Analysis of State Right-of-Way (ROW) Policy and Fees

Submitted to:

The West Virginia Broadband Enhancement Council

Prepared by:

Tilson Technology Management, Inc.
16 Middle Street, 4th Floor
Portland, ME 04101

Submitted:
October 17, 2018
## Contents

INTRODUCTION ......................................................................................................................................................... 3
WEST VIRGINIA POLICY - Rates and Cost ................................................................................................................... 4
ROW Use fees/permit fees: other jurisdictions ......................................................................................................... 7
  Vermont ............................................................................................................................................................. 7
  Maryland ........................................................................................................................................................... 8
  Virginia ............................................................................................................................................................. 11
  Ohio ................................................................................................................................................................. 13
  Kentucky .......................................................................................................................................................... 15
  Pennsylvania .................................................................................................................................................... 17
  Idaho ................................................................................................................................................................ 18
  Maine ............................................................................................................................................................... 20
  West Virginia .................................................................................................................................................. 21
APPENDIX A: STATE ROW POLICY SUMMARY TABLE ............................................................................................... 24
APPENDIX B: ANALYSIS OF PROPOSED ROW FEES ................................................................................................... 28
INTRODUCTION

The following report prepared for the West Virginia Broadband Enhancement Council provides an analysis of the right-of-way (ROW) fee structures in place in contiguous and demographically comparable states as a means of comparison to proposed ROW fee changes in West Virginia. In undertaking this analysis, Tilson Technology Management, Inc. (Tilson) first conducted a review of proposed rules and policies in West Virginia implementing recent legislation. It is important to understand that in the first section our review is of draft rules and policies, and that in key respects, the implementation of the new legislation to date has differed from the draft. In particular, the Governor of West Virginia recently directed the Department of Highways to set the fair market value of ROW access at $0 for broadband facilities. The second component of this report involved information gathering and analysis of the current ROW fee structures through a review of applicable state statutes, discussions and e-mail correspondence with state highway ROW and engineering contacts, and review of material published on state DOT websites in each jurisdiction surveyed. In this section we also discuss ROW compensation and permitting in West Virginia, including recent legislation as implemented to date, not the draft proposed rules and policy.

As mentioned above, the jurisdictions chosen for the analysis were selected on the basis of proximity to West Virginia (Pennsylvania, West Virginia, Virginia, Maryland, Ohio, Kentucky), as well as the states of Vermont, Idaho, and Maine, which were selected because of their similarity to West Virginia’s rural population and mountainous terrain.
The draft lease rates for fiber optic facilities are extraordinarily high relative to the cost of fiber construction. Fiber optic facilities have an expected useful life of decades, and so companies constructing fiber facilities would expect to have to pay the required compensation over at least a 20 or 30 year period, making the upfront cost of paying for these terms an appropriate point of comparison. Under the proposed rates, the licensee would need to either pay annually a rate per foot of innerduct, on an upfront rate per foot for 10, 20, or 30 years.¹ The proposed required annual payment would be $1/ft. at the lowest, “rural” density. This annual rate would be subject to increases from year to year, but instead of paying year-to-year, the licensee would also have the option to pay up front for a block of years at the current rate. The upfront payment for a 10 year term would be $10/ft., $20/ft for a 20 year term, and $30/ft. for a 30 year term. For suburban and urban areas, the annual and upfront rates would be is two and three times respectively the rural rate. Under normal and relatively unobstructed ground conditions, the lowest of these rates would exceed the expected labor and materials cost for the construction of the facilities themselves. This assumes that that only a single innerduct is installed. As the rate given is for each innerduct, and a typical construction practice today involves placing a conduit with multiple innerducts (not all of which may be used at the time of installation), the rate charged for a typical installation could be multiples of the given rate.

To illustrate these costs using an actual project proposed to serve unserved areas in rural West Virginia, consider the proposal from the Webster County Economic Development Authority to the Appalachian Regional Commission (ARC) for a fiber optic and wireless broadband project that included 10 miles of last-mile fiber optic cable.² The Authority estimated a construction cost of $27,500 per mile for this fiber. If the Authority would need a ROW lease of 20 years for its fiber, the cost of ROW access alone would be almost four times its budgeted cost to construct the fiber. In fact, the useful life of new fiber is almost certainly greater than 20 years. The total cost of this ROW access would be in excess of $1 million. The Authority’s grant request to ARC for all fiber and wireless elements of the proposed project was $3.2 million.

Table 1: ROW Fees vs. Estimated Fiber Construction Cost

<table>
<thead>
<tr>
<th>County Class</th>
<th>Budgeted Fiber Construction Costs (per mile)</th>
<th>20-Year Lease Fee (per mile)</th>
<th>% of Estimated Construction Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural ($1/ft)</td>
<td>$27,500</td>
<td>$105,600</td>
<td>384%</td>
</tr>
</tbody>
</table>

Companies evaluating whether to build a new fiber optic line must factor whether they will be able to recover these additional costs from customers along a potential route. In the attached table, the proposed rates are multiplied out and the size of the additional cost per customer per year and per month are shown across a range of customer densities.³ At relatively high densities, the additional costs are substantial and may be enough to

¹ Draft Utility Accommodations Leasing for Fiber Optics.
² Application for Federal Assistance from the Webster County Economic Development Authority to the Appalachian Regional Commission, filed April 30, 2018.
³ See Appendix B.
deter investment. At modest to low densities typically found in rural and unserved areas, the additional costs are prohibitive. However, the authorizing legislation states in part that compensation must be “set at an amount that encourages the deployment of digital infrastructure within this State.”

The draft policy creates uncertainty about future costs

Fiber optic facilities constructed in the highway ROW are very likely to be in place for decades, requiring the owner to pay lease fees for a long period of time or pay a long term up-front fee. The Division of Highways (DOH) may periodically change (including raise) its rates during the useful life of the asset. Under the draft policy, companies may attempt to gain some certainty by paying up-front lease costs for 10-, 20-, or 30-year terms. This, however, greatly raises the upfront capital that an owner must raise for a project. Even if a company elects for a term agreement, the proposed policy contains a rental review and adjustment provision that allows the DOH to review and adjust rates.

Whether facing an increase in rates due to adjustments under a yearly lease or a long term one, the options for a company with facilities in place that are subject to an increase are not good. It must either agree to the increase (the amount of which was not known at the time of construction) or it may be required to remove its facilities (which is expensive and provides no revenue).

The draft policy does not clearly identify when and by how much compensation will be adjusted in unserved or underserved parts of the state.

The authorizing legislation states that the DOH, in conjunction with the Council, may consider adjustments in required compensation from telecommunications carriers, “for areas...[that]...are underserved or unserved areas of the state and may consider the value to such areas for economic development, enhancing the transportation system, expanding opportunities for digital learning, and telemedicine.” However, the draft policy does not elaborate on when adjustments will be made, where unserved or underserved areas are, how much adjustment may be made, and how a company may obtain an adjustment. Even if an adjustment would be available, the uncertainty about adjustments for unserved or underserved areas may deter companies considering investments in these areas.

LEASE PROCESS AND OTHER CONDITIONS

The draft policy discourages efficient sharing of conduit and other facilities

The draft rates sheet states, “The following lease rates allow only the conduit needed to accomplish the build. Sub-leasing of vacant conduit by the lessee is not allowed.” However, a common “best practice” when installing fiber optic facilities (and associated conduit) is to install excess capacity, even if it may be in excess of anticipated needs because the incremental cost of doing so is low when done at the time of initial construction, and high if it is ever needed in the future. This extra conduit capacity places essentially no incremental burden on the use of the ROW for other purposes. Furthermore, the wholesale leasing of excess capacity is a valid business model while

---

4 House Bill 4477 §17-2E-3 (c)(5)
5 House Bill 4477 §17-2E-3(d)
6 Draft policy section 8.110
7 Draft Utility Accommodations Leasing for Fiber Optics.
requiring every company to dig and install its own conduit creates more cost and disturbance in the ROW. The draft rules appear to go further, stating, “Subleasing of the right-of-way is not permitted.” This creates uncertainty at the very least about whether a lease holder may engage in common practices like leasing dark fiber to other broadband or telecommunications service providers.

