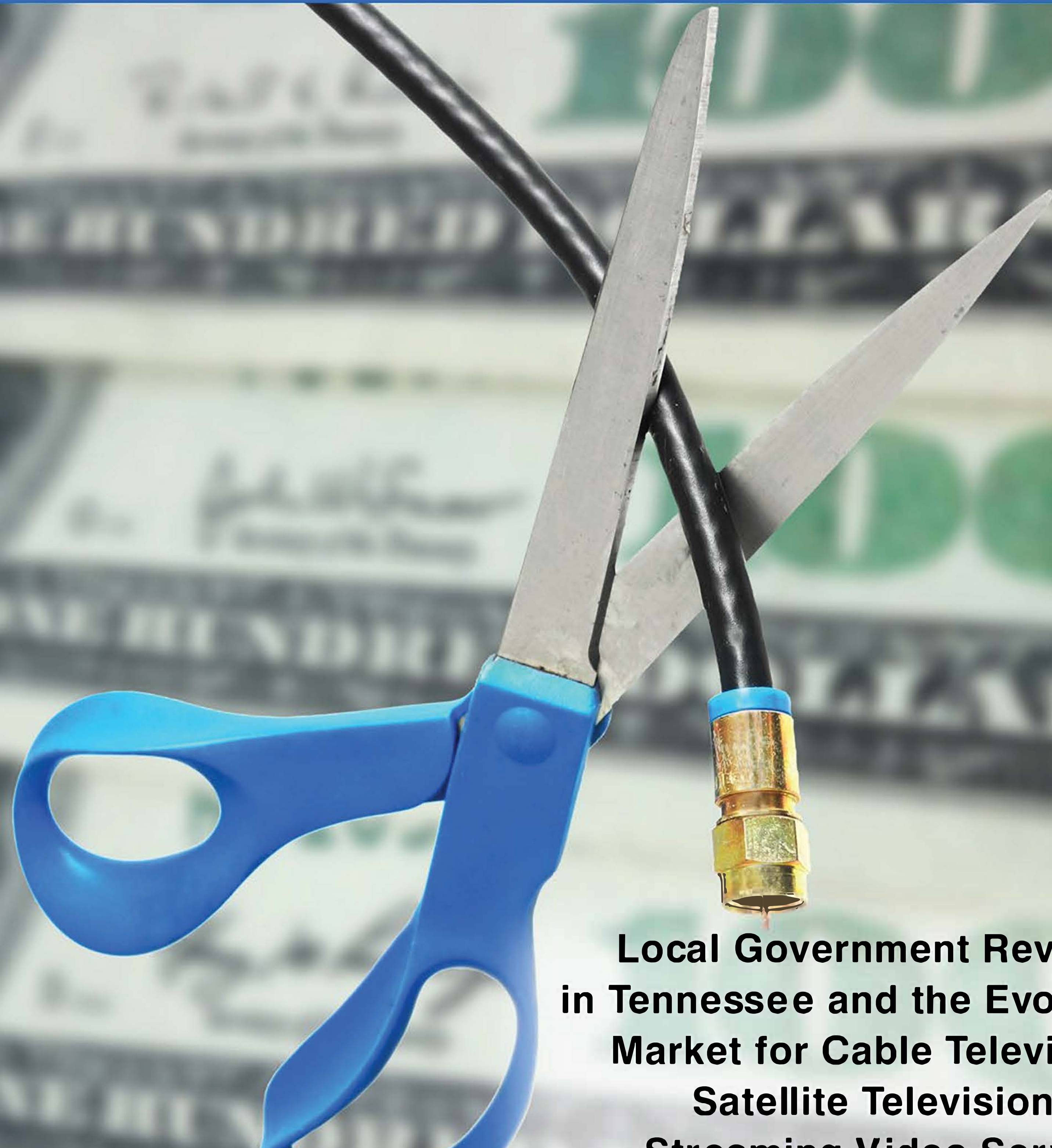
Report of the Tennessee Advisory Commission on Intergovernmental Relations



Local Government Revenue in Tennessee and the Evolving Market for Cable Television, Satellite Television, and Streaming Video Services

September 2019

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Report of the Tennessee Advisory Commission on Intergovernmental Relations

Local Government Revenue in Tennessee and the Evolving Market for Cable Television, Satellite Television, and Streaming Video Services

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Recommended citation:

Tennessee Advisory Commission on Intergovernmental Relations. 2019. *Local Government Revenue in Tennessee and the Evolving Market for Cable Television, Satellite Television, and Streaming Video Services.*

Tennessee Advisory Commission on Intergovernmental Relations. This document was produced as an Internet publication.

State of Tennessee
Tennessee Advisory Commission on Intergovernmental Relations
226 Anne Dallas Dudley Boulevard, Suite 508
Nashville, Tennessee 37243

September 6, 2019

The Honorable Randy McNally
Lt. Governor and Speaker of the Senate

The Honorable Cameron Sexton
Speaker of the House of Representatives

Members of the General Assembly

State Capitol
Nashville, TN 37243

Ladies and Gentlemen:

Transmitted herewith is the Commission's report on cord cutting and local government revenue in Tennessee, which was requested by the Commission's then-Chairman, Mark Norris, at the January 26, 2018, commission meeting. Pursuant to his request, the report examines factors affecting the market for cable television, satellite television, and streaming video services; whether changes in this market are affecting local government revenues; and whether changes to the state's tax and fee structure and its cable television franchising laws are warranted. The report finds that changes to the state's tax and fee structure or its cable franchising laws are unnecessary at this time. However, because it is likely that local revenue from cable franchise fees will decrease if industry trends continue, the report recommends that local governments consider no longer using this revenue to fund government services that have maintenance of effort requirements. The Commission approved the report on September 6, 2019, and it is hereby submitted for your consideration.

Respectfully yours,

Representative Mike Carter
Chairman

Cliff Lippard
Executive Director

The Tennessee Advisory Commission on Intergovernmental Relations

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MEMORANDUM

TO: Commission Members

FROM: Cliff Lippard
Executive Director

DATE: 6 September 2019

SUBJECT: Cord Cutting and Local Revenue—Final Report for Approval

The attached Commission report is submitted for your approval. It was prepared in response to a request at the January 26, 2018, commission meeting from then-Chairman Mark Norris, who asked the Commission to study the effects of cord cutting on cable television, satellite television, streaming video services, and local government revenue in Tennessee. The report examines factors affecting the market for video services, whether changes in this market are affecting local government revenues, and whether changes to the state's tax and fee structure and its cable television franchising laws are warranted. Since the draft report was presented at the last meeting, two maps have been added showing which states apply sales tax to these services and which states authorize cable franchise fees to be collected.

