on an application. With rare exception, local governments should adhere to the applicable shot clock, which varies according to the type of application.

### Macrocell Shot Clocks

- 60 days: macrocell eligible facilities requests not involving a substantial change
- 90 days: macrocell modifications involving a substantial change
- 150 days: new macrocell facilities

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#### Shot Clock

The reasonable period of time within which a local government may review and decide on an application for telecommunication facilities.

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### Variation in Regulation According to Changes Requested

Beyond shot clocks, how local governments regulate telecommunications facilities varies based upon what changes or developments are being requested. As a baseline, telecommunications facilities owners may perform ordinary maintenance without local permitting, as well as make minor changes that do not amount to an actual “modification” of the facilities.

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Meanwhile, modifications to macrocell telecommunications facilities fall into one of two categories (1) those that *do not* involve a substantial change, known as an eligible facilities request that must be approved, and (2) those that *do* involve a substantial change.

What constitutes a “substantial change” is defined in detail by the FCC and involves an eligible facilities determination and different shot clocks.

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#### *Acronyms*

FCC = Federal Communications Commission

FAA = Federal Aviation Administration

EPA = Environmental Protection Agency

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#### *Intersection with Various Laws*

Telecommunications infrastructure may involve a number of different federal and state laws, of which local governments should be aware in order to avoid preemption. That is, local governments must be careful not to regulate what the state or federal government already regulates. For example, rules issued by the FCC, FAA, or the EPA may affect whether and to what extent local government may regulate telecommunications facilities.

#### *West Virginia Context*

If a local government in West Virginia wants to regulate macrocell telecommunications facilities, the authority to do so exists only through zoning authority. Local governments have not been granted authority by the State of West Virginia to adopt standalone ordinances for macrocell telecommunications facilities. Where local governments opt to regulate through zoning, the zoning ordinance may be significantly tailored to the community’s needs, provided the few required aspects of a zoning ordinance generally, as delineated in Chapter 8A of the West Virginia Code, are met.

Local governments may pursue four different strategies in regulating macrocells. The first zoning strategy allows telecommunications towers only in certain zoning districts in the community—no site-specific review is conducted, and no design controls apply. A word of caution: this regulation should be consistent with any treatment of telecommunications facilities in the comprehensive plan.

The next two zoning strategies build upon the first incrementally. Beyond districting, local governments may utilize site-specific review of the location of a particular tower at an identified location—this occurs through a conditional use permit. The third strategy is the most comprehensive zoning approach, as the local government additionally incorporates design controls involving camouflaging and collocation. Local governments have some flexibility with these controls.

Finally, the local government may choose to do nothing. In this case, telecommunications towers may be built anywhere in the community with the only limits coming from federal and state controls.

In considering the options for local regulation of telecommunications towers, the community should always consult with its local government attorney. In addition, public input is important to gauge community desires.



*Camouflaging v. No Camouflaging*



### Small Wireless Facility

Each antenna is located inside an enclosure of no more than six cubic feet in volume, and all other wireless equipment associated with the facility is cumulatively no more than 28 cubic feet in volume.<sup>47</sup>

<sup>47</sup> *Id.*

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## Small Cells

### Definition

Small wireless facilities, also known as “small cells” or “5G,” supplement macrocell telecommunications facilities, providing higher data speeds while utilizing smaller facilities. In order to be considered a small wireless facility, telecommunications facilities must be limited in size: antennas no larger than six cubic feet and all other equipment no larger than 28 cubic feet.<sup>48</sup>

### Purpose

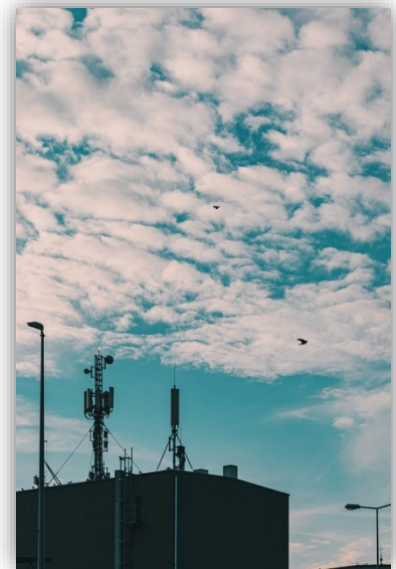
According to the Federal Communications Commission, “America is in the midst of a transition to the next generation of wireless services, known as 5G . . . [that] can unleash a new wave of entrepreneurship, innovation, and economic opportunity for communities across the country.”<sup>49</sup> The proliferation of small wireless facilities is expected to be rapid, increasing from 86,000 in 2018 to 800,000 by 2026.

### Implementation

Small wireless facilities are distinct from macrocell telecommunications facilities both in function and in regulation. Small wireless facilities must be situated closer together than macrocell telecommunications facilities because they have a smaller range of service.<sup>50</sup> However, small wireless facilities are small enough that they can more easily incorporate stealth design such that they are hardly noticeable.



*Small Wireless Facilities*



*Small Wireless Facilities*

<sup>48</sup> “The following types of associated ancillary equipment are not included in the calculation of equipment volume: Electric meter, concealment elements, telecommunications demarcation box, ground-based enclosures, grounding equipment, power transfer switch, cut-off switch, and vertical cable runs for the connection of power and communications services[.]” W. Va. Code §31H-1-2(23).

<sup>49</sup> FCC 18-133 (Sept. 27, 2018).

<sup>50</sup> For example, 30 to 60 small wireless antennas per square mile will be needed. See, e.g., City Council Policy and Procedure on Small Wireless Facility Installations, Concord, CA, <https://www.cityofconcord.org/DocumentCenter/View/4706/Small-Wireless-Facilities-Policy-PDF>.



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### Small Cells Shot Clocks

An applicant may batch several small wireless facilities in one application, yet the shot clock is the same whether the application contains 100 small wireless facilities or one. Shot clocks for small wireless facilities are divided into two categories.