The draft policy anticipates extensive delays for applicants seeking exceptions to paying the proposed monetary compensation rates

The draft policy states, “Any lessee that proposes lease modifications or desires to provide in-kind compensation should be advised by the District that the process to approve such could take up to three (3) to six (6) months.” However, the draft policy does not provide any additional guidance on when in-kind compensation will be accepted, creating uncertainty about whether a request to provide in-kind compensation in lieu of monetary compensation is likely to be worth the cost of delays to a project. Furthermore, since the draft rates establish the fair market value of the ROW at such a high level that it will in most cases exceed the cost of the facility being installed, it is difficult to understand how an applicant would meet the standard, “The value of in-kind compensation, or a combination of money and in-kind compensation, must be equal to or greater than the amount of monetary compensation that the Division of Highways would charge if the compensation were paid solely with money.”

The draft rates do not create transparency around the intended use of required in-kind conduit and fiber facilities

The draft Utility Accommodations Leasing for Fiber Optics states, “Right of way space for fiber optics shall always include 1 additional conduit of the same size with pull tapes installed and 4 strands of fiber whenever right of way is leased for fiber optics.” The purpose of this requirement is not stated and is unclear, which has the potential of creating uncertainty for those considering an investment. Is the purpose of these facilities limited to DOH transportation purposes or other state uses? Will the DOH itself lease the conduit and fiber it controls for commercial purposes? If so, at what rates, and how would this be done in a competitively neutral manner?

The draft rules and policy are not clear regarding placement of aerial broadband facilities

The authorizing legislation states, “The provisions of this article shall not apply to … aerial telecommunications facilities or associated apparatus or equipment in a right-of-way.” The draft rules and policy, do not, however, clearly exempt from the proposed charges aerial facilities (such as fiber hung on utility poles or pole-mounted wireless small cells).

The draft rules potentially contemplate exclusive agreements with a single competitor

The draft rules state, “Any utility accommodation lease entered into by the Division with a utility that is not subject to the jurisdiction of the West Virginia Public Service Commission shall be non-exclusive, to promote competition.” This language mirrors the language of Senate Bill 445. However, telecommunications companies

---

8 Draft 157CSR2-12.11.1
9 Draft policy section 8.112
10 House Bill 4477 §17-2E-3(f)
11 House Bill 4477 §17-2E-3(g)
12 Draft 157CSR2-12.9
13 Senate Bill 445 §17-2A-17a(d)
subject to the jurisdiction of the West Virginia Public Service Commission may also be competitors, and House Bill 4477 requires that agreements with telecommunications carriers “be nonexclusive”. One category of utilities regulated by the West Virginia Public Service Commission is telecommunications carrier.

ROW USE FEES/PERMIT FEES: OTHER JURISDICTIONS

Tilson conducted a nine-state survey of ROW use fee amounts, rules, and permit processes in the states of Vermont, Maryland, Virginia, West Virginia, Idaho, Maine, Pennsylvania, Ohio, and Kentucky to compare these jurisdictions’ treatment of broadband in the ROW to West Virginia’s proposed approach.

In general, ROW access fees for utility installations in the ROW applied in limited instances. Where permits are required for utility installations, permit fees also only applied in limited instances, surveying the various states as a whole. The following narrative details the findings of the research which included discussions with state highway department utility regulators and engineering personnel, as well as research into each state highway and land use statutes and regulations.

Vermont

State Highway Access Fees/Rates

In the State of Vermont, there are no ROW access fees for placement of utilities in Vermont Transportation Agency rights-of-way, since these entities are granted the ability to use the highway ROW by right.15

Permit Process

The Vermont Transportation Agency Permitting Services Unit reviews and issues permits for installation and maintenance of utility facilities for all work performed within Agency-owned ROW.16

State Highway Permit Fee/Rate

Installation of utility facilities are governed under state law and for such installations there are two applicable State Highway Access and Work permit fees administered by the Vermont Agency of Transportation, $100 for utility installations, and $500 for annual blanket utility permits for routine inspection and maintenance of existing utility installations on State highways.17 Both municipal and state projects, as well as nonprofit organizations and companies, are not exempt from these fees.18

Limited Access vs. Non-Limited Access Highways

For utility installations in the limited access ROW in Vermont, the Federal Highway Administration requires providers of such facilities to provide the Vermont Transportation Agency with fair market value (FMV) in return

---

14 House Bill 4477 §17-2E-3(b)(2)(C)
15 30 V.S.A. Section 2502
16 http://vtrans.vermont.gov/planning/permitting
17 19 V.S.A. Section 1112
for their use of the limited access ROW. VTrans is currently in the process of developing a FMV fee or potentially services or dark fiber in lieu of a fee for its policy relating to limited access ROW use in accordance with FHWA guidelines.

Applicability of State Rules to Local Highways

Under Vermont state law, broadband and telecommunications providers have the ability to utilize the highway ROW by right. Generally, The Vermont Transportation Agency (VTrans) has permitting jurisdiction over state-owned highways. If a utility permit applicant is seeking municipal site plan approval, they are required to obtain a letter of intent from VTrans confirming that the applicant’s proposed site plan will be approved for a State Highway Access and Work permit from the Agency. Town highways are under the jurisdiction of the selectmen of the town where the roads are located. In summary, while broadband and telecom enjoy free right of use of the highway ROW, this right is subject to permits and regulation under the local selectboard authority for local highways, and the regulation of the Agency of Transportation in the case of state highways.

Regulated Utilities versus Unregulated Companies

Under Vermont law, regulated utilities such as LECs are not treated any differently than unregulated companies in terms of utility permitting requirements on state-owned roads as the Public Service laws allow for construction and maintenance of utility facilities by “persons” or “corporations”.

Wireline versus Wireless Facilities

Regarding wireline versus wireless facilities, the Vermont Public Service Commission views wired and wireless broadband facilities in the same manner, placing both into the permit process described above if along state highway ROWs.

Maryland

State Highway Access Fees/Rates

In Maryland, while the DOT SHA does not require ROW use fees or permit fees for telecommunications equipment in the traditional sense, there is a resource sharing and compensation policy that applies to such installations, whether on fully-controlled access rights of way or secondary routes. Under this policy, for public and private entities, MDOT SHA may allow for non-exclusive use of its fully-controlled access ROWs in exchange for those

---

19 E-mail with Robert White, State of Vermont AOT (July 27, 2018).
20 Id.
21 30 V.S.A. 2502
22 30 V.S.A. Section 2501
23 24 V.S.A. Section 4416
24 19 V.S.A. Section 303
25 30 V.S.A. Section 2502
26 Id.
27 Per e-mail and discussion with Nelson Smith, Statewide Utility Engineer, Maryland State Highway Admin. (September 26, 2018)
entities’ providing equipment, services, and/or monetary revenue/compensation to the Department.\textsuperscript{28} Any compensation provided to the MDOT SHA must be used for highway purposes.\textsuperscript{29} Depending on public need, the SHA may ask for in-kind services in lieu of compensation.\textsuperscript{30} While historically for secondary (partially-controlled access) roads the SHA has had more flexibility to only require a permit when assessing a particular telecom project, the policy moving forward will be to require resource sharing and potentially compensation (whether monetary or in-kind services) to projects on both fully controlled as well as partially controlled access (secondary routes) ROWs.\textsuperscript{31}

**Permit Process**

While there are no permit fees required by the MDOT for utility installations in the state highway ROW, The DOT and SHA do require that an authorized utility obtain approval by MDOT SHA as an Authorized Public Utility.\textsuperscript{32} For each location in which an APU seeks to perform work within MDOT SHA ROWs, it must complete an Authorized Utility Permit.\textsuperscript{33}

**State Highway Permit Fee/Rate**

As referenced above, with regard to state highway rights-of-way, there are no permit fees for aerial fiber broadband deployments on existing poles.