The trend toward cord cutting will likely continue. But predictions of cable and satellite's imminent demise may be premature, and industry analysts expect that the shift away from these services will be gradual.

Although cable, satellite, and streaming each offer video entertainment for personal consumption, there are several variations in the taxes and fees that apply to them in Tennessee. Tennessee is one of 17 states that apply sales tax to all three of these video services. Although cable and satellite receive partial sales tax exemptions, both are subject to higher state sales tax rates than streaming for at least a portion of each customer's monthly bill, which partially offsets the effect of these exemptions.

Providers of cable service—but not satellite or streaming—are also required to obtain cable franchise agreements for the areas in which they provide service, under federal and state law. These agreements grant cable providers the privilege to offer cable service in designated franchise areas and, crucially, the authority to build and maintain communications networks needed to provide that service in public rights-of-way.

Local governments commonly receive compensation from cable providers through their franchise agreements. This compensation includes franchise fees, which are capped at 5% of gross revenue from cable service. Other compensation may include support for public, educational, and governmental (PEG) programming or in-kind contributions such as providing fiber capacity or free service to government buildings.

Franchise fees in particular will be affected by changes in the market for cable services because they are based on a percentage of providers' gross revenue. Although they have continued to increase on a statewide basis, the rate of increase appears to be slowing in recent years. Most local governments allocate these fees to their general funds; however, several appear to be using them to fund services, including education, that have maintenance of effort requirements.

A review of other states' laws identified several alternatives to Tennessee's current tax and franchise fee framework. Because each of these alternatives would either impose costs on the state or its local governments or increase taxes on cable's competitors that don't deploy infrastructure in public rights-of-way, because franchise fees originated as a means to compensate local governments for cable providers' use of public rights-of-way, because the Federal Communications Commission's recent rule changes could reduce compensation some local governments receive from cable franchise agreements, and because the effective combined state and local sales and use tax rates that currently apply to cable, satellite, and streaming in Tennessee are already similar to each other, **the report doesn't recommend any immediate changes to Tennessee's cable franchising laws or its tax and fee structure.** However, because it is likely that revenue from cable franchise fees will decrease if industry trends continue, **the report instead recommends that local governments should consider no longer using this revenue to fund government services that have maintenance of effort requirements.**

Numerous concerns raised by commission members, providers, local officials, and others interviewed warrant further study, in part because no state appears to have a comprehensive, ready-made solution to them. Each of the issues identified are described in the report, which proposes that the Commission evaluate these issues in the update to its 2017 broadband report required by the Tennessee Broadband Accessibility Act, which is due in January 2021.

Contents

Summary and Recommendations: Local Revenue Decreases Likely if Cord Cutting Continues; Immediate Changes in Tax and Fee Structure Unnecessary

The Super Bowl is the most watched televised event in the United States. But since 2015 it has shed 14% of its viewers on traditional television platforms including cable television, satellite television, and over-the-air broadcast. During the same period, however, the Super Bowl has set records for the number of people watching over the internet via providers of streaming video service, though the growth of this internet audience has only partially offset the decrease on traditional platforms. Rather than an anomaly, changes in Super Bowl viewership mirror trends in the video entertainment industry as a whole, where decreases in subscribers to traditional cable and satellite television services have coincided with the growth of internet-based streaming video services. Although each of these services offers video entertainment for personal consumption, they are not always subject to the same taxes and fees; one concern for policy makers is whether these trends will have any effect on government revenue—in particular local revenue—while some providers question whether the existing tax and fee structure should be adjusted given the industry's evolution. Local governments should be aware that local revenue, particularly from cable franchise fees, will decrease if industry trends continue, but these trends are expected to be gradual. Although alternatives to the current structure exist, those adopted by other states aren't necessarily ready-made solutions for Tennessee.

"For the better part of 15 years, pundits have predicted that cord cutting was the future. Well, the future has arrived."

Craig Moffett, founding partner, MoffettNathanson

Ongoing shifts in the market for cable, satellite, and streaming services are expected to remain gradual.

The ongoing shift away from cable and satellite services has garnered much comment from both the media and industry analysts; so much so that the term "cord cutting" is now a common descriptor for the practice of forgoing cable or satellite television in favor of subscribing to internet-based alternatives. Many internet-based streaming video subscription services—including well-known services like Netflix, Hulu, and Amazon Prime Video—allow subscribers to select from a variety of movies, television shows, and other programming, similar to video-on-demand services offered by traditional providers. Some—including PlayStation Vue and Sling TV, among others—now offer internet-delivered packages of the same television channels that have long been provided by cable and satellite. The primary difference for consumers is that access is provided over the internet—though if provided over wired internet connections, the videos are delivered over the same wires that would otherwise deliver traditional cable service.

Subscriber counts for both cable and satellite have been decreasing nationally since 2012, according to industry analysts. This shift away from cable and satellite is accelerating. Year-over-year subscriber losses, which were generally less than 1% prior to 2016, were estimated to be around 3.5% in each of the first three quarters of 2018. In raw numbers, losses for the top cable and satellite providers amounted to 3.5 million subscribers in 2018, compared with 1 million in 2015. But any predictions of imminent demise may be premature, as these cable and satellite providers still had more than 85 million subscribers nationwide at the end of 2018—more than two of every three households in the US. And while the downward trend in cable and satellite subscribers is expected to continue, one industry analyst interviewed characterized it as a flow rather than a tidal wave.

Analysts still expect the shift away from cable and satellite to remain gradual, describing it as a slow-moving train or a flow not a tidal wave.

In contrast, internet-based streaming video subscription services have grown. Approximately a decade after first becoming available, streaming providers were the top two video subscription services in the US based on subscriber counts in the first quarter of 2018—comparing cable, satellite, and streaming. Streaming's popularity has grown among younger consumers in particular, with more than half of adults under 35 watching streaming video daily, compared with only 11% of those aged 55 and older. But as with premature predictions of cable and satellite's imminent demise, the future of the market for streaming services is unclear. As more streaming services become available and as some companies like Disney reportedly consider restricting access to their movies and shows to their own streaming platforms, the "great unknown is how many individual streaming services people are willing to sign up for," according to one industry analyst. And streaming's growth doesn't necessarily mean cable and satellite's ruin, as many customers subscribe to both streaming and cable or satellite services.

In light of these ongoing changes in the industry, the Tennessee Advisory Commission on Intergovernmental Relations' (TACIR) then-Chairman, Mark Norris, at the January 26, 2018, commission meeting, requested a study of the effects of cord cutting both on the market for subscription-based video services and on local government revenue in Tennessee,[1] including whether changes to the state's tax and fee structure and its cable television franchising laws are warranted. In Tennessee, there are several variations in the taxes and fees that apply to cable, satellite, and streaming services, as well as providers of those services (see appendix A). Some of these variations result from exemptions in federal or state law, while others result from providers' business practices. Based on a review of other states and interviews with representatives of providers and local governments, this study gives particular attention to state and local sales

[1] Although TACIR staff have been unable to obtain state-specific data showing changes in the market for video entertainment services, they have found no evidence to suggest trends in Tennessee differ markedly from those nationally.

taxes in Tennessee and the compensation that local governments receive through cable television franchise agreements.