- 60 days: collocation of small wireless facilities on an existing structure
- 90 days: construction of new small wireless facilities, poles, or replacement structures

### West Virginia Context

#### Location

The Small Wireless Facilities Deployment Act,<sup>51</sup> significantly limits local government's regulation of small wireless facilities in West Virginia. Local governments in West Virginia are enabled to enact small wireless facilities regulation either through zoning or a standalone ordinance.<sup>52</sup> Unlike with zoning, a comprehensive plan is not required for the standalone ordinance. For communities with zoning, this legislation ensures that small wireless facilities are permitted "by right" in a right-of-way and outside the right-of-way in all zoning districts except districts zoned exclusively for single-family residential use.<sup>53</sup>

#### Fees and Annual Rate Limits

West Virginia law limits one-time fees that local governments may charge to review small wireless facility applications.<sup>54</sup> Application fee limits include any costs related to zoning, building permits, or other permits issued through the local government.

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Local governments may also charge an annual rate of twenty-five dollars (\$25) per small wireless facility to occupy the right-of-way. Small wireless facilities on a local government-owned utility pole may require sixty-five dollars (\$65) per year, per pole.

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<sup>51</sup> West Virginia Code, Chapter 31H.

<sup>52</sup> The appendices of this toolkit includes a standalone sample small wireless facility ordinance.

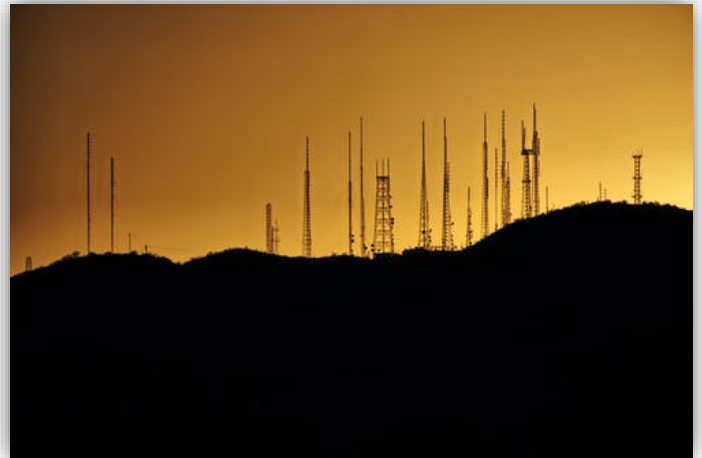
<sup>53</sup> In most cases, a zoning district titled "Single Family Residential" is not actually zoned exclusively for single-family uses.

<sup>54</sup> W. Va. Code §31H-2-3(c).

## Design Guidelines

Design guidelines are local government provisions that require the coordination and matching of the aesthetics and character of a proposed small wireless facility to the immediate area. Design guidelines can include location, appearance, and concealment requirements. These requirements must be reasonable, published in advance, and no more burdensome than what is placed on similar infrastructure. However, local government must be careful not to impose different requirements on different carriers. Specifically, design guidelines for small wireless facilities may require:

- camouflaging to mimic surrounding structures and poles
- painting to match poles
- locational requirements that enable safe operation of traffic control equipment or streetlights
- not displaying commercial signs



## Exemptions

In some instances, work performed on a small wireless facility does not require a permit or fee. These instances include routine maintenance; replacement of wireless facilities that are substantially similar, the same size, or smaller; and micro wireless facilities that are suspended on existing cables strung between existing utility poles.



## Substantial Change Under Section 6409(a)

### Definition

Section 6409(a) of the Spectrum Act reduces the shot clock for “eligible facilities requests” from 90 days to 60 days where a macrocell telecommunications application does not involve a “substantial change.” Eligible facilities requests do not substantially change the physical dimensions of an existing tower or base station and so are afforded a shorter shot clock. Section 6409(a) establishes a detailed substantial change test to make an eligible facilities determination.

### Purpose

Much like the rest of telecommunications law generally, Section 6409(a) aims to advance wireless broadband service by reducing regulatory obstacles and making the wireless facility siting process more efficient. Specifically, the substantial change test serves to expedite review of and changes to macrocell facilities that do not involve a significant change.

### Implementation

Section 6409(a) requires state and local governments to review, on an expedited basis, certain wireless facilities siting requests that do not constitute a substantial change to the

## Definitions

### Collocation

The practice of locating multiple wireless broadcast facilities or providers within or on the same facility.

### Micro Wireless Facilities

Wireless facilities that are no more than 24 inches in length, 15 inches in width, and 12 inches in height with an exterior antenna no longer than 11 inches.

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physical dimensions of existing towers or base stations. Under Section 6409(a), a proposed facilities modification will result in a substantial change and is subject to a 90-day shot clock—rather than the 60-day expedited shot clock—for review if it meets any of the following criteria:

#### **Towers and base stations not in public rights-of-way**

- Tower height increases by more than 10% or 20 feet
- Support structure height increases by more than 10% or 10 feet
- New item on a tower would measure horizontally 20 feet or more, or the width of the tower or more at the elevation of the change, whichever is greater
- New item on a base structure would extend from the existing structure horizontally more than 6 feet
- More than the standard number of new equipment cabinets for the technology in question, but not more than 4 new cabinets, would result
- Any excavation or deployment outside the current boundaries leased or owned, or outside any access or utility easements of or relating to the facilities, is involved
- The concealment elements of the tower or station are defeated
- Compliance with conditions in any prior approval are compromised

#### **Towers and base stations in public rights-of-way**

- Height increases by 10% or 10 feet, whichever is greater
- New item extends more than 6 feet from the tower
- Equipment cabinets will be placed on the ground for the first time
- The size of existing ground cabinets increases by more than 10% in height or volume

Applicants for eligible facilities requests are only required to provide documentation that is reasonably related to determining whether the applicant meets the criteria under Section 6409(a). Local governments must review applications covered by Section 6409(a) within 60 days. If a macrocell telecommunications application does not involve a substantial change and thus is an eligible facilities request, the application must be approved by the local government.

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### Deemed Granted Remedy

An application filed under Section 6409(a) is *deemed granted* and automatically approved if a state or local government fails to act on it within the shot clock. This becomes effective when the applicant notifies the reviewing authority in writing that the review period has expired. Local authorities may challenge an applicant's written assertion of a deemed grant if it believes the application did not meet the criteria for mandatory approval in Section 6409(a).

“[A] state or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.” 47 U.S.C. § 1455(a)

## **Shot Clocks**

### Definition

The “Shot Clock” is the amount of time a local government has to complete a review of a telecommunications facility application and issue permits. Shot clocks apply to all required authorizations at the state and local levels to develop wireless service infrastructure.