**Limited Access vs. Non-Limited Access Highways**

In Maryland, the two types of highways are fully and partially controlled (or secondary routes) state highway ROWs. For fully controlled access ROWs, longitudinal utility installations in general are prohibited from these controlled access highways, but telecommunications are not.\textsuperscript{34} In terms of compensation for longitudinal telecommunications installations, the Maryland Department of Information Technology is currently in the process of developing applicable rates, which should be finalized in late 2018.\textsuperscript{35} As noted above, as part of MDOT SHA’s resource-sharing program, the MDOT SHA allows non-exclusive use of fully controlled access ROWs by public/private entities for installation, operation, and maintenance of communications systems for itself in exchange for providing communications equipment, services, and/or monetary revenue/compensation to MDOT

\textsuperscript{28} http://www.roads.maryland.gov/index.aspx?Pageld=872
\textsuperscript{29} Per e-mail and discussion with Nelson Smith, Statewide Utility Engineer, Maryland State Highway Admin. (September 26, 2018) and 23 CFR Section 1.23
\textsuperscript{30} Per e-mail and discussion with Nelson Smith, Statewide Utility Engineer, Maryland State Highway Admin. (September 26, 2018)
\textsuperscript{31} Id.
\textsuperscript{33} Annotated Code of Maryland, Section 8-646 (Transportation Articles).
\textsuperscript{34} Per e-mail and discussion with Nelson Smith, Statewide Utility Engineer, Maryland State Highway Admin. (September 26, 2018)
\textsuperscript{35} Per e-mail with Nelson Smith, Statewide Utility Engineer, Maryland State Highway Admin. (October 1, 2018)
This process involves an applicant participating in a detailed proposal process in which a full itemization of the monetary compensation, equipment, services is provided to the state. For secondary routes (partially controlled access highways), the state transportation secretary has more flexibility in determining whether or not resource sharing will apply to the proposed installation or if only a permit is required, the trend has been to apply the resource sharing/compensation policy evenly to projects whether on fully or partially controlled state highway ROWs.

Applicability of State Rules to Local Highways
In terms of jurisdiction over various different types of highways and roads with regard to utility installations in the ROW, MDOT SHA has authority solely on state-owned highways. Local roads are under the jurisdiction of local governments and city streets are under the jurisdiction of municipalities. Interstate and national highway routes generally have input from the Federal Highway Administration (FHWA).

Regulated Utilities versus Unregulated Companies
As referenced previously, in Maryland, a company must be registered with the MDOT SHA as an authorized public utility prior to obtaining an authorized utility permit to install broadband facilities in the state highway rights-of-way. Authorized utilities are typically certified as competitive local exchange companies with the State Public Service Commission.

Wireline versus Wireless Facilities
The state of Maryland regulates wireline and wireless attachments similarly in terms of not requiring right of way use fees or permit fees if placing these facilities on existing poles. However, if a smaller company seeks to place its own poles, they must demonstrate to the MDOT SHA that they have the ability to maintain such infrastructure housing small cell equipment. Both wireline and wireless installations in the controlled access ROWs are addressed in the MDOT’s resource sharing policy, but each has its own set of requirements for calculating the monetary value of such proposals.

36 http://www.roads.maryland.gov/Index.aspx?PageId=872 and Per e-mail and discussion with Nelson Smith, Statewide Utility Engineer, Maryland State Highway Admin. (September 26, 2018)
37 Id.
38 Per e-mail and discussion with Nelson Smith, Statewide Utility Engineer, Maryland State Highway Admin. (September 26, 2018)
39 Email from Nelson Smith, Maryland State Utility Engineer, July 20, 2018.
40 Id.
41 Id.
42 Per discussion with Mike Pasquariello, Utility Engineer, District of Baltimore/Hartford (July 17, 2018).
43 Id.
Virginia

State Highway Access Fees/Rates
The Commonwealth of Virginia does not impose a ROW fee on broadband companies, telecommunications providers, and cable operators. Virginia does however impose a public ROW use fee on customers of telecommunications companies and cable operators, and requires those companies to collect this fee and remit it to the state. This rate is recalculated annually by formula and for 2017 the rate was $1.11/month for each telecommunications company access line or cable subscriber. For 2018, this rate is $1.09/mo. The formula that establishes the rate per customer is based on the total number of highway miles in the Commonwealth multiplied by $425 per year, plus the distance of the new pole lines, conduit systems, or buried cable (the addition of new cables to existing conduit or pole infrastructure does not count in this calculation) multiplied by $1/ft. This sum is then divided by the number of access lines and then by 12 to derive the fee. The Virginia Code expressly prohibits localities and the Commonwealth Transportation Board from requiring in-kind fees from certificated telecommunications providers with regard to ROW use if already receiving a public ROW use fee.

Permit Process
In general, permits are required for any type of utility activity occurring within the right-of-way, and are governed by the land use permit process. There are generally two types of permits required for these types of installations, depending on the type and duration of the activity: 1.) single use permits, which allow for utility installations within limited access highways and primary and secondary road rights-of-way at a specific location; and 2.) district-wide permits, which are of 2-year duration and allow multiple occurrences of the same activity on non-limited access, primary, and secondary ROW without the need for a single use permit for each occurrence.

State Highway Permit Fee/Rate
For utilities operating in the state highway ROW, companies regulated by the State Corporation Commission are exempt from all permit fees. If a company is not registered with the SCC, then the single use ($100 application fee plus additive costs and a surety bond requirement) and district-wide ($750 per district) permit fees would apply to the installations.

---

45 Per discussion with Mutaz Alkhadra, Permit Manager, Virginia Dept. of Transportation (July 19, 2018).
49 Va. Code Section 56-468.1.(D)
50 Id. at Section 56-458(E)
51 24 VAC 30-151-30 (Land Use Permit Regulations).
52 24 VAC 30-151-30 (B-C).
53 Per Mutaz Alkhadra, Permit Manager, Virginia Dept. of Transportation (July 19, 2018) (discussion and e-mail)
54 Id.
Limited Access vs. Non-Limited Access Highways

For installations in the limited access ROW, in general, no such installations are allowed for telecom and broadband.\(^{55}\) For aerial broadband, nothing is allowed in the limited access ROW unless the broadband provider enters into a resource-sharing agreement, where the VDOT will determine whether a public need exists for the fiber.\(^{56}\) For underground installations, none are allowed in the limited access highway unless there is both a resource sharing plan and a surety bond requirement as well.\(^{57}\)

For non-limited access highways, broadband installations (overhead and underground) are both permitted under the typical single use and district-wide permitting structure outlined above in the “Permit Process” section above.\(^{58}\)

Applicability of State Rules to Local Highways

The ROW use fee structure described above also applies to localities in Virginia.\(^{59}\) Per Virginia law, the PROW use fee replaces all fees of general application (aside from zoning and site plan fees) otherwise chargeable to telecommunications providers by the transportation board or a locality in connection with permits for occupation and use granted to those telecom providers.\(^{60}\) Cities and Towns or counties that have withdrawn from DOT jurisdiction may only impose the PROW use fee on end-users of local telecommunications service by local ordinance.\(^{61}\) Additionally, the land use permit regulations which apply to utilities seeking access to the state highway ROW also apply to all roads in the Commonwealth, including local highways, and primary and secondary roads.\(^{62}\)