Cable, satellite, and streaming services are each subject to similar sales taxes in Tennessee.

Tennessee is one of 17 states that apply sales tax to all of these video services, whether cable, satellite, or streaming. Although cable and satellite receive partial sales tax exemptions in Tennessee, both are subject to higher state sales tax rates than streaming services for at least a portion of each customer's monthly bill, which partially offsets the effect of these exemptions (see table 1). Cable's current partial exemption includes both state and local sales tax, under state law, with the first $15 of each monthly cable bill exempt from state sales tax and the first $27.50 exempt from local sales tax. Satellite service is fully exempt from all local sales tax in Tennessee; under federal law, satellite providers cannot be required to collect and remit most local taxes.

Tennessee is one of 17 states that apply sales tax to cable, satellite, and streaming services.

Table 1. Sales Tax Rates Applied to Cable Television, Satellite Television, and Streaming Services in Tennessee

		Sales Tax Rate	
		State	Local
Cable TV	Portion of monthly bill no greater than $15.00	Exempt	Exempt
	—greater than $15.00 but no greater than $27.50	8.25%	Exempt
	—greater than $27.50	7.00%	Up to 2.75%
Satellite TV		8.25%	Exempt
Streaming Video		7.00%	2.50%

Source: Tennessee Code Annotated, Section 67-6-101 et seq., 67-6-201 et seq., and 67-6-701 et seq.; and 47 US Code 152 note.

Note: The effective date of provisions in law that would have replaced all state and local sales taxes on cable with a 9% state privilege tax that would apply only to the portion of each monthly bill greater than $15, with a portion of the tax's revenue required to be distributed to local governments, was extended from July 1, 2019, to July 1, 2021, by Public Chapter 157, Acts of 2019; this is the ninth time the effective date of these provisions has been extended. They would have also replaced satellite's 8.25% sales tax with an equal 8.25% state privilege tax, but all of the revenue from this new tax would be deposited in the state general fund, unlike state sales tax revenue, a portion of which must be shared with local governments, under state law.

Allowing for these exemptions, state sales tax applies at a rate of

- 8.25% for both satellite service and the portion of each monthly cable bill subject to state sales tax but exempt from local and
- 7% for both streaming service and the portion of each monthly cable bill subject to both state and local sales tax.

Local sales tax applies at

- the applicable local option rate for each jurisdiction—capped at 2.75%, under state law—for the portion of each cable bill subject to local sales tax and
- a uniform rate of 2.5% for streaming services.

This results in streaming services being taxed at an effective state and local rate of 9.5%, satellite being taxed at a single state rate of 8.25%, and cable being taxed at an effective state and local rate of approximately 8%—based on its exemptions, the current 2.5% statewide average of local option rates, and the national average for monthly cable bills, which according to an industry analyst estimate was $107 in 2018. In fiscal year 2017-18, total sales tax revenue from these services was approximately $188 million—$157 million in state sales tax and $31 million in local sales tax—based on TACIR staff calculations using estimates provided by the Tennessee Department of Revenue (see table 2).

Table 2. State and Local Sales Tax Revenue in Tennessee for Cable Television, Satellite Television, and Streaming Services in Fiscal Year 2017-18

	Sales Tax Revenue		
	State	Local	**Total**
Cable Television	$ 77,770,340	$ 24,114,043	**$ 101,884,383**
Satellite Television	59,884,077	-	**59,884,077**
Streaming Services	19,675,411	7,026,932	**26,702,343**
Total	**$ 157,329,828**	**$ 31,140,976**	**$ 188,470,804**

Source: TACIR staff calculations based on estimates provided by the Tennessee Department of Revenue.

Note: A portion of state sales tax revenue is shared with local governments, under state law. Columns and rows may not sum to totals because of rounding.

Bills that would have either eliminated cable's partial state sales tax exemption and increased state sales tax rates on cable or replaced cable's current state sales tax exemption with a lesser state sales tax exemption for both cable and satellite failed in the 102nd and 108th General Assemblies, respectively. Although representatives for cable providers acknowledged that the sales tax rates and exemptions that are applied to cable, satellite, and streaming vary, they said any reforms, such as equalizing sales tax rates, should also include changes to the compensation local governments receive through cable franchise agreements.

Cable providers are also subject to franchise agreements that can include both monetary and in-kind compensation for local governments.

Providers of cable television service—but not satellite or streaming video—are required to obtain cable franchise agreements for the areas in which they provide service, under federal and state law. In Tennessee, these franchise agreements can be issued by

- cities, only for service provided within their municipal boundaries;
- counties, only for service provided within their unincorporated areas; and the
- Tennessee Public Utility Commission (TPUC), for any area.

While the terms and conditions of cable franchises issued by local governments are negotiated agreements reached between providers and local officials—subject to certain limitations—the terms and conditions for those franchises issued by TPUC are set in state law.

Cable television franchise agreements serve as permission for providers' continued use of public rights-of-way, setting out the rights and obligations of providers and local governments in relation to that use.

Both state-issued and locally issued franchise agreements grant cable providers the privilege to offer cable service in designated franchise areas and, crucially, the authority to build communications networks needed to provide that service in public rights-of-way. As described by the Mackinac Center for Public Policy, a nonprofit organization that advances the principles of free markets and limited government, this

> regulatory treatment is due to cable's need for rights-of-way for their network of wires. Local governments control these rights-of-way and often own the utility poles and other infrastructure used for cable television delivery. Thus, cable operators must negotiate franchise arrangements . . . for access to rights-of-way.

In exchange, local governments commonly receive compensation from cable providers through their franchise agreements, as authorized under federal and state law. Examples of compensation include but are not necessarily limited to

- cable franchise fees;
- both monetary and in-kind support for the production and distribution of public access programming—often referred to as public, educational, and governmental (PEG) programming; and
- other in-kind compensation, such as providing fiber capacity or building dedicated networks for government uses and providing free service to public schools, courts, and other government buildings.

The Commission heard presentations from cable and satellite providers at its January 31, 2019, commission meeting—including a discussion of whether the state should consider alternatives to the current compensation local governments receive through cable franchises, given the increasing competition in the video industry. Cable providers said that franchise fees, in particular, place an additional tax burden on cable service that their direct competitors are not subject to. Satellite providers disputed this characterization, saying that franchise fees are simply a cost of doing business for cable providers because they place infrastructure in public rights-of-way, no different than the cost of rocket fuel needed for launching satellites.