The following is a summary of shot clock time periods:

- Construction of a new macrocell telecommunications structure: 150 days
- Collocation of macrocell telecommunications facilities on an existing structure: 90 days
- Eligible facilities modifications of macrocell: 60 days
- Construction of a new small wireless structure: 90 days
- Collocation of small wireless facilities on an existing structure: 60 days

### Purpose

The FCC has recognized that wireless services are increasingly central to the economic, civil, and social lives for millions of Americans. In order to minimize delays that hinder the deployment of new wireless infrastructure, shot clocks provide a timeframe within which government entities must complete the review of wireless siting requests.

### Implementation

Shot clocks begin to run on the day an application is submitted, not when the locality considers the application complete. However, shot clocks can be paused, known as “tolling,”



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when an application is determined to be incomplete or by mutual agreement between the locality and applicant. Otherwise, a local

government must complete its review

of a telecommunications facility application and issue permits or an application denial within the shot clock timeframe.

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*Tolling: A pause or delay to the running time of the shot clock.*

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### Macrocell Telecommunications Facilities

After receiving an application, a locality has 30 days to provide notice that the application is incomplete, at which time the shot clock is tolled while the locality waits on the additional application materials. If the application remains incomplete even after receiving the additional materials from the applicant, and if the locality provides written notice within 10 days of the deficiency, the shot clock is tolled again. In both instances, the shot clock is tolled until subsequent submissions are received.

### Small Wireless Facilities

Localities have 10 days from the submission of an application to provide written notice of completeness. If an application is incomplete, the shot clock will be tolled from the time the locality sends written notice of incompleteness until the applicant provides the missing information.

### Batched Applications for Small Wireless Facilities

Batched applications are applications for separate small wireless facilities that are filed at the same time. A locality has the same time under the shot clocks rules to review multiple small wireless facilities applications filed at the same time as it would for a single application.

### Missing a Shot Clock Deadline

If an authority fails to act within the shot clock, then it is presumed to be a prohibition of services. For eligible facilities requests, applications are deemed granted; otherwise, there is a rebuttable presumption of

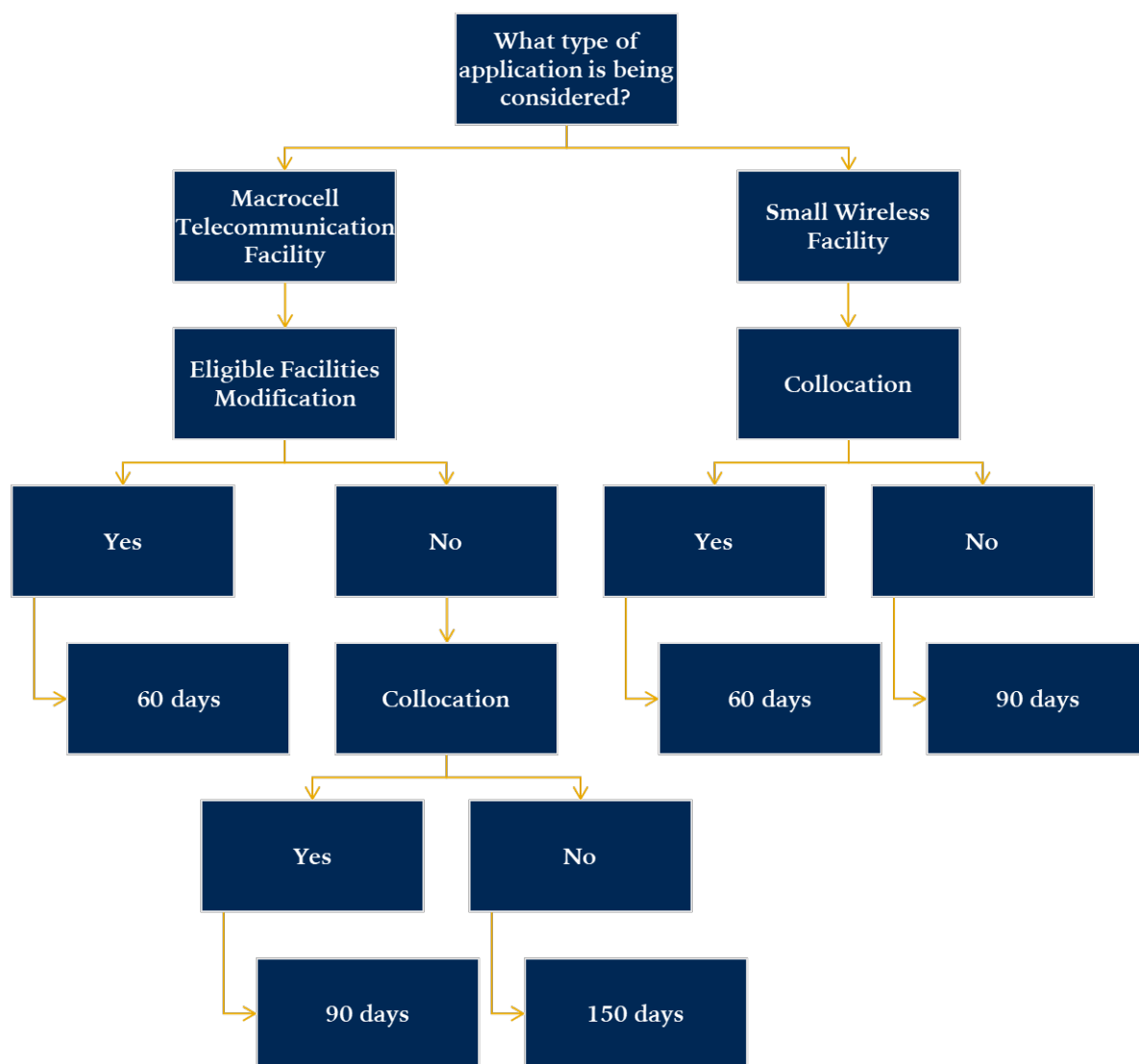
reasonableness as to the shot clocks. Generally, when a shot clock deadline is missed, the applicant may file suit seeking injunctive relief granting the application. The locality may rebut the presumed prohibition by showing that the failure to act was reasonable under the circumstances and did not materially limit or inhibit the applicant from introducing new services or improving existing services. However, the failure of a local government to review

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*Eligible Facilities Modification: A modification to an existing tower or base station that does not substantially change the physical dimensions of such tower or base station.*

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an application for an eligible facilities request within the shot clock time frame automatically results in that application being deemed granted upon written notice of the missed deadline by the applicant.