Regulated Utilities versus Unregulated Companies

In Virginia, there are different requirements for broadband providers depending on whether the entity in question is a regulated utility (LEC) or not. As mentioned previously, a LEC registered with the State Corporation Commission in Virginia is exempt from both ROW use annual fees as well as permit fees. That same provider is only subject to the annual ROW use fee if it is seeking to place underground fiber in the ROW unless it is participating in a resource-sharing agreement with the Commonwealth of Virginia.\(^{63}\)

If however, a broadband provider (aerial or underground) seeks to install facilities in the ROW and is not registered with the State Corporation Commission, it is subject only to permitting fees for the land use permit. In addition, it must also comply with certain registration and notification requirements, namely registering as an operator with an appropriate notification center and notifying entities with property interests that a permit application has been made.\(^{64}\)

\(^{55}\) Id.
\(^{56}\) Id.
\(^{57}\) Id.
\(^{58}\) 24 VAC 30-151-330, 340.
\(^{59}\) Va. Code Section 56-468.1.B.1
\(^{60}\) Id.
\(^{61}\) Id.
\(^{62}\) Per Mutaz Alkhadra, Permit Manager, Virginia Dept. of Transportation (July 20, 2018) (e-mail)
\(^{63}\) Id.
\(^{64}\) Va. Code Title 2.2 Section 1151.1 (Per Mutaz Alkhadra e-mail July 20, 2018).
**Wireline versus Wireless Facilities**

There are no fees required of wireless service providers or wireless infrastructure providers for use of the state highway ROW in Virginia.\(^{65}\) In terms of permitting, wireless providers seeking to access/attach to existing structures are subject to the single use and district-wide permitting fees ($150 and $750, respectively).\(^{66}\) For wireless providers seeking to install new wireless support structures in the public ROW, use fees are applicable and range from $1,000-$5,000 per structure, depending on the height of the structure.\(^{67}\)

**Ohio**

**State Highway Access Fees/Rates**

The Ohio DOT does not currently impose fees for use of the state highway ROW by telecommunications facilities.\(^{68}\) Ohio officials are however evaluating how to treat broadband installations in the ROW in the future, and whether ROW use fees should be implemented for such facilities.\(^{69}\) Ohio Law expressly prohibits the Director of Transportation from imposing conditions requiring payment of money to the DOT in return for the privilege to use the ROW.\(^{70}\)

**Permit Process**

In order to broadband providers to access the ROW, an access permit is required, for which formal application is made to the Ohio Director of Transportation.\(^{71}\) A copy of the required utility permit is located at [http://www.dot.state.oh.us/districts/D05/Capital%20Programs/Production/Pages/Permits.aspx](http://www.dot.state.oh.us/districts/D05/Capital%20Programs/Production/Pages/Permits.aspx).

**State Highway Permit Fee/Rate**

There is no charge for permit applications for use of the right of way.\(^{72}\) While in general utility installations in the state highway ROW are not subject to permitting fees, if the installation is on a state route within city limits, cities have the ability to impose permit fees.\(^{73}\)

---

\(^{65}\) Va. Code Title 56 Section 484.27  
\(^{66}\) Id. at 484.28(C).  
\(^{67}\) Id. at Section 484.32  
\(^{68}\) Oh. Rev. Code Ch. 5515  
\(^{69}\) Phone discussion with Wendi Snyder, Utilities and Railroad Program Manager, Ohio DOT (July 25, 2018).  
\(^{70}\) Oh. Rev. Code Ch. 5515.01(F)  
\(^{71}\) Oh. Rev. Code Ch. 5515  
\(^{72}\) [http://www.dot.state.oh.us/districts/D05/Capital%20Programs/Production/Pages/Permits.aspx](http://www.dot.state.oh.us/districts/D05/Capital%20Programs/Production/Pages/Permits.aspx)  
\(^{73}\) Per Wendi Snyder, ODOT, phone discussion (July 25, 2018).
Limited Access vs. Non-Limited Access Highways

The ODOT generally allows for only minimally for utility use of the limited access right of way, and currently fiber broadband installations are not permitted in the L/A ROW. In the future, ODOT may consider implementing fees for fiber/broadband use of the L/A ROW or a resource sharing policy, but currently does not.

On non-limited access highways, utility installations are simply subject to the normal permitting process as described above, submitting formal application for access permits through one of 12 district offices depending on the location of the facility. No permit fees apply to installations in the non-L/A ROW.

Applicability of State Rules to Local Highways

In Ohio, the hierarchy of ROW jurisdiction is as follows: 1) For interstate routes, the ODOT has jurisdiction; 2.) For state highway routes, the ODOT also has jurisdiction; 3.) If however, a state route is within city limits, the city has the ability to impose permit fees. Under Ohio law, the municipal public way is governed by local municipal authorities.

Regulated Utilities versus Unregulated Companies

Regulated utilities are generally treated similarly to unregulated companies in Ohio with respect to state highway ROW access under the ODOT. Despite this general rule, the Ohio Director of Transportation has full discretion as to whether or not to allow a private utility access to roadways under its jurisdiction and may impose requirements or limit such private utilities as they see fit.

Wireline versus Wireless Facilities

In Ohio, wireless facilities are governed by the permitting procedure as outlined in the Ohio Revised Code, whereby a wireless provider must obtain requisite consent of the municipal corporation owning or controlling the public way prior to occupation or use. The Ohio code makes specific reference to small cell wireless facilities, for which a one-time municipal consent fee, not to exceed $250 is required.

For wireline (fiber optic facilities) as mentioned previously, such installations are not currently subject to ROW use or permitting fees for use of state highway ROWs.
Kentucky

State Highway Access Fees/Rates

The Kentucky Transportation Cabinet (KYTC) does not currently impose ROW use fees or permit fees, however, for utilities seeking to use the ROW, an indemnity may be required following the encroachment permit submittal process detailed in the following section. Under Kentucky law, “telephone” companies (LECs) authorized to do business in the state are provided the right, under Kentucky law, “upon making just compensation” to construct/maintain/operate their lines on/across/along any public road. Despite this, for any facilities in the KYTC ROW, there are no ROW use, permitting fees, nor does the KYTC require or accept compensation for use or permitting of these highways.

Permit Process

Utilities seeking to encroach upon the ROW, are required to submit a form (TC 99-1) along with plans detailing the nature of the encroachment. Once this form and plans are submitted, the DOT then determine the amount of any indemnity that is required for the requested utility encroachment in the ROW. The form is then reviewed by KYTC permit staff as well as any other required departments prior to approval. All permits on the interstate ROW are subject to review and approval from the local Kentucky Transportation Cabinet district office, as well as the Central Office Permits office (Frankfort), and the FHWA. Local KYTC district offices have discretion to deny or approve permits as they see fit.

State Highway Permit Fee/Rate

There is no permit fee associated with the TC 99-1 encroachment permit application submittal process detailed above.

Limited Access vs. Non-Limited Access Highways

According to the Kentucky Transportation Cabinet, longitudinal and overhead installations in the ROW are prohibited on controlled access highways unless the entity seeking to install can make a showing that there will be no adverse effects from such installations. As for support structures for overhead utility lines, these are also

---

84 Kentucky Revised Stat. Section 177.106(1) and confirmed per e-mail with Thomas Hines, District Utility Engineer, Kentucky Transportation Cabinet (KYTC) (July 18, 2018), and Staci Timol, Engineer, KYTC Division of Maintenance per e-mail (Sept. 26, 2018).
85 Id. at Section 278.540
86 Per e-mail with Staci Timol, Engineer, KYTC Division of Maintenance per e-mail (Sept. 26, 2018).
87 Id.
88 Id.
89 Id.
90 E-mail with Staci Timol, Engineer, KYTC (July 23, 2018).
91 Id.
92 E-mail with Thomas Hines, District Utility Engineer, KYTC (July 18, 2018).
93 Kentucky Transportation Cabinet, Permits Manual, PE-302 (July 2013).
prohibited on controlled access highways. The utility permits that the KYTC allows on interstate rights-of-way are for perpendicular crossings.