As compensation for cable provders' use of public rights-of-way, local governments have historically received cable franchise fees.

According to the US Court of Appeals for the Fourth Circuit in *DIRECTV, Inc. v. Tolson* (2008), franchise fees do have several traits that are more characteristic of taxes than fees, in part because they can be used for general purposes rather than earmarked for right-of-way management. Moreover, rather than being assessed on the infrastructure cable providers' place in the right-of-way or based on the costs the infrastructure imposes on local governments, franchise fees are assessed as a percentage of gross revenue on one of the services provided over this infrastructure. As noted above, streaming services are not subject to these fees, though consumers often access these services using the same right-of-way-based infrastructure they would when watching traditional cable television.

But regardless of whether franchise fees share characteristics with taxes, local governments have historically received some compensation from cable providers for using public rights-of-way. In response to industry concerns that some local governments were charging fees that were too high, the Federal Communications Commission (FCC) began placing caps on them in the 1970s to balance the interests of providers and local governments.

Citing similar goals, the US Congress capped cable franchise fees at 5% of gross revenue in the Cable Communications Policy Act of 1984. The federal cap has remained unchanged, though the FCC adopted a rule in August 2019 that could reduce the overall amount of compensation some local governments receive through their franchise agreements. The rule clarifies that much of this compensation—including in-kind compensation and a portion of the support for PEG programming—must be counted toward the 5% franchise fee cap.

Whether cable providers in Tennessee are required to pay franchise fees at the maximum federally authorized rate varies based on whether they have state-issued or locally issued franchises. Those with state-issued franchises are currently required to pay franchise fees equal to the 5% federal cap to the local governments in which they provide service. But those with locally issued agreements can negotiate lower rates. Of the 38 states that authorize locally issued franchises in at least some circumstances, Tennessee is one of 36 that authorize local governments to set fees up to the federal cap; however, some local governments agree to lower rates or forgo fees entirely, according to local officials and franchise agreements obtained by TACIR staff.

In Tennessee, cable franchise fees have continued to increase on a statewide basis, totaling approximately $53 million in fiscal year 2016-17, but the rate of increase appears to be slowing, and more cities and counties reported individual decreases in the last two years—based on local government audit data, a TACIR survey of local governments, and TACIR staff calculations.[2] Regardless of whether cable franchises are locally issued or state-issued, providers remit all franchise fees directly to local governments, under state law. It is likely that these fees will decrease if industry trends continue because they are based on providers' gross revenue and, therefore, would drop if cable revenue decreases, though recent declines in the number of cable subscribers "have not necessarily resulted in video revenue losses . . . 'because of persistent annual rate hikes,'" according to the FCC.

Cable franchise fees have been capped at 5% of providers' cable revenue under federal law since 1984.

The effect of losing these fees would vary by local government. While all counties and most cities reported franchise fees that accounted for less than 2% of their total revenue in fiscal year 2016-17, a few cities reported fees accounting for more than 5% of their revenue, with one as high as 10%. Even in communities where they make up no more than 1% of revenue, several local officials interviewed referred to franchise fees as "not an insignificant" revenue source, though one noted that decreases could be budgeted for "as long as they were gradual." Most local governments allocate cable franchise fee revenue to their general funds; however, several appear to be using it to fund services, including education, that have maintenance of effort requirements.

Other states have adopted alternative tax and franchise fee frameworks.

A review of other states' laws identified several alternatives to Tennessee's current tax and franchise fee framework. Two states authorize cable providers to credit at least some of their cable franchise fees against specified state taxes. Utah allows providers to credit up to half of their franchise fees against the state's excise tax on cable and satellite services, while Kentucky allows providers to credit all of their franchise fees against the state's excise and gross receipt taxes that apply to cable, satellite, and streaming services. Applying Utah's approach in Tennessee would authorize cable providers to take credits against state taxes totaling approximately $26 million annually, based on TACIR staff estimates of total franchise fees for

[2] The state does not collect complete information on the amount of franchise fees collected annually in Tennessee.

fiscal year 2016-17. Applying Kentucky's approach would result in credits for the full amount of franchise fees, totaling approximately $53 million annually, based on the same estimates. Tennessee already provides other tax incentives for broadband providers, including those that also provide cable service. Public Chapter 501, Acts of 2019, exempted the cost of labor for installing fiber optic cable from state and local sales tax, replacing existing credits against state taxes for broadband investments in underdeveloped areas classified as tier 3 and tier 4 enhancement counties by the Tennessee Department of Economic and Community Development. Two other states have set franchise fee caps below the federal maximum for some franchises, which would result in a decrease in local revenue for some communities in Tennessee.

Tennessee local governments received approximately $53 million in cable franchise fees in fiscal year 2016-17. This total may decrease in future years if the trend toward cord cutting continues.

Of the six states that prohibit local governments from assessing cable franchise fees, Florida and North Carolina replaced them with sales taxes with approximately equal effective rates on cable, satellite, and streaming services. Because Tennessee already applies sales tax to all three of these services, it would have to increase its equalized rates higher than the general sales tax rates—similar to what was done in Florida—for this approach to be revenue neutral. In Tennessee, this would result in sales tax rates of approximately 10.75% for satellite's state rate and the effective combined state and local rates for cable and streaming, based on TACIR staff estimates. Although this approach would increase taxes on satellite and streaming subscribers, it would result in an overall decrease in taxes and fees for cable subscribers because revenue currently collected only from cable franchise fees would be spread across all three services. If Tennessee adopted the alternative used in North Carolina—which applies a state sales tax to all three services equal to its combined state and local general sales tax rates in lieu of cable franchise fees, with a portion distributed to local governments—it would decrease the combined amount of state and local revenue currently collected from Tennessee's existing sales taxes and franchise fees by approximately $28 million annually, though it would still result in tax increases for satellite, based on TACIR staff estimates.

Another alternative, described by cable providers both in presentations at the January 2019 commission meeting and in interviews with staff, would replace existing cable franchise fees with annual right-of-way fees that aren't based on a percentage of gross revenue. Virginia has done this, adopting a state-administered program. But its method for calculating these fees is still subject to shifts in the broader market for communications services because it is based in part on the number of wireline telephone subscribers in the state and does not account for the growing number of mobile wireless subscribers. Instead, providers note Michigan's state-administered program for determining right-of-way fees for wireline telecommunications providers—which, except for some incumbent telephone companies, calculates fees based on the amount of linear feet of right-of-way each company's wireline infrastructure occupies. Cable providers, it should be noted, remain subject to franchise fees in Michigan and are authorized either to claim credits for broadband investment, which have historically exempted them from right-of-way fees, or to credit their right-of-way fees against other state taxes or their cable franchise fees.