## Roswell Case

In *T-Mobile South LLC v. City of Roswell, Ga.*,<sup>56</sup> the Supreme Court of the United States interpreted provisions of the Telecommunications Act (the Act),<sup>57</sup> providing guidance on denying wireless facilities applications, as well as challenging those denial determinations. Generally speaking, the denial of a telecommunications application must be in writing and reasons for the denial must be provided in writing. A number of key holdings resulted from this case.

<sup>56</sup> *T-Mobile South LLC v. City of Roswell, Ga.*, 574 U.S. 293 (2015).

<sup>57</sup> 47 U.S.C. §332.

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### *30-day Commencement-of-suit Clock*

Any person adversely affected by any final action may file a lawsuit within 30 days. In *Roswell*, the Supreme Court held that the relevant final action triggering the 30-day commencement-of-suit clock is an issuance of the “written denial,” not the subsequent issuance of reasons explaining the denial.

### *Form of Denial*

In *Roswell*, the Supreme Court determined that the Act does not specify what form a locality’s written denial must take, acknowledging that the Act “just says that a denial ‘shall be in writing.’” As a result, jurisdictions have varied in determining what constitutes a written denial. Some lower courts have found that meeting minutes, once ratified, may satisfy the written denial requirement. Others have held that a writing separate from the locality’s record is required, something that explicitly states an application has been denied. The Fourth Circuit, however, has held that stamping the word “DENIED” on a letter sent to city council from the planning commission—a letter that described an application—was sufficient written denial.<sup>58</sup>

### *Reasons for Denial Must be in Writing*

Localities are required to provide the *reasons* for a denial in writing as well. These reasons do not have to be in the same document or record that conveys the locality’s written denial. Minutes from the meeting where the locality denied an application may serve as written reasons. Practically, however, localities may be better served by providing a separate statement of reasons to avoid prolonged litigation parsing meeting minutes.

### *Supported by Substantial Evidence*

A denial under the Act must be supported by substantial evidence so that courts are able to identify the reasons why a locality denies an application. More specifically, the reasons for denial must be clear enough to allow reviewing courts to determine whether a locality violated substantive provisions of the Act.

### *Essentially Contemporaneous*

Reasons for denial must be issued “essentially contemporaneously” with a written denial to satisfy the Act. Although the written denial and reasons for denial may be in separate documents or records, the reasons must be issued promptly after written denial to enable judicial review. If a locality is not in a position to provide reasons for a denial promptly, the

<sup>58</sup> AT&T Wireless PCS, Inc. v. City Council of City of Virginia Beach, 155 F.3d 423, 429 (4th Cir. 1998).

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locality can delay the issuance of the written denial within the appropriate shot clock timeframe.

## Permitting

Several agencies review and issue permits for telecommunications facilities. While local governments retain the authority to regulate telecommunications facilities through zoning, including application siting, several federal agencies exercise control in the permitting process.

### Federal Communication Commission

The Federal Communications Commission (FCC) is the primary federal agency concerned with telecommunications permitting. The FCC reviews telecommunications tower registration and licensing of towers. FCC's registering, licensing, and construction of towers must adhere to various guidelines and permits, including environmental reviews, transportation safety standards, and property preservation reviews. Additionally, the FCC is responsible for administering the Antenna Structure Registration (ASR) system. The ASR system stores information related to "location, height, marking, and lighting" for all FCC-registered antennas.<sup>59</sup>

### National Environmental Policy Act

The National Environmental Policy Act (NEPA) is a federal law that requires environmental review of all major federal agency action and includes tower registration, licensing, and construction. All FCC-governed telecommunications facilities must comply with NEPA regulations.<sup>60</sup>

The environmental review under NEPA for telecommunications facilities often requires an Environmental Assessment (EA). An EA is a document that outlines potential or actual risks to the environment associated with the proposed agency action. A federal agency, including the FCC, may not proceed until a NEPA review is completed.

According to the FCC, an EA is required for the following situations related to telecommunications facilities:<sup>61</sup>

- Proposed location is within a wilderness area or preserve
- Threatens or actually harms endangered species survival or habitat

<sup>59</sup> 47 C.F.R. §17.4.

<sup>60</sup> *United Keetoowah Band of Cherokee Indians in Oklahoma v. Fed. Communications Comm.*, 933 F.3d 728 (D.C. Cir. 2019) (holding that small wireless facilities are not exempt from NEPA and NHPA permitting requirements, as originally ordered by the FCC in "Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment" September 2018).

<sup>61</sup> 47 C.F.R. §1.1307.

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- Threatens or actually impacts migratory birds and their flight patterns
  - Historic preservation concerns are present
  - Proposed location is within a recognized floodplain
  - Presence of high intensity lights in residential neighborhoods
  - Excessive radiofrequency emission<sup>62</sup>

If the telecommunications project does not impact the environment, the FCC tower permit may proceed without a formal environmental review process. When an EA is required, the applicant must await approval. Specifically, an applicant may not break any ground on the project prior to approval, including “grading soil, removing vegetation, clearing an area or otherwise beginning construction or building” prior to the completion of the required environmental review.<sup>63</sup> Failure to adhere to this permitting process is a violation of FCC rules and may invoke an enforcement action against the applicant.

### *Endangered Species Act*

Under the Endangered Species Act (ESA), a telecommunications tower applicant is required by federal law to consider possible impacts of the proposed project to protected species and habitat.<sup>64</sup> As part of NEPA review, “the FCC must review all proposed tower projects and determine if construction or operation of such facilities “may affect” federally listed species or designated critical habitat.<sup>65</sup> An EA of the proposed facility’s effects on the species or habitat is required if there is a possibility that the project “may affect” a species or habitat protected under the ESA.<sup>66</sup> Of particular concern to towers, the FCC may require an EA that considers the effects on migratory birds imposed by a telecommunications tower over 450 feet above ground level.<sup>67</sup>

The U.S. Fish and Wildlife Service or an independent biologist determines whether a proposed federal action impacts endangered species or habitat.<sup>68</sup> If a determination is made that a telecommunications project will affect a protected species or its habitat, formal consultation with the U.S. Fish and Wildlife Service is required.<sup>69</sup>

### *Federal Emergency Management Agency*

Also under NEPA review, the FCC requires an EA when a proposed telecommunications tower site is located within a designated “special flood hazard area,” pursuant to the Federal

<sup>62</sup> *Id.*

<sup>63</sup> *Id.*

<sup>64</sup> 47 C.F.R. §1.1307(a)(3).