On non-fully controlled access highways, The Kentucky Department of Highways permits utilities to be installed longitudinally as long as they do not interfere with safe use of median roadway and shoulder areas and do not interfere with maintenance or aesthetics. No excavation of the travelled way or shoulders via open trenching is allowed unless approved by the Department on non-fully controlled access highways.

Applicability of State Rules to Local Highways
In Kentucky, all state routes are handled via the permit process outlined above and the Transportation Cabinet does not interfere with local jurisdiction.

Regulated Utilities versus Unregulated Companies
Utility companies regulated by the Kentucky Public Service Commission (PSC) and municipal utility companies have different frontage rights requirements than do private utility companies. Where the utility seeks to install an encroachment on state ROW extending in front of property of others, requirement of property owner approval is waived if facilities are to serve the public and DOH owns the property. If the intended facilities are private and not intended to serve the public, signatures/consent of property owners in front of whose property the equipment is placed are required.

Wireline versus Wireless Facilities
In Kentucky, the only manner in which the Transportation Cabinet regulates wireline and wireless facility installations differently in the state highway system right of way is by prohibiting large utility pole or cellular tower structures installations longitudinally within the 30-foot clear zone.

---

94 Id.
95 E-mail with Staci Timol, Engineer, KYTC (July 23, 2018).
96 Kentucky Transportation Cabinet, Permits Manual at PE-303.
97 Id.
98 Per e-mail with Thomas Hines, District Utility Engineer, KYTC (July 18, 2018).
99 E-mail with Staci Timol, Engineer, KYTC (July 23, 2018).
100 Kentucky Transportation Cabinet, Permits Manual, PE-301 (July 2013).
101 Id.
102 Kentucky Transportation Cabinet, Permits Manual, PE-301 (July 2013).
Pennsylvania

State Highway Access Fees/Rates

The Commonwealth of Pennsylvania, in regulating occupancy of its highways by utilities, does not require ROW access fees, but charges permit and inspection fees for surface openings or placing of utility facilities within the state highway ROW.103

Permit Process

Under the Pennsylvania Code, no work may be conducted within the ROW that involves the placement or installation of utility facilities, opening of the ROW surface, or placement of other utility structures without first obtaining a permit from the Pennsylvania DOT.104 However, permits are not required for stringing overhead utility lines on non-limited access highways.105 Applicants for a permit utilize form M-945A, which is submitted in the district or county office in which the proposed utility work will be performed.106

State Highway Permit Fee/Rate

The fees for the permit referenced above include Application Fees ($50) and Supplemental Fees ($10) and General Permit Inspection Fees.107 For the general permit inspection fees, these are calculated per 100 linear feet for surface openings. For an opening in the pavement, the inspection fee is $40 per 100 linear feet; for an opening in the shoulder, the rate is $20 per 100 linear feet; for openings outside of the pavement and shoulder, $10 per 100 linear feet.108 For aboveground facilities such as poles the rate is $20 for up to ten physically interconnected aboveground facilities.109 Permit application fees and general permit inspection fees are not applicable to the Commonwealth, its political subdivisions, governmental authorities, the Federal government, or utility facility owners installing work at the request of government entities.110

Limited Access vs. Non-Limited Access Highways

For limited access highways in Pennsylvania, work performed on or across an L/A highway requires a permit.111 For non-limited access highways, if there is no surface opening and the utility is only modifying parts of existing facilities (example, cable within conduit), no permit application would be required as long as no surface opening is required.112 Permit applications are not required for accessing an existing utility facility through a manhole except in limited access highway medians or interchange areas.113 As mentioned above, if merely stringing

103 Pa. Code Title 67 Ch. 459; confirmed by Mike Dzurko, Manager, Highway Occupancy Program (PennDOT) via e-mail (July 25, 2018).
104 Pa. Code Title 67 Ch. 459.3(a).
105 Id.
106 Id.
107 Id. at 459.4(b).
108 Id.
109 Id.
110 Id. at 459.4(c).
111 Id. at 459.3(a)(5).
112 Id. at 459.3(a)(2).
113 Id.
overhead utility lines in the non-limited access highway, no permit is required from the DOT.\textsuperscript{114} PennDOT does not allow any longitudinal occupancy of the L/A ROW.\textsuperscript{115}

**Applicability of State Rules to Local Highways**

In Pennsylvania, if a permit is required for certain utility installations, highway occupancy permits are required to be submitted to either the district or county office which has jurisdiction over the county where the proposed work is to be performed.\textsuperscript{116} Municipalities have the ability to review permit applications for highway occupancy if that municipality has entered into a permit issuance agreement with the DOT.\textsuperscript{117} Local and municipal roads are under town and local jurisdiction as PennDOT does not have jurisdiction to issue permits or approve utility installations in non-State highways.\textsuperscript{118}

**Regulated Utilities versus Unregulated Companies**

The Pennsylvania statutes define “utilities” as privately or publicly owned lines and facilities, which directly or indirectly serve the public. As such, this broad definition would encompass both regulated as well as unregulated companies seeking to install facilities in the state highway ROW.\textsuperscript{119}

**Wireline versus Wireless Facilities**

The Commonwealth of Pennsylvania does not make much distinction between wireline and wireless in the state highway ROW except in the case of the interstate limited access ROW. Under the Highway Occupancy Permit Manual, small cellular wireless facilities are not permitted in the limited access ROW in Pennsylvania.\textsuperscript{120}

**Idaho**

**State Highway Access Fees/Rates**

In Idaho, the Idaho Transportation Department (ITD) is currently in the process of establishing a policy with regard to broadband facilities in the state highway ROW.\textsuperscript{121} Under Idaho state law, telecommunications companies are allowed by right to utilize public highways in order to construct their lines, poles, wires, and other necessary fixtures.\textsuperscript{122} While the ITD’s broadband-specific policy is still under development, the right of access to public roads granted to telephone corporations in Idaho is not subject to any access fees.\textsuperscript{123} Compensation for use of the ITD

\textsuperscript{114} Id. at 459.3(a)(3).
\textsuperscript{115} Mike Dzurko, Manager, Highway Occupancy Program (PennDOT) via e-mail (July 25, 2018).
\textsuperscript{116} Pa. Code Title 67 Ch. 459.3(c)
\textsuperscript{117} Id.
\textsuperscript{118} Mike Dzurko, Manager, Highway Occupancy Program (PennDOT) via e-mail (July 25, 2018).
\textsuperscript{119} Pa. Code Title 67 at Section 459.1
\textsuperscript{120} PA DOT Highway Occupancy Permit Manual – Publication 282 (July 2017), Subchapter 2.7 p. 87.
\textsuperscript{121} Per Barbara Waite, Railroad/Utility Manager – Idaho Trans. Dept., via e-mail (August 17, 2018).
\textsuperscript{122} Idaho Code, Title 62, Section 701.
\textsuperscript{123} Id.
ROW by broadband/fiber/telecom companies is currently under review and consideration by ITS management, and as of the date of this report, no policy has been set.\textsuperscript{124}

\textbf{Permit Process}

The rules governing ROW encroachments generally by utilities require an approved permit for all utility installations.\textsuperscript{125} Installations in the ITD ROW involve permits for ROW encroachment or, for utilities, a Right of Way Encroachment Application and Permit, submitted to the district engineer.\textsuperscript{126}

\textbf{State Highway Permit Fee/Rate}

For non-utility type installations, permit fees are in the range of $50 per permit application.\textsuperscript{127} For permit fees involving utility type installations in the ITD ROW, the fees are $50 for the application, and potential inspection fees and performance bond requirements as determined by the ITD following review of the permit application.\textsuperscript{128}