But the revenue generated from Michigan's right-of-way fee program is equal to approximately one-quarter to one-third of the revenue generated from franchise fees in the state, according to estimates provided by an attorney who represents cities in Michigan on telecommunications issues. And the program is difficult to administer, in part because providers' fees can be calculated multiple ways, according to staff interviewed, who said annual funding for the office administering the program is approximately \$300,000. While a uniform statewide fee or rate would likely make such a program easier to administer, it would not account for local variation in the cost of right-of-way management, according to a consultant interviewed from the University of Tennessee's Municipal Technical Advisory Service. Consideration would also need to be given to whether local governments or the state have the capacity to verify right-of-way information reported by providers. Virginia Department of Transportation staff interviewed said that auditing this information would be a challenge; currently, neither Michigan nor Virginia has a formal process for auditing the information they receive from providers for their state-administered programs.

Alternatives to Tennessee's current tax and fee structure for cable, satellite, and streaming identified through a review of other states would either impose costs on state or local governments or increase taxes on cable's competitors that don't deploy infrastructure in public rights-of-way.

Each of these alternatives to the current cable franchise fee structure in Tennessee would either impose costs on the state or its local governments—in the form of forgone revenue or increased administrative costs—or increase taxes on the video services of cable's competitors that don't deploy infrastructure in public rights-of-way. Ultimately, despite having some characteristics of a tax, cable franchise fees originated at least in part as a means to compensate local governments for cable providers' use of public rights-of-way when deploying their wireline infrastructure. It is likely that these fees will decrease of their own accord in future years if industry trends continue, and while they are not an insignificant revenue source for local governments, any changes are expected to be gradual. Moreover, recent FCC rule changes could reduce the overall compensation that some local governments receive from franchise agreements with cable television providers. For these reasons—and because the effective combined state and local sales and use tax rates that currently apply to cable television, satellite television, and streaming services in Tennessee are already similar to each other—**the Commission is not recommending any immediate changes to Tennessee's cable franchising laws or its tax and fee structure. However, because it is likely that revenue from cable television franchise fees will decrease if industry trends continue, local governments should consider no longer using this revenue to fund government services that have maintenance of effort requirements.**

Several concerns about Tennessee's current tax and fee framework and its effect on the high-speed communications industry warrant further study.

Although no changes to either the state's cable franchising laws or its tax and fee structure are recommended in this report, numerous concerns raised by commission members, providers, local officials, and others interviewed warrant further study, in part because no state appears to have a comprehensive, ready-made solution to them. Each of the issues identified are described later in this report and include

- whether adopting stronger build-out requirements for state-issued cable franchises would improve access to broadband in unserved areas;
- whether local permitting processes and fees hinder deployment of broadband networks;
- whether processes for obtaining pole attachments and the terms and conditions of pole attachment agreements similarly hinder deployment;
- whether alleged instances of providers deploying infrastructure in public rights-of-way and attaching infrastructure to utility poles without first obtaining required permits or pole attachment agreements are representative of widespread practices or localized incidents;
- whether a more efficient process for resolving disputes among providers, local governments, and utility pole owners is warranted; and
- whether any modifications to the state's grant program for expanding broadband access are necessary.

The Commission will evaluate these issues in the update to its 2017 broadband report required by the Tennessee Broadband Accessibility Act (Public Chapter 228, Acts of 2017), which is due in January 2021. The findings of the Commission's ongoing study of local revenue sources and local services may also provide helpful context to the extent that any future recommendations in the broadband update could affect local government revenue sources, including local sales tax, franchise fees, or fees for local permits.

Analysis: Video Entertainment in the 21st Century and the Taxes and Fees that Apply to Cable, Satellite, and Streaming Services

The ongoing shift away from cable and satellite has garnered much comment from both the media and industry analysts; so much so that the term "cord cutting" is now a common descriptor for the practice of forgoing cable or satellite television service in favor of subscribing to internet-based alternatives.[3] The trend toward cord cutting is evident even in viewership of the Super Bowl, which is the United States' most watched annually televised event. Since 2015, the year its viewership peaked, the Super Bowl has shed 14% of its viewers on traditional television platforms, including cable television, satellite television, and over-the-air broadcast. But during the same period, the Super Bowl has set records each year for the number of people watching the event over the internet via providers of streaming video service, though the growth of this internet audience has only partially offset decreases on traditional platforms.[4] This mirrors trends in the video entertainment industry as a whole, where decreases in subscribers to traditional cable and satellite television services have coincided with the growth of internet-based streaming video services. As noted by one of the founding partners of MoffettNathanson, a research firm that specializes in the communications industry, "for the better part of 15 years, pundits have predicted that cord cutting was the future. Well, the future has arrived."[5]

The number of cable and satellite subscribers peaked nationally in 2012.

For consumers, video content available through internet-based streaming video subscription services is similar to, if not the same as, the content accessed through traditional cable and satellite providers. Many streaming services—including well-known services like Netflix, Hulu, and Amazon Prime Video—allow subscribers to select from a variety of movies, television shows, and other programming, similar to video-on-demand services offered by traditional providers.[6] Some—including PlayStation Vue and Sling TV, among others—now offer internet-delivered packages of the same television channels that have long been provided by cable and satellite.[7] The primary difference is that access is provided over the internet—though if provided over wired internet connections, the videos are still delivered over the same wires that would otherwise deliver traditional cable service.[8]

[3] Moffett 2018.
[4] Nielsen 2019; and Barron 2019.
[5] Baumgartner 2017.
[6] Comcast 2019; Charter Communications 2019; and DISH Network 2019b.
[7] Sony Interactive Entertainment 2019; and Sling TV 2018. For other examples, see HULU 2019; YouTube TV 2019; and AT&T 2019.
[8] Moffett 2018.

One concern for policymakers is whether the trend toward cord cutting will have any effect on government revenue, in particular local revenue. And representatives for some video service providers question whether the existing tax and fee structure should be adjusted given the industry's evolution. Although cable, satellite, and streaming services each offer subscribers access to video entertainment for personal consumption, they are not always subject to the same taxes and fees. In light of the ongoing changes in the industry, the Tennessee Advisory Commission on Intergovernmental Relations' (TACIR) then-Chairman, Mark Norris, at the January 26, 2018, commission meeting, requested a study of the effects of cord cutting on both the market for subscription-based video services and local government revenue in Tennessee, including whether changes to the state's tax and fee structure and its cable television franchising laws are warranted.

Amazon Prime Video and Netflix have overtaken cable and satellite and were the top two video services based on the number of subscribers in the first quarter of 2018.