<sup>65</sup> 47 C.F.R. §1.1307.

<sup>66</sup> *Id.*

<sup>67</sup> 47 C.F.R. §1.1307(d).

<sup>68</sup> Letter from Susan H. Steinman, Associate General Counsel for the Federal Communications Commission to Steve Williams, Director of the U.S. Fish and Wildlife Services, Secretary of the Interior (July 9, 2003).

<sup>69</sup> *Id.*

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Emergency Management Agency (FEMA). As part of the EA, a FEMA map indicating the location of the proposed antenna structure is required.<sup>70</sup>

When a local jurisdiction enforces the building code, the applicant of a proposed tower in the floodplain must provide copies of all building permits relevant to the proposed antenna structure. The building permit must indicate that the structure will be at least one foot above the floodplain.<sup>71</sup> When a local jurisdiction does not issue building permits, an “applicant must submit independent verification to FEMA, proving the proposed structure is at least one foot above the floodplain.”<sup>72</sup>

### *National Historic Preservation Act*

The National Historic Preservation Act (NHPA) mandates review of all federally funded and permitted telecommunications projects that may impact sites listed on or eligible for the National Register of Historic Places.<sup>73</sup> Created in 2004 by the FCC, the Nationwide Programmatic Agreement (NPA) improves and streamlines the historic preservation review process for telecommunications installations under the FCC’s jurisdiction.<sup>74</sup> The NPA requires use of a qualified professional to perform certain aspects of review under NHPA review.<sup>75</sup>

More specifically, a letter is required from the State Historic Preservation Office (SHPO) when a proposed facility has no effect or no adverse effect on historic properties.<sup>76</sup> The letter must conclude that the proposed telecommunications facility “does not affect any districts, sites, buildings, structures or objects, significant in American history, architecture, archeology, engineering or culture, that are listed, or are eligible for listing, in the National Register of Historic Places.”<sup>77</sup>

### *Federal Aviation Administration*

The FCC may require the painting or lighting of proposed towers when a risk to air navigation is expected or possible.<sup>78</sup> In determining risk to air navigation, the FCC adopted the Federal Aviation Administration’s (FAA) illumination standards as mandatory.<sup>79</sup>

<sup>70</sup> See, FCC Environmental Assessment Checklist, <https://wireless2.fcc.gov/UlsEntry/attachments/attachmentViewRD.jsp?applType=search&fileKey=1219929546&attachmentKey=18573949&attachmentInd=applAttach>

<sup>71</sup> *Id.*

<sup>72</sup> *Id.*

<sup>73</sup> 16 U.S.C. §470.

<sup>74</sup> Broadband Infrastructure and Section 106 Review, Adv. Coun. On Historic Pres. [https://www.achp.gov/broadband\\_and\\_106](https://www.achp.gov/broadband_and_106).

<sup>75</sup> *Id.*

<sup>76</sup> 47 C.F.R. part 1, Appendix B.

<sup>77</sup> *Id.*

<sup>78</sup> 47 C.F.R. §§17.21-17.58.

<sup>79</sup> *Id.*



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According to the FCC, the agency “requires an FAA determination that an antenna tower will not pose an aviation hazard before [the FCC] will grant permission to build that antenna tower.”<sup>80</sup> FAA regulations require landowners to mark any towers between 50 feet and 200 feet in height on their property, and report tower information in the FAA database.<sup>81</sup>

### Federal Highway Administration

The Federal Highway Administration (FHWA) allows each state to permit new utilities, including telecommunications facilities within rights-of-way.<sup>82</sup> Towers located within the interstate highway or the National Highway System rights-of-way may be permitted with FHWA review and approval.<sup>83</sup> In addition, “depending on the state highway agency’s stewardship agreement with FHWA, proposals involving the other roads in the National Highway System may also require FHWA review and approval.”<sup>84</sup>

### West Virginia Division of Highways

West Virginia law permits telecommunications facilities in Division of Highways (WV DOH) rights-of-way “when the use of the right-of-way does not adversely affect the safety of the traveling public or impair the highway or its aesthetic quality or conflict with any federal, state, or local laws, rules, regulations, or policies.”<sup>85</sup>

A telecommunications provider must enter into an agreement with WV DOH for a telecommunications facility permit.<sup>86</sup> Then, the provider must submit a permit application to all relevant WV DOH districts. The permit application must provide detailed information regarding the installation, expansion, or any upgrades of the telecommunications facilities in WV DOH rights-of-way.<sup>87</sup> In West Virginia, small wireless facilities (“small cells”) applications are given priority by WV DOH, followed by underground “dig once” permit applications.<sup>88</sup>

<sup>80</sup> The FAA presumption against construction of structures over a certain height is set forth in the FAA rules. A proposed structure or an alteration to an existing structure that exceeds 2,000 feet in height above the ground will be presumed to be a hazard to air navigation and to result in an inefficient utilization of airspace and the applicant has the burden of overcoming that presumption. See 47 CFR § 1.61 Note.

<sup>81</sup> 47 C.F.R. part 17.

<sup>82</sup> Lester G. Finkle, *Wireless Communications: A Modern Necessity*, 63 Public Roads 5 (Mar./Apr. 2000) <https://www.fhwa.dot.gov/publications/publicroads/00marapr/wireless.cfm>.

<sup>83</sup> 23 C.F.R. §1.23(b)-(c).

<sup>84</sup> Yang, Qingyan, et al., *Adapted From “Assessment of Rural ITS Wireless Communications Solutions,”* Public Roads, Volume 63, Issue 5 (Mar./Apr. 2000).

<sup>85</sup> W. Va. Code §17-2E-1.

<sup>86</sup> Dig Once: Interim Final Guidance (Nov. 2020) <http://broadband.wv.gov/wp-content/uploads/2020/12/Dig-Once-Interim-Final-Guidance-2020-11-05.pdf>.