\textbf{Limited Access vs. Non-Limited Access Highways}

In accordance with the 1996 Telecommunications Act, in Idaho, longitudinal placement of any telecommunications utilities in an Interstate ROW requires a permit approved by the Department for the installation of those utilities.\textsuperscript{129}

\textbf{Applicability of State Rules to Local Highways}

Telecommunications providers are subject to the authority of city, county, or highway districts, and the statutory right of access that telephone corporations enjoy under Idaho state law does not waive any rights, code requirements, or city, county, or highway district resolutions or ordinances of those entities.\textsuperscript{130} Municipalities may levy franchise fees of up to 3\% of gross operating revenues on telecom providers.\textsuperscript{131} This fee is in lieu of other taxes and fees imposed by the municipality related to easement, franchises, rights-of-way, utility lines, and equipment installation.\textsuperscript{132}

\textbf{Regulated Utilities versus Unregulated Companies}

While the right of use by regulated telecommunications companies is well established in Idaho, as noted above, the Idaho Transportation Department is currently in the process of developing its policy with regard to unregulated broadband providers in the state highway ROW.\textsuperscript{133}

\begin{footnotesize}
\textsuperscript{124} Per Barbara Waite, Railroad/Utility Manager – Idaho Trans. Dept., via e-mail (September 21, 2018).
\textsuperscript{125} Idaho Admin Code Section 500 (IDAPA 39.03.42).
\textsuperscript{126} https://apps.itd.idaho.gov/apps/formfinder2dmz
\textsuperscript{127} Id.
\textsuperscript{128} Id.
\textsuperscript{129} Idaho Admin Code Section 500 (IDAPA 39.03.42).
\textsuperscript{130} Idaho Code Title 62, Section 701A(2).
\textsuperscript{131} Idaho Code Title 50, Section 329A.
\textsuperscript{132} Id.
\textsuperscript{133} Idaho Code, Title 62, Section 701; and Per Barbara Waite, Railroad/Utility Manager – Idaho Trans. Dept., via e-mail (August 17, 2018).
\end{footnotesize}
**Wireline versus Wireless Facilities**
Currently, Idaho does not make a distinction between ROW use for wireline versus wireless facilities, as both are included in the broad definition of “telecommunication services” under Idaho law.134

**Maine**

**State Highway Access Fees/Rates**
Under Maine law, there are currently no ROW access fees required for broadband or utilities communications providers upon or along highways and public roads.135

**Permit Process**
The permitting process for utilities in state or state aid highway ROW is set forth in the Maine Department of Transportation’s Utility Accommodation Rules.136 Utilities seeking to construct new poles must apply for a Location Permit providing a description and the location of the facilities.137 DOT reviews the application for conformance with the standards in the Rules, and sends the utility an approved location permit, with any applicable conditions, within 30-60 days.138 Utilities may also use the Permit-By-Rule process for facilities not on freeways, controlled access highways, or scenic byways, which allow for automatic approval without further notification from Maine DOT after 14 days (10 or fewer poles) or 30 days (more than 10 poles).139 No permit is required to install wires, cables and appurtenances on existing poles or in existing conduit, or for replacement facilities.140

In Urban Compact areas (generally, municipalities with greater than 7,500 inhabitants, currently 47 Maine communities), the permit must be submitted to the municipality for approval, and the municipality may impose more stringent licensing requirements than those set forth in the rules.141

**State Highway Permit Fee/Rate**
As with ROW access, in Maine there are no fees for broadband or utility permits in the state highways ROW.142

---

134 Idaho Code Title 61, Section 121.
135 Maine Rev. Stats., Title 35-A, Section 2501.
137 A copy of the blank form is available at https://www1.maine.gov/mdot/utilities/docs/locopen/location_permit_application_0906_000.pdf
139 Id.
140 Id.
141 Id.
142 Id.
Limited Access vs. Non-Limited Access Highways

In general, Maine DOT does not allow new utility facilities to be placed longitudinally within the right of way of a controlled access highway, though they may be permitted in special circumstances. Utilities may take advantage of the expedited Permit-By-Rule process described above in non-limited access highways only. For special case longitudinal underground point-to-point facilities on controlled access freeways, Maine DOT can negotiate agreements and receive compensation for use of the freeway ROW to install such facilities.

Applicability of State Rules to Local Highways

For municipally owned ways, the location permit process described above is administered by the municipality, and the municipality may impose more stringent licensing requirements than those proscribed by the Maine DOT.

Regulated Utilities versus Unregulated Companies

The types of telecommunications providers authorized to place facilities in the public right of way is set forth in Maine statute. It includes voice service providers, competitive local exchange carriers, telecommunications service providers (47 U.S.C. 153(24)), information service providers (47 U.S.C. 153(53)), Dark fiber providers, and cable companies.

As a practical matter, this includes any entity that could provide any type of broadband service, regardless of whether they are subject to state regulation.

Wireline versus Wireless Facilities

Maine makes no distinction between wireline and wireless broadband access to the ROW as it includes any “plant or equipment” in the definition of “facilities” regulated in the public way.

West Virginia

State Highway Access Fees/Rates

In West Virginia, Senate Bill 445 was enacted in March 2018, which allows the Division of Highways to acquire and lease the ROW to broadband companies and all utilities, and charge fair market value for such use. The new law’s definition of “utility” includes both publicly and privately owned entities and cooperatives and which own

143 Id.
144 Id.
145 Id. at Section 12(F)(1), p.56
146 Maine Rev. Stats., Title 35-A, Section 2301.

147 Id.
148 Maine Rev. Stats., Title 35-A, Section 2502.

149 W. Va. Code §17-2A-17a
lines/facilities which produce, transmit, or distribute communications, data, information and light.  In addition, West Virginia also enacted House Bill 4447 (Dig Once Policy), addressing broadband conduit installation and compensation in the ROW. In terms of defining the amount of compensation due from a telecommunications carrier, the Legislature required that the compensation should be: (1) At Fair Market Value; (2) Competitively Neutral; (3) Nondiscriminatory; (4) Open to Public Inspection; (5) Calculated based on population and impact on private ROW users; (6) Paid in monetary compensation, in-kind compensation, or a combination of both. Despite the enactment of the new law, however, the practical effect of this legislation on compensation amounts has been mitigated, as recently, the Governor of West Virginia issued a directive to the Department of Highways to set the fair market value of the ROW access at $0.

**Permit Process**

Under the new HB 4447, prior to obtaining a permit for construction or installation of a telecommunications facility in the ROW, a telecommunications carrier must first enter into an agreement with DOH. Agreements must be competitively neutral and nondiscriminatory with regard to other telecommunications carriers. Once this is done, the carriers may make a request to perform utility work within the DOH ROW, which is made on a specific form (MM-109), unless the work is covered by the utility agreement. Once completed, the permit application, accompanied by sketches illustrating the nature of the work to be performed is submitted by the owner/operator of the facility to the appropriate District Engineer.

**State Highway Permit Fee/Rate**

As part of the MM-109 Form permit process, the applicant for an encroachment permit must agree to deposit a sum as determined by the division of highways to cover costs associated with granting the permit as well as agree to reimburse the division for any inspection costs incurred under the permit.

**Limited Access vs. Non-Limited Access Highways**

Relying on the Telecommunications Act of 1996, the WVDOT allows fiber/cable to be run longitudinally in the controlled access ROW, thus it treats controlled and non-controlled access highways similarly.

---

150 Id. at §17-2A-17a(b)
151 W. Va. Code §17-2E-3(c)
152 Id.
154 W. Va. Code §17-2E-3(a)
155 Id.
156 Id. at 5.
157 Id. at 6.
158 Form MM-109 (Encroachment Permit)
159 Per e-mail with Stefan Zakaib, WV DOH (October 19, 2018).
Applicability of State Rules to Local Highways

In West Virginia, the state DOT owns nearly all roadways, including state and local roads.\textsuperscript{160} Therefore, the state rules apply broadly across the state.