Cord cutting has increased in recent years, though analysts expect ongoing shifts in the video entertainment industry to remain gradual.

While subscriber counts for both cable and satellite peaked nationally in 2012, subscriber counts for streaming services have continued to increase.[9] Younger consumers, in particular, are driving this shift, with multiple surveys and analysts pointing to the relative cost of cable and satellite compared with streaming services as the primary factor leading consumers to forgo traditional pay-tv platforms in favor of their internet-based alternatives. Moreover, the decreasing profitability of cable and satellite service appears to be creating a disincentive for attracting new or retaining existing subscribers for some providers. Although TACIR staff have been unable to obtain state-specific data showing changes in the market for video entertainment services in Tennessee, they have found no evidence to suggest trends in Tennessee differ markedly from those nationally.

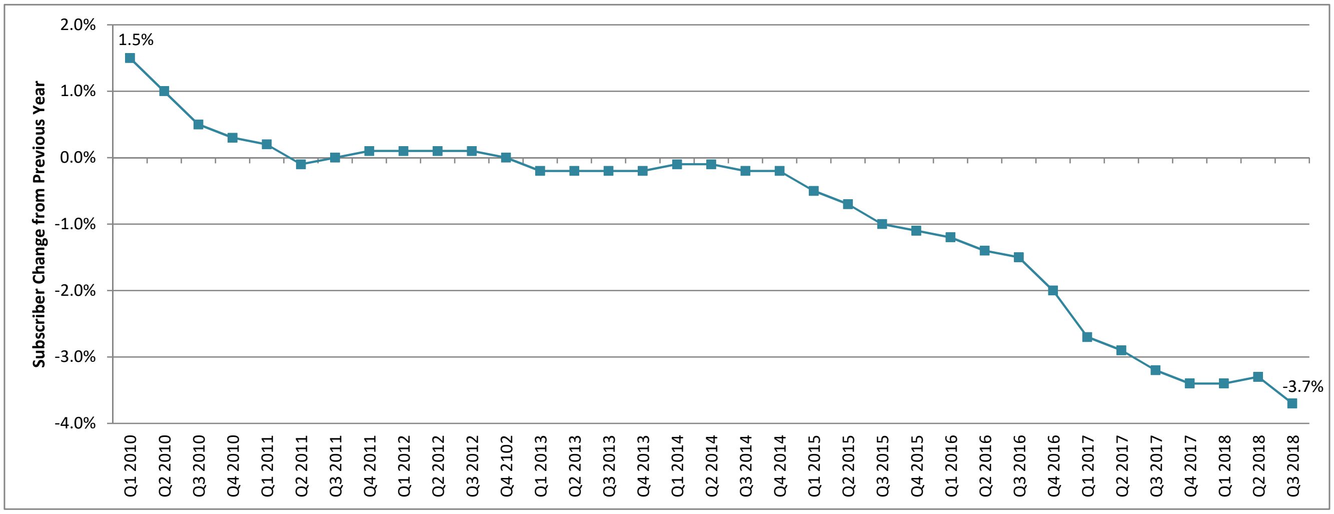
Decreases in Cable and Satellite Television Subscribers

Not only is the number of cable and satellite subscribers decreasing, but the shift away from these traditional pay-tv platforms is accelerating, according to industry analysts. Year-over-year subscriber losses, which were generally less than 1% prior to 2016, were estimated to be around 3.5% in each of the first three quarters of 2018 (see figure 1). In raw numbers, annual losses for the top cable and satellite providers, representing approximately 95% of the US market, amounted to 3.5 million subscribers in 2018 compared with 3.1 million in 2017, 1.6 million in 2016, and 1 million in 2015.[10]

9 McAlone 2017b; McAlone 2017a; Munson 2018; and Richter 2019.

10 Leichtman Research Group 2019b; Leichtman Research Group 2018a; and Leichtman Research Group 2017.

Figure 1. Percent Change in Cable and Satellite Television Subscribers from Previous Year



Source: Company reports and MoffettNathanson estimates and analysis published in Munson 2018 and McAlone 2017a.

But predictions of cable and satellite's imminent demise may be premature. The top cable and satellite providers still counted more than 85 million subscribers nationwide at the end of 2018, according to Leichtman Research Group, a firm that specializes in analysis of the broadband, media, and entertainment industries in the US.[11] This represents more than two out of every three households in the US, based on TACIR staff calculations using data from the US Census Bureau.[12] Although industry analysts expect the downward trend in cable and satellite subscribers to continue, they predict that the shift away from these services will still be gradual, with one analyst interviewed characterizing cord cutting as a flow rather than a tidal wave.[13]

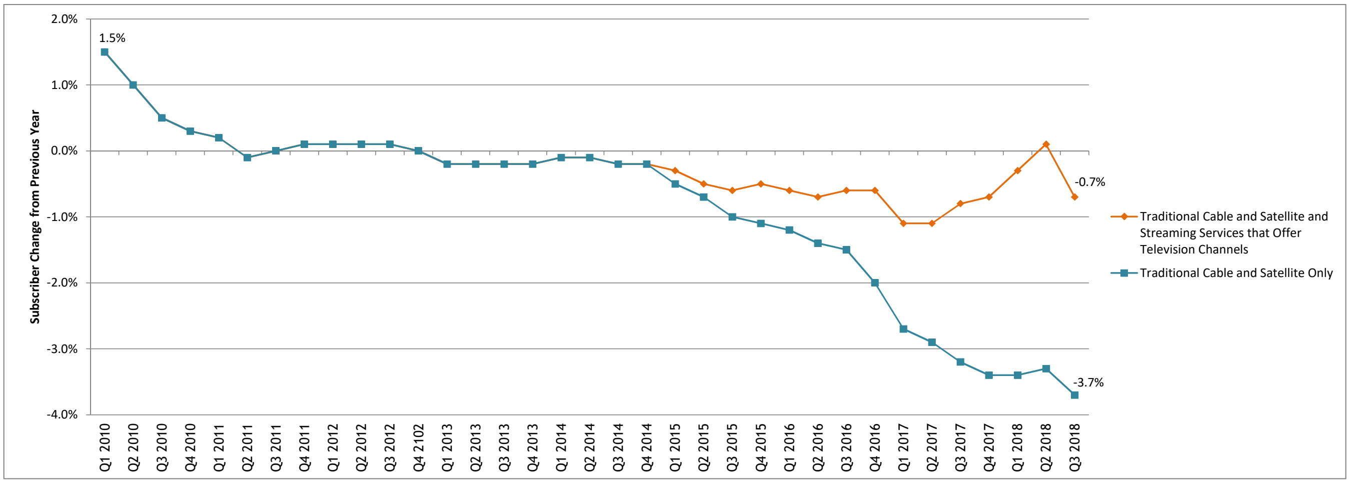
Increases in Streaming Video Subscribers