<sup>87</sup> *Id.*

<sup>88</sup> Small wireless facilities applications have strict deadlines and filing requirements. *Id.*

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# Other Legal Issues

## Introduction

When working to expand broadband, agreements between service providers, local governments, and customers will vary greatly depending on the specific needs of all parties involved. In assessing the variety of models, certain legal issues should be considered. This section introduces some of those legal issues: insurance, tax, contracting, and leasing.



## Insurance

The expansion of broadband infrastructure should correspond with expanded insurance coverage for the variety of parties involved in planning, building, maintaining, and using the infrastructure. This section discusses the main insurance coverage issues and requirements for the key parties involved in broadband expansion, including real property owners, tower owners, internet service providers, and subcontractors. In some cases, the local government is the real property owner, the tower owner, the internet service provider, or some combination of the three.

### **Tower**

A structure which hosts an antenna or other equipment used for the purposes of transmitting cellular or wireless signals for communications purposes, including telephonically, or for computing purposes, including any antenna and all associated equipment constructed between July 1, 2019 and July 1, 2024.”<sup>89</sup>

### Real Property Owners

Broadband expansion often requires building infrastructure on a particular piece of land or real property, such as building a tower on the surface of a bare piece of land or burying fiber-optic cables beneath it. Sometimes, the internet service provider purchases that property, but often it is leased from a third-party landowner. The real property owner should have general liability coverage for any injuries that may occur on the property. Additionally, the real property owner should consider commercial property insurance, which protects any physical assets from fire, explosion, storms, theft, or vandalism.<sup>90</sup> Additional coverage can be acquired for floods, earthquakes, equipment breakdowns, or any other “direct causes of loss.”<sup>91</sup> Real property owners should also consider any potential risks to neighboring property owners or passersby from infrastructure installations.

<sup>89</sup> *Id.* §11-6L-2(1).

<sup>90</sup> Property Insurance, Travelers, <https://www.travelers.com/business-insurance/property>.

<sup>91</sup> *Id.*

### Tower Owners

The tower owner also requires insurance protection and must consider a variety of factors when seeking coverage, including coverage for tower materials and equipment, coverage for theft and crimes, property and building coverage, coverage for employees in addition to workers compensation, protection for neighboring property owners or passersby, coverage for the operators and users of the tower, and coverage for the operators and users of the tower's services.<sup>92</sup> Risk to employees and workers compensation coverage are very important considerations during the tower's construction and repair and maintenance, as risks persist after construction is complete.<sup>93</sup> Tower maintenance and climbing is 11 times as dangerous as traditional construction work.<sup>94</sup> Tower maintenance workers most frequently suffer injuries by falling from the tower or by radiofrequency radiation burns.<sup>95</sup>



*Small Cell on an electrical tower*

The tower owner may be an independent third party that provides the tower's services to the internet service provider and its customers for a fee. However, the ISP may choose to purchase or build the tower itself.

### Internet Service Providers

Broadband expansion is usually led by an ISP that gathers funding to acquire property leases to develop infrastructure. The telecommunications industry is considered high risk and highly hazardous for workers, often resulting in insurance companies requiring more stringent underwriting guidelines,<sup>96</sup> which in turn often results in increased premiums and limited availability of insurance coverage.

This problem may be mitigated, however, by considering specialized coverage plans tailored to the needs of telecommunications companies. Often these plans include commercial liability coverage, workers compensation, business interruption or income insurance, property

<sup>92</sup> "Does Your Telecom Insurance Policy Include These Risks?" USA Telcomm Insurance Services (Dec. 9, 2019), <https://usatelecomins.com/does-your-telecom-insurance-policy-include-these-risks/>.

<sup>93</sup> *Id.*

<sup>94</sup> Commercial Insurance for Cell Tower Owners & Operators, Commercial Global Insurance, <https://www.cgloballins.com/industries/cell-tower-insurance/>.

<sup>95</sup> *Id.*

<sup>96</sup> Underwriting guidelines are created by insurance underwriters who consider the risk of the industry and calculate the required cost for coverage of that risk. Underwriting is a fancy term for receiving money in exchange "for the willingness to pay a potential risk." Insurance Underwriter, Investopedia (Mar. 30, 2021), <https://www.investopedia.com/terms/i/insurance-underwriter.asp#:~:text=Insurance%20underwriters%20establish%20pricing%20for,and%20magnitude%20of%20a%20risk.>

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insurance, general liability coverage, extra expense insurance, and cyber liability and data breach coverage.<sup>97</sup>

High premiums may be mitigated through several factors. If addressed, these factors could reduce a company's premiums:<sup>98</sup>

- the company's Experience Modification Rate (EMR), which calculates workers comp losses on average for the type of work and amount of payroll and predicts losses for a rating period (usually 3 years)
- general losses
- financial stability
- percent of climbing or tower work
- heights of towers
- percent of work involving erection of monopoles
- percent of work on new construction
- comprehensive safety or health programs implemented and compliance
- OSHA incidence rates
- recovery procedures for injured employees
- number of cranes owned
- number of employees and the percent with third-party tower safety training or radiofrequency (RF) radiation courses
- pre-employment screening
- types of medical coverage
- safety incentive programs
- separating the tower division from the rest of the company, to save on insurance costs (towers present the greatest risk of injury, which causes a rise in rates)

### Subcontractors

Subcontractors are commonly used in the development of broadband infrastructure, so many major telecommunications companies already have specific insurance requirements for an approved subcontractor. Major telecommunications companies often require subcontractors to carry statutory workers compensation, general liability coverage, vehicle liability coverage,

<sup>97</sup> Critical Insurance Coverage for the Datacom/Telecom Industry, Byars Wright, <https://www.byarswright.com/critical-insurance-coverage-for-the-datacom-telecom-industry/>; <https://www.cgloballins.com/industries/cell-tower-insurance/> (noting Commercial Global offers customized programs to meet the needs of the industry); Service Information, Wireless Estimator, <http://wirelessestimator.com/content/industryinfo/61>; Telecommunications Business Insurance, The Hartford, <https://www.thehartford.com/business-insurance/midsize-telecommunications>.

<sup>98</sup> Service Information, Wireless Estimator, <http://wirelessestimator.com/content/industryinfo/61>. Also note that similar risks and concerns are present in the fiber-optic cable laying businesses. See Business Insurance for Fiber Optic Cable Installers, Business Insurance USA, <https://www.businessinsuranceusa.com/business-insurance-fiber-optic-cable-installers>.