Regulated Utilities versus Unregulated Companies

Under HB 4447 and SB 445, the definitions of “telecommunications carrier” and “utility facility”, respectively have been expanded. Under HB 4447, “telecommunications carrier” includes both companies as determined by the West Virginia Public Service Commission; and those that are telecom carriers as defined by the FCC under 47 USC Section 153.\textsuperscript{161} In addition, as noted above in SB 445, the definition of “utility” now encompasses both private and public companies, either directly or indirectly serving the public.\textsuperscript{162}

Wireline versus Wireless Facilities

The definition of “utility” in the recently enacted SB 445 encompasses both wireline and wireless facilities.\textsuperscript{163} In addition, HB 4447 (Dig Once Policy) also includes wireless facilities in addressing its new compensation policy for use of the ROW by such facilities.\textsuperscript{164} As such, West Virginia currently has no express distinction between wireline and wireless in terms of its policy with regard to ROW access.

\textsuperscript{160} Per e-mail with Stefan Zakaib, WV DOH (October 17, 2018).
\textsuperscript{161} W. Va. Code §17-2E-2(8)
\textsuperscript{162} W. Va. Code §17-2A-17a(b)
\textsuperscript{163} W. Va. Code §17-2A-17a(b)
\textsuperscript{164} W. Va. Code §17-2E-3(c)
## APPENDIX A: STATE ROW POLICY SUMMARY TABLE

<table>
<thead>
<tr>
<th>STATE</th>
<th>State Highway Access Fee/Amount</th>
<th>State Highway Permit Fee/Amount</th>
<th>Permit Process</th>
<th>Compensation Policy</th>
<th>Limited Access vs. Non-limited Access</th>
<th>Local Highways</th>
<th>Regulated Utilities versus unregulated</th>
<th>Wireline vs. Wireless</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>None</td>
<td>Application Fee ($50) Supplement Fee ($10)</td>
<td>If placing utility facilities/structures → DOT permit required; Permits (Highway Occupancy, Form M-945P) If modifying existing facilities → no permit required (Example: cable within conduit on non L/A highways) Submitted to one of 11 district offices Possible insurance bond requirement as well (per engineering contact)</td>
<td>Not expressly provided for or prohibited</td>
<td>L/A: Work performed on or across L/A highway → permit required (possible FHWA involvement as well) No longitudinal occupancy Non L/A: If no surface opening and modifying existing facilities → no permit needed Non L/A: If stringing overhead utility lines → no permit needed If it is a new project → permit required</td>
<td>Interstate: PennDOT as well as FHWA jurisdiction Some highway occupancy permits can be issued by municipality under a municipal permit issuance agreement with DOT Local and municipal roads (town/local jurisdiction)</td>
<td>For unregulated utilities → PennDOT looks more closely at past projects of the unregulated entity, (ability to manage/handle emergencies)</td>
<td>No small cell facilities permitted in the L/A ROW (Hwy Occupancy permit Manual - Pub. 282, Subchapter 2.7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATE</th>
<th>State Highway Access Fee/Amount</th>
<th>State Highway Permit Fee/Amount</th>
<th>Permit Process</th>
<th>Compensation Policy</th>
<th>Limited Access vs. Non-limited Access</th>
<th>Local Highways</th>
<th>Regulated Utilities versus unregulated</th>
<th>Wireline vs. Wireless</th>
</tr>
</thead>
<tbody>
<tr>
<td>OH</td>
<td>None, currently, but ODOT is reviewing policy to see how to treat broadband in the future</td>
<td>None, However, if on a state route within city limits → cities can impose permit fees (example: City of Columbus has high fees according to contact)</td>
<td>Access Permit required to use or occupy ROW Access Permit - Formal application to Dir. Of Transportation for permit (Section 5515.01 Ohio Revised Code)</td>
<td>Monetary compensation for use of ROW expressly prohibited</td>
<td>Limited Access ROW: No fiber allowed on L/A ROW currently L/A: potential for charge for fiber or resource sharing policy in the future Non-limited access: normal permitting process through one of 12 districts (No permit fee)</td>
<td>Interstate routes → ODOT jurisdiction State routes → ODOT jurisdiction If state route within city limits → can impose permit fees Municipal public way governed under Ohio rev. code Ch. 4939</td>
<td>No real distinction between regulated/unregulated—Director of Transportation has discretion however in allowing unregulated access</td>
<td>Municipal ROW Permitting procedure (4939.01-4939.09) only applies to wireless, not wireline (4939.0311) Small cell wireless municipal consent Fee (Section 4939.0316) (one-time, not to exceed fee $250) Currently no charge for fiber optic</td>
</tr>
</tbody>
</table>
### APPENDIX A: STATE ROW POLICY SUMMARY TABLE

<table>
<thead>
<tr>
<th>STATE</th>
<th>State Highway Access Fee/Amount</th>
<th>State Highway Permit Fee/Amount</th>
<th>Permit Process</th>
<th>Compensation Policy</th>
<th>Limited Access vs. Non-limited Access</th>
<th>Local Highways</th>
<th>Regulated Utilities versus Unregulated</th>
<th>Wireline vs. Wireless</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA</td>
<td>No ROW fee imposed on broadband, telecom, or cable operators. ROW use fee imposed on customers of telecom and cable operators: ($1.09/month per access line for 2018)</td>
<td>If LEC, none of the permit fees apply. If not LEC: Single use: $100 application fee + additive costs; surety req. District wide (2 year permit) $750 per district</td>
<td>Single use permits; District wide permits; Land use permit for installation of utilities in L/A ROW Occupancy within controlled access ROW—approval of Chief Engineer required for new utilities and relocating existing</td>
<td>For localities receiving ROW use fees and the Commonwealth transit board is prohibited from requiring in-kind services or physical assets from certified telecom providers</td>
<td>L/A ROW: In general, nothing is allowed unless resource-sharing agreement is in place (for aerial); L/A ROW: If underground, resource sharing plus surety bond may be required. Non-L/A: District-wide permit process applies. Non-L/A: Overhead and underground utility installations in non-L/A highways permit required.</td>
<td>PROW use fees only apply to customers of certified providers of telecom and cable. If not a regulated utility—only permit fee applies and company must comply with Section 2.2-1151.1 (Registration and notice to local government)</td>
<td>Annual ROW use fees only apply to access/use ROW. Permit required for access to existing structures ($150 application fee (single-use permit); $750 Processing fee (district-wide permit) (S6-484.28(C)) New wireless support structure PROW use fees (Height based ranging from $1,000-$5,000 per structure)</td>
<td>No fees to wireless providers generally to access/use ROW. Permit required for access to existing structures ($150 application fee (single-use permit); $750 Processing fee (district-wide permit) (S6-484.28(C)) New wireless support structure PROW use fees (Height based ranging from $1,000-$5,000 per structure)</td>
</tr>
<tr>
<td>KY</td>
<td>None</td>
<td>None</td>
<td>ROW permit required before encroaching on ROW (obtained from District office where work is proposed) Amount of indemnity/bond is determined after encroachment permit application submitted</td>
<td>KY Trans. Cabinet (KYTC) does not require or accept compensation for KYTC ROW use or permitting However, under KY statute &quot;telephone companies&quot; have the right to use public roads &quot;upon making just compensation.&quot;</td>
<td>Controlled Access Highways: No longitudinal or overhead installations in ROW unless showing of no adverse effects. No support structures for overhead utility lines allowed in ROW; vertical clearance req’d (Permits manual, PE-302) Non Fully Controlled Access Highways: Overhead req’d: Department of Highways designates which utilities can be installed overhead (Permits Manual, PE-303)</td>
<td>All state routes are handled via permit process and DOT does not interfere with local jurisdiction</td>
<td>Frontage rights requirements are different for regulated Utilities/Municipal utilities versus private utilities Waiver of certain approvals if for public use (PE-301)</td>
<td>Utility poles and large wireless towers must be located outside 30-foot Clear Zone.</td>
</tr>
</tbody>
</table>
## APPENDIX A: STATE ROW POLICY SUMMARY TABLE