Providers of streaming services have generally added subscribers in recent years. For example, the number of Netflix subscribers in the US had increased in every quarter since 2011 until a recent decline posted for the second quarter of 2019, and Amazon has continually added subscribers to its subscription service, Prime, which includes access to video content.[14] These streaming services have now overtaken cable and satellite. Netflix and Amazon were the top two video subscription services in the US, based on subscriber counts in the first quarter of 2018—comparing cable, satellite, and streaming—approximately a decade after first becoming available. A

[11] Leichtman Research Group 2019b.
[12] US Department of Commerce, Bureau of the Census 2018.
[13] Telephone interview with Bruce Leichtman, president and principal analyst, Leichtman Research Group, March 6, 2019. According to another analyst, because cable and satellite provide access to live events, sports, and other content, "there won't be a mass conversion. It's still going to be a relatively slow-moving train"; see Garrick 2017.
[14] Munson 2019; Richter 2019; and Levin and Lowitz 2019.

third streaming provider, Hulu, was number five.[15] For streaming services that provide access to packages of television channels in particular, these subscriber increases have at least partially offset decreases in traditional cable and satellite subscribers (see figure 2).

Figure 2. Percent Change from Previous Year in Subscribers to Services Offering Access to Packages of Television Channels



Source: Company reports and MoffettNathanson estimates and analysis published in Munson 2018 and McAlone 2017a.

Note: Streaming services that provide access to packages of television channels, similar to traditional cable or satellite subscriptions, are sometimes referred to as virtual multichannel video programming distributors. They exclude services like Netflix and Amazon Prime Video that don't offer access to television channels with prescheduled programming.

The number of streaming services available is also increasing. Some companies—including Apple, ESPN, Fox News, and CBS—have recently launched subscription-based streaming services.[16] In November 2019, Disney will reportedly launch a streaming service that will provide access to its movies and shows.[17] Providers of traditional cable and satellite services are also offering access to streaming services, with some, including DISH Network and AT&T, launching their own services, while others offer access to a number of streaming services as part of their monthly television subscription packages.[18]

But much like predictions of cable and satellite's imminent demise may be premature, the future of the market for streaming services is also unclear. As more streaming services become available and as some companies like Disney reportedly consider restricting access to their movies and shows to their own streaming platforms,[19] the "great unknown is how many individual streaming services people are willing to sign up for."[20] Although some of these streaming services are profitable, others aren't yet.[21] Moreover, increases in streaming subscribers don't necessarily mean

[15] Interview with representatives for the Tennessee Cable & Broadband Association, Comcast, and Charter, October 4, 2018.
[16] Associated Press 2019d; Levy 2019; and Albergotti and Ellison 2019.
[17] Sorrentino and Solsman 2019.
[18] Associated Press 2019e; DISH Network 2019a; and AT&T 2018.
[19] Associated Press 2019b.
[20] Anderson 2019.
[21] Poletti 2018; Spangler 2019; and Levy 2019.

cable and satellite's ruin, as many consumers subscribe to both streaming and cable or satellite.[22]

Demographics of Cord Cutting

Younger consumers are more likely to forgo traditional cable or satellite service than older consumers. Although more than 70% of those aged 52 and older subscribed to cable or satellite, less than 60% of those younger than 52 subscribed to these services, according to a 2017 survey on digital media trends conducted by the consulting firm Deloitte.[23] In an analysis of future trends, eMarketer—a firm that analyzes trends in digital marketing—concluded that "the number of US pay-tv viewers ages 55 and older will continue to rise . . . while every other age group user tallies will decline."[24]

In contrast, streaming's popularity has grown, particularly among younger consumers. More than 60% of those under 52 subscribed to a streaming service, compared with less than 40% of those aged 52 and older, according to Deloitte's 2017 survey.[25] Daily use of streaming services also tends to be greater among younger consumers. More than half of adults under 35 watch streaming video daily, compared with 31% of those aged 35 to 54 and only 11% of those aged 55 and older, according to a survey by Leichtman Research Group.[26]

More than 50% of adults under 35 watch streaming video daily, compared with only 11% of those aged 55 and older.

Factors Driving Changes in the Market for Video Services

Cost-related factors affecting both consumers and providers are driving the ongoing shift away from cable and satellite. Consumers do cite access to desired content and greater flexibility in regards to when and where they view that content when describing reasons why they forgo cable and satellite for streaming services.[27] But cost—including both the relative price of each service and perceived value—is often the deciding factor, according to industry analysts and consumer surveys. Cost is also a factor for providers, as the increasing expense of obtaining programming is affecting the profitability of cable and satellite service.

Increasing subscription costs and decreases in perceived value are leading consumers to forgo cable and satellite service.

Cable prices, in particular, have increased steadily, beginning in the 1990s. Average prices for the most popular cable packages more than tripled from

[22] Snider 2019a; Pressman 2018a; Liesman 2018; and telephone interview with Bruce Leichtman, president and principal analyst, Leichtman Research Group, March 6, 2019.
[23] Westcott et al. 2018.
[24] eMarketer 2017.
[25] Westcott et al. 2018.
[26] Pressman 2018b.
[27] Westcott et al. 2018; and cg42 2016.

1995 to 2015, according to the Federal Communications Commission (FCC). And cable price inflation outpaced inflation in the economy as a whole, with a compound average rate of change of 3.9% for cable's consumer price index, compared with only 2.2% for the price index for all items (see appendix B).[28] More broadly, consumers nationwide paid an average price of $107 per month in 2018 for pay-tv services, including both cable and satellite, an increase of approximately 45% since 2011.[29] According to one of the founders of the research firm MoffettNathanson in 2018 testimony before the Subcommittee on Communications and Technology of the US House of Representatives' Committee on Energy and Commerce, "the appeal of cord cutting is simple. It's cheaper. Some might argue that it is also about greater consumer control . . . but the real appeal is simpler than that."[30] As he noted in 2017, "there was never any question that if a customer could get their pay-tv subscription for [less] that there would be a lot of people who would want to do that."[31]

"The appeal of cord cutting is simple. It's cheaper."