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umbrella coverage,<sup>99</sup> and coverage for others' properties.<sup>100</sup> In addition, subcontractors should consider these non-mandatory coverage options: protection for construction equipment, coverage for theft or crime, coverage for worker injuries (such as strain from lifting, falling or flying objects, strain from pushing or pulling, and vehicle accidents),<sup>101</sup> as well as coverage for risks to passersby.

### Local Governments

In cases where the local government is the real property owner, the tower owner, or internet service provider, or has entered into certain contractual arrangements with the internet service provider, the local government should follow the corresponding recommendations above. Local governments can require additional hazard and liability insurance when leasing property owned by the local government, for towers or equipment, or in other contractual arrangements with ISPs. Bonds and other methods of financial surety may also be required for construction.

As local governments increase participation in broadband development activities, insurance policies should be reviewed to determine if additional coverage may be needed.

## **Taxation**

Tax treatment under federal and state law is an important consideration when deciding to start a business. The same is true when starting a business in the broadband industry.

### Federal Taxation

According to the Internal Revenue Code,<sup>102</sup> an entity that receives grant funding from the Rural Utilities Service (RUS) or the National Telecommunications and Information Administration (NTIA) may exclude that funding from reported income on the entity's tax return if that funding is used for certain defined uses: last mile remote projects, last mile projects, middle mile projects, rural library broadband, broadband infrastructure, and comprehensive community infrastructure.<sup>103</sup>

<sup>99</sup> Commercial umbrella coverage covers additional liabilities such as legal fees, medical bills, damage to others' properties, and judgments and settlements. Commercial Umbrella Insurance, The Hartford, <https://www.thehartford.com/commercial-umbrella-insurance>.

<sup>100</sup> Service Information, Wireless Estimator, <http://wirelessestimator.com/content/industryinfo/61>.

<sup>101</sup> *Id.*

<sup>102</sup> Rev. Proc. 2010-34 (RS RPR); 2010-411 I.R.B. 426, 2010 WL 3704234 (explaining that entities may treat a grant from RUS under the Broadband Infrastructure Program for Last Mile Remote, Last Mile, Middle Mile, or Rural Library Broadband projects as contributions to capital under 26 U.S.C. §118 and therefore not taxable income to the entity. This also applies to NTIA grants under the Broadband Technology Opportunities Program for Broadband Infrastructure or Comprehensive Community Infrastructure projects.)

<sup>103</sup> Rev. Proc. 2010-34 (IRS RPR), 2010-41 I.R.B. 426, 2010 WL 3704234.d.

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If an entity uses the previously mentioned grant funding, in part, to acquire property, then the entity must adjust its *basis* in that property accordingly.<sup>104</sup> “Basis is generally the amount of capital investment in property for tax purposes.”<sup>105</sup> The basis proves important when the entity sells a property, as the difference between the sales price and the basis is subject to capital gains tax.

Basis example: If a broadband company uses RUS funding to purchase property to build broadband infrastructure, the basis in that piece of property must be reduced by the amount of the funding.

Assume the property costs \$100,000, and the entity received a \$50,000 RUS grant. The entity’s basis in that property is only \$50,000. While it paid \$100,000 for the property, the basis was reduced by the \$50,000 grant.

Why does this matter? If the entity sells the property for \$105,000, the entity gained \$55,000 that will be subject to capital gains tax.<sup>106</sup>

Further, in 2019, Congress passed the Revitalizing Underdeveloped Rural Areas and Lands (RURAL) Act.<sup>107</sup> This law modified the Internal Revenue Code to allow cooperative phone and electric companies to maintain tax-exempt status, even if a significant portion of the entity’s income is made up of grant funding used for purposes “substantially related to providing, constructing, restoring or relocating electric, communication, broadband, internet, or other utility facilities or services.”<sup>108</sup>

### West Virginia Taxation

Generally, West Virginia assesses property taxes for all real and personal property on 60 percent of the property’s “true and actual value.” True and actual value refers to the price the owner would receive for selling that property on the open market.<sup>109</sup> Real property taxes are assessed against the property’s titleholder, while personal property taxes are assessed against the party in possession of the property.<sup>110</sup> For the purposes of broadband entities, personal property could include fiber-optic cables, construction equipment, and other non-real property required for the business.

<sup>104</sup> 26 U.S.C. §362(c)(2); 26 C.F.R. §1.362-2. The regulations provide additional guidance for using funding to adjust basis when the property cost is lower than the amount of funding received.

<sup>105</sup> Internal Revenue Service, Tax Topics, [https://www.irs.gov/taxtopics/tc703\\_](https://www.irs.gov/taxtopics/tc703_)

<sup>106</sup> 26 U.S.C. §1(h).

<sup>107</sup> Pub. L. No. 116-94, § 301 (2019).

<sup>108</sup> *Id.*

<sup>109</sup> W. Va. Code §11-3-1(a).

<sup>110</sup> *Id.* §11-3-8.



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However, West Virginia exempts some property from taxation. If property is owned by the United States, the state of West Virginia, or a county, district, city, or other municipality, the property is exempt from property taxes so long as it is used for public purposes.<sup>111</sup> This exemption also applies to property used for distributing electricity or used for economic development by a nonprofit, as well as “[a]ll property belonging to benevolent associations not conducted for profit.”<sup>112</sup>

### Towers

The West Virginia Code provides a special rule for assessing property taxes on wireless telecommunication towers.<sup>114</sup> Towers and associated equipment are assessed at 60 percent of the *salvage value*, which is only 5 percent of original cost.<sup>115</sup>

**Salvage Value**  
Five percent of the original cost.<sup>113</sup>

While the tax implications are significant, this special rule only applies to towers constructed or erected between July 1, 2019, and July 1, 2024, and only lasts for the five years immediately following construction.<sup>116</sup>

Assessing towers: Under the standard taxation, a tower worth \$100,000 would be assessed for property tax purposes at 60 percent its value: \$60,000.<sup>117</sup> However, under the special taxation rule for towers, the salvage value of that tower is just \$5,000, and 60 percent of the salvage value would result in the tower being assessed at \$3,000.