<table>
<thead>
<tr>
<th>STATE</th>
<th>State Highway Access Fee/Amount</th>
<th>State Highway Permit Fee/Amount</th>
<th>Permit Process</th>
<th>Compensation Policy</th>
<th>Limited Access vs. Non-limited Access</th>
<th>Local Highways</th>
<th>Regulated Utilities versus unregulated</th>
<th>Wireline vs. Wireless</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT</td>
<td>None</td>
<td>Utility Installations: $100</td>
<td>VT Agency of Transportation Permitting services unit reviews permits; State highway access and work permit required</td>
<td>VTrans considering FMV fee or services/dark fiber in lieu of fee for use of limited access ROW</td>
<td>FHWA guidelines require VTrans to receive Fair Market Value in return for use of I/A ROW; VTrans currently considering FMV fee or services/dark fiber in lieu of fee</td>
<td>No right of way use fees for telecom and BB, however VT Agency of Trans has permitting jurisdiction over State highways (Title 30)</td>
<td>No distinction—rules apply to persons or corporations</td>
<td>Wired and Wireless permit process is same if along state highway ROW (Title 30, V.S.A., Section 2502)</td>
</tr>
<tr>
<td>ID</td>
<td>None</td>
<td>$50 permit application; potential inspection fees and performance bond requirements as determined by Idaho Transp. Dept.</td>
<td>Applications for ROW encroachment permit for utilities, submitted to district engineer; Bond requirement</td>
<td>Compensation for use of ITD ROW by BB/fiber/telecom companies currently under review—no set policy yet</td>
<td>Limited Access: Permit required for longitudinal placement of telecommunications utilities on interstate ROW (from Idaho Transp. Dept.)</td>
<td>Telecom providers are subject to rights, code requirements of city, county, or highway district; Franchise fees for public service providers in lieu of other fees</td>
<td>Regulated Telecom providers: ROW right of access well established; Unregulated broadband providers: ROW policy currently under development by Idaho Transp. Dept.</td>
<td>No distinction between ROW use between wireline and wireless facilities</td>
</tr>
<tr>
<td>ME</td>
<td>None</td>
<td>None</td>
<td>Construction of broadband facilities requires application with State DOT for state highways</td>
<td>Limited Access: Permit required under special circumstances for new utility facilities. Non Limited Access: Utilities may apply to DOT and receive permit (expedited process 14-30 days)</td>
<td>If municipally owned ROW, location permit is issued by municipality; municipality may impose more stringent licensing requirements than DOT.</td>
<td>Any entity providing broadband, whether regulated or not can place facilities in ROW on a distinction</td>
<td>No distinction—facilities in ROW includes “any plant or equipment”</td>
<td></td>
</tr>
</tbody>
</table>
# APPENDIX A: STATE ROW POLICY SUMMARY TABLE

<table>
<thead>
<tr>
<th>STATE</th>
<th>State Highway Access Fee/Amount</th>
<th>State Highway Permit Fee/Amount</th>
<th>In Kind Compensation Policy</th>
<th>Process</th>
<th>Limited Access vs. Non-limited Access</th>
<th>Local Highways</th>
<th>Regulated Utilities versus unregulated</th>
<th>Wireline vs. Wireless</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>No traditional access fees, however, for both fully and partially controlled access highways, in-kind and monetary compensation likely through resource sharing program</td>
<td>None</td>
<td>On fully controlled and also partially controlled access ROWs - Resource sharing proposal/compensation request; Monetary value of fiber determined as part of calculating compensation to the state (applies to public/private entities). Also option for in-kind compensation in lieu or together with monetary compensation</td>
<td>DOT/SHA - Authorized Utility Permit (required for each location); must be approved by MDOT/SHA as an Auth. Public Util.</td>
<td>Fully controlled Access: possible fiber sharing requirement and/or compensation to MDOT/SHA if public need determined; compensation rate under development</td>
<td>Partially controlled access (Secondary Routes): Possibility of no resource sharing, but most likely it will apply here as well moving forward</td>
<td>MDOT SHA has authority on state highways only, Local roads and city streets fall under local and municipal jurisdiction, respectively.</td>
<td>Must be an authorized public utility registered with MDOT SHA and the PSC prior to ROW use.</td>
</tr>
<tr>
<td>WV</td>
<td>New Law requires compensation for ROW use at FMV, calculated based on population factors and impact on private ROW. Governor Directive after enactment however placed ROW value at $0, so no practical cost yet</td>
<td>Encroachment permit fee equal to reimbursement for inspection fees/costs</td>
<td>Agreement between B&amp;B provider and Dept. of Highways, required prior to Encroachment Permit (MM-109). Permit submitted to district engineer</td>
<td>Under new legislation, DHH is entitled to FMV for use. Form: Monetary compensation, in-kind compensation, or combination of both.</td>
<td>WVDOT allows fiber/cable to be run longitudinally in the controlled access ROW, thus it treats controlled and non-controlled access highways similarly</td>
<td>State DOT owns vast majority of roadways, statewide and local. State rules apply broadly across the state.</td>
<td>Under new law’s definitions of utility being public and private, both regulated and unregulated are now treated similarly, though some provisions of law only apply to telecommunicatio carriers as determined by the WV PSC or the FCC</td>
<td>No distinction currently. New ROW law encompasses both wireline and wireless</td>
</tr>
</tbody>
</table>
# APPENDIX B: ANALYSIS OF PROPOSED ROW FEES

## Analysis of West Virginia Division of Highways DRAFT ROW Rates

<table>
<thead>
<tr>
<th></th>
<th>Annual</th>
<th>10 year</th>
<th>20 year</th>
<th>30 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>$3</td>
<td>$30</td>
<td>$60</td>
<td>$90</td>
</tr>
<tr>
<td>Suburban</td>
<td>$2</td>
<td>$20</td>
<td>$40</td>
<td>$60</td>
</tr>
<tr>
<td>Rural</td>
<td>$1</td>
<td>$10</td>
<td>$20</td>
<td>$30</td>
</tr>
</tbody>
</table>

## Cost Per Mile

<table>
<thead>
<tr>
<th></th>
<th>Annual</th>
<th>10 year</th>
<th>20 year</th>
<th>30 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>$15,840</td>
<td>$158,400</td>
<td>$316,800</td>
<td>$475,200</td>
</tr>
<tr>
<td>Suburban</td>
<td>$10,560</td>
<td>$105,600</td>
<td>$211,200</td>
<td>$316,800</td>
</tr>
<tr>
<td>Rural</td>
<td>$5,280</td>
<td>$52,800</td>
<td>$105,600</td>
<td>$158,400</td>
</tr>
</tbody>
</table>

## Cost Per Subscriber Per Year

<table>
<thead>
<tr>
<th></th>
<th>Customer Density Per Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Urban</td>
<td>$316.80</td>
</tr>
<tr>
<td>Suburban</td>
<td>$211.20</td>
</tr>
<tr>
<td>Rural</td>
<td>$105.60</td>
</tr>
</tbody>
</table>

## Cost Per Subscriber Per Month

<table>
<thead>
<tr>
<th></th>
<th>Customer Density Per Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Urban</td>
<td>$26.40</td>
</tr>
<tr>
<td>Suburban</td>
<td>$17.60</td>
</tr>
<tr>
<td>Rural</td>
<td>$8.80</td>
</tr>
</tbody>
</table>