### Middle-Mile Expansion

Further, the West Virginia Legislature enacted the Middle-Mile Fiber Broadband Infrastructure Expansion Program to improve access to broadband throughout the state.<sup>118</sup> This program allows electric utilities to place a surcharge on bills to recover the costs associated with providing those middle-mile connections.<sup>119</sup> The costs that may be recovered even include income tax and property tax expenses. In order to participate in the program, providers must submit a written plan to the state’s Public Service Commission to demonstrate the planned expansion of middle-mile broadband infrastructure. Plans are approved that are “reasonable,

<sup>111</sup> *Id.* §11-3-9.

<sup>112</sup> *Id.* §11-3-9(16).

<sup>113</sup> *Id.* §11-6L-2(2).

<sup>114</sup> *Id.* §11-6L-1 et. seq.

<sup>115</sup> *Id.* §11-6L-3.

<sup>116</sup> *Id.*

<sup>117</sup> West Virginia State Tax Dept., Ad Valorem Property Tax, <https://tax.wv.gov/Business/PropertyTax/Pages/AdValoremPropertyTax.aspx>.

<sup>118</sup> W. Va. Code §24-2-1p.

<sup>119</sup> *Id.* §24-2-1p(j).

prudent, useful, and not contrary to the public interests, considering the interests of the potential broadband users and the electric utility customers.”<sup>120</sup>

### **Electric Utility**

Any electric utility in West Virginia that is regulated by the Public Service Commission.<sup>121</sup>

Federal Taxation	RUS & NTIA grant funding is excluded from income; grant funding is also excluded from basis in property that funding is used to purchase.	RURAL Act allows co-ops and non-profits to maintain tax exempt status even when grant funding is significant portion of funds, when used for broadband projects.	
State Taxation	Property taxes are generally assessed on 60% the value of the property.	Wireless towers have a special rule: property taxes are assessed on 60% the salvage value of the tower for up to five years following construction.	The Middle-Mile Fiber Broadband Infrastructure Expansion Program allows some companies to add a surcharge to recover broadband expansion costs, including income tax and property tax expenses.

## **Contracts and Agreements**

The broadband industry involves many types of agreements. This section introduces two examples: leases and operation and maintenance agreements. Other agreements include memoranda of understanding, business formation documents, and purchasing contracts, just to name a few. Given the technical nature of broadband systems, experienced legal counsel proves essential during contract negotiation and drafting.

### *Operation and Maintenance Agreements*

A local government may want or need another entity to operate and maintain equipment used as part of a broadband system. For example, many public funding opportunities support the purchase of publicly owned equipment. A local government may want to benefit from funding opportunities but lack the technical expertise or capacity to maintain the broadband system. A

<sup>120</sup> *Id.* §24-2-1p(e)(1).

<sup>121</sup> *Id.* §24-2-1p(b).

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local government or other owner of equipment can contract with a third party to operate and manage the system while still maintaining ownership of the equipment. In such cases, an Operation and Maintenance Agreement (“O&M Agreement”) should be developed. An O&M Agreement typically outlines the roles and responsibilities of both the equipment owner(s) and the operator(s). Contract language in an O&M Agreement for broadband may include the following:

- Name of equipment owner(s) and a description of their responsibilities
- Name of equipment operator(s) and a description of their responsibilities
- Scope of services, such as:
  - Description of equipment
  - Towers
  - Antennas
  - Fiber optic strands
  - Conduit
  - Hardware
  - Base stations
  - Any related infrastructure
- Description of how each system component will be managed, maintained, and upgraded;
- Commitment to hire and train qualified personnel
- Additional services:
  - Billing and collections
  - Grant reporting or other reporting requirements
  - Customer service
- Insurance requirements
- Indemnification requirements allocating should there be harm to people or property

The need for an O&M agreement as well as the contents of any legal agreement should be discussed under the guidance of local legal counsel.

## **Leases to Facilitate Expansion of Broadband Infrastructure**

To facilitate the development and expansion of broadband infrastructure in their jurisdictions, local governments may find themselves negotiating lease agreements with tower builders, ISPs, and other telecommunications installers and service providers. Oftentimes, especially if the governmental entity owns the tower and is the lessor of space on that tower, it will have multiple leases with various parties (i.e., lessees) who are collocating their respective equipment on the tower. These leases include many terms common to leases between all types of parties (such as, the description of the leased premises, the lease term, the rent and other payments, access rights, indemnification of the parties, insurance, and the permitted uses of the parties under the lease), but they also often have terms more specifically tailored to the telecommunications industry.

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For example, it is common for telecommunications leases to include a term whereby the tower owner, whoever that party may be, warrants that the tower is registered with the Federal Communications Commission (FCC) and the Federal Aviation Administration (FAA), if such registrations are required. Similarly, there is often a lease term stating that all necessary federal licenses to operate a telecommunication facility have been obtained, in addition to approval for all other state and local regulations or ordinances that may apply. These leases also may provide that lessees must operate their telecommunication facilities in a way that will comply with FCC regulations governing the exposure of humans to radio frequencies and that those operations will not cause interference with the uses of the lessor or other lessees.

The potential for collocation of multiple users' equipment on a shared tower or alternative support structure is also often defined in telecommunication leases. If the tower owner wants to be able to lease space on the tower to multiple lessees in an effort to maximize revenue or diversify the provision of services to people served by the facilities located on the tower, then the leases with each respective lessee service provider should make clear that the lease is a non-exclusive lease and that the parties thereto agree that the lessor may otherwise lease with third-parties to allow for their respective use of the shared facility. Relatedly, a telecommunications lease should make clear whether the lessee may sublease any of its rights to operate to a third-party with no direct relationship with the lessor.

Many telecommunications leases also clearly establish whether the various components of a facility will be considered real property (meaning land or real estate) or personal property. The parties often make clear in the lease terms that all of the lessee's equipment used to facilitate or support its provision of services is considered the lessee's personal property and the existence of the same, no matter how it might be attached or affixed to the lessor's property; in other words, the lessee's equipment is not considered a fixture that creates an interest in land. Other provisions related to the personal property of the lessee often require that the lessee maintain said property in good condition during the term of the lease and that the same is removed from lessor's property in a timely manner after the termination of the lease.

Please note that this discussion is not intended to be a comprehensive review of terms found in leases between landowners, tower builders, ISPs, and other telecommunication service providers, nor is it intended to provide legal advice or identify a preferable course of action in any given scenario. Rather, this discussion is intended to shed light on some of the considerations often addressed in telecommunications leases that may not otherwise be necessary in other local government leases.