Craig Moffett, founding partner, MoffettNathanson

In surveys, many consumers cite price as a reason why they either are dissatisfied with their current cable or satellite service or don't subscribe to these services. A full 70% of respondents to Deloitte's 2017 survey said they are paying too much for their traditional pay-tv subscriptions.[32] In a 2016 survey by the consulting firm cg42, 66% of respondents who previously subscribed to cable or satellite said that not getting competitive pricing contributed significantly to their frustration with those services, while 52% said service was simply too expensive. Of those who had never subscribed to cable or satellite, 73% said those services were too expensive, and 69% said they get a better deal by using streaming services.[33]

Perceived value is another cost-related factor influencing decisions to forgo cable or satellite. On a per-channel basis, the average price of providers' most popular cable packages actually decreased from 2009 to 2015, as the number of channels providers added to these packages more than offset overall price increases, according to the FCC (see appendix B).[34] But adding channels and reducing the effective per-channel cost haven't increased the perceived value of these services for all consumers. Of those respondents to cg42's 2016 survey who previously subscribed to cable or satellite, 63% said that paying for channels they didn't watch contributed significantly to their frustration with these services.[35]

[28] Federal Communications Commission 2016.
[29] Leichtman Research Group 2018b; and Smith 2018.
[30] Moffett 2018.
[31] Channick 2017.
[32] Westcott et al. 2018.
[33] cg42 2016.
[34] Federal Communications Commission 2016.
[35] cg42 2016. For similar sentiments, see Smith 2018.

Increasing programming costs and decreasing profitability are leading some providers to reduce their efforts to sign new or retain existing subscribers.

The increasing costs of providing cable and satellite are also contributing to the shift away from these services. According to the FCC,

> video revenue increases have failed to keep up with increased costs and the result has been falling video margins (i.e., revenue minus cost divided by revenue). At the end of 2015, video margins were just over 10%, down from 15% in 2014, and 20% in 2013. Rapidly rising programming costs, which increased 8.1% in 2015, 6.8% in 2014, and 7.4% in 2013, are cited as the primary cause of declining video margins. According to SNL Kagan, [cable and satellite providers] spent over half of their video revenues on programming in 2015.[36]

Providers have also cited the increasing cost of programming as the primary factor contributing to the cost of providing service and increases in customer bills both in presentations to the Commission[37] and in contract disputes with media companies, which have sometimes resulted in channel blackouts when providers refuse to pay more for programming.[38]

As the overall profitability of cable and satellite has decreased, some providers have reduced their efforts to sign up new or retain existing customers. As described by *The Wall Street Journal* in a 2014 article on cord cutting,

> several pay-tv providers including DirecTV and Cablevision say their subscriber losses were driven in part by their own strategies to let discount-seeking customers fall to the wayside, focusing instead on attracting "higher value" subscribers willing to pay more.[39]

Providers' reduced efforts to attract subscribers in response to the decreasing profitability of cable and satellite may be a more important factor in cord cutting than consumer preferences, according to some industry analysts.[40] In a 2019 research note on subscriber losses in the video industry, the Leichtman Research Group said that

[36] Federal Communications Commission 2017.
[37] Panel discussion of cord cutting and local government revenue, TACIR, January 31, 2019.
[38] Fung 2019.
[39] Ramachandran 2014. Also see Sherman 2019.
[40] Telephone interview with Bruce Leichtman, president and principal analyst, Leichtman Research Group, March 6, 2019.

> for the pay-tv industry over the past couple years, net losses were as much related to a decline in the acquisition of new subscribers as they were to an acceleration in disconnects. . . .
>
> As discussed in DISH's 4Q 2018 Earnings Call, these changes are the result of "the painful steps of right sizing our customers, eliminating customers that aren't profitable . . . of not doing crazy giveaways and just trying to have numbers for the street, but rather run it as a business and run it for the long-term profitability of that business." . . .
>
> For the major cable companies, video is not even their priority anymore as they are increasingly focused on the more profitable broadband segment (as well as business services). In Comcast's 4Q 2018 Earnings Call it was stated that "we made a very successful transition to a connectivity centric model . . . we're going after and will attract the most profitable video customer relationships that we can." Similarly, in Charter's 4Q 2018 Earnings Call it was said that the company is "using the video business to drive our core business, which is connectivity."[41] (emphasis omitted)

Predictions of cable and satellite's imminent demise may be premature. Streaming services are not immune from cost pressures and competition simply because they are provided over the internet.

Although these cost-related factors are currently contributing to the shift away from cable and satellite, streaming services are subject to many of the same pressures and could be negatively affected in the future. As noted above, some streaming providers are not profitable despite an increasing number of subscribers. They are not immune from cost and competition simply because their services are provided over the internet. According to one of the founders of MoffettNathanson,

> the programming itself doesn't cost any less to produce just because it is delivered over the internet. Nor is it any cheaper for the aggregator—in this case, a vMVPD [a streaming provider offering packages of television channels]—to buy it from the content creator (in fact, [streaming providers] usually pay more for the same networks than do traditional cable and satellite operators, due to the fact they are generally smaller and have less negotiating clout). Nor is the video any cheaper to deliver by virtue of being delivered over the internet instead of so-called linear [traditional] cable; remember, the infrastructure underlying the delivery remains exactly the same. In most cases, it doesn't even avoid the need for a set top box; it's just that the set top box is provided by

[41] Leichtman Research Group 2019a.

someone like Apple or Roku instead of a traditional set top box provider.[42]

One likelihood, according to this analyst, is that the prices of streaming services "will rise significantly to become self-sustaining," and as a result, "the distinction between 'new' and 'old' models won't look so significant after all."[43] Some streaming providers have increased the prices of their services in recent months; at least one, DirecTV Now, is also losing subscribers because of these increases.[44] And to the extent that the distinctions between the "new" and "old" models become even less significant, the differing taxes and fees that apply to cable, satellite, and streaming services may begin to receive more attention from policymakers.

Video services are subject to different taxes and fees in Tennessee, though some of these differences are relatively slight.

Variations in the taxes and fees that apply to cable, satellite, and streaming result from exemptions in federal and state law and differences in providers' business practices.

There are several variations in the taxes and fees that apply to cable, satellite, and streaming services in Tennessee, as well as to providers of those services (see appendix A). Some of these variations result from exemptions in federal or state law. Under federal law, for example, satellite providers cannot be required to collect and remit most taxes and fees imposed by local governments.[45] Under state law, cable providers that are organized as electric cooperatives or telephone cooperatives are exempt from several taxes that both for-profit and municipally owned cable providers are subject to.[46] Other variations result from providers' business practices—for example, streaming providers and satellite providers aren't subject to pole attachment fees, not because they are exempt, but because they don't attach equipment to utility poles. Based on both a review of other states and interviews with representatives for providers and local governments, this study gives particular attention to state and local sales taxes in Tennessee and the compensation that local governments receive through cable television franchise agreements.

Sales Tax in Tennessee for Cable, Satellite, and Streaming: Separate Rates but Similar Treatment

Whether cable, satellite, and streaming services are subject to sales tax varies from state to state. Tennessee is one of 17 states that apply sales tax or some equivalent to all three of these services. In nine states, only some of these services are subject to sales tax, including one state that taxes

[42] Moffett 2018.
[43] Ibid.
[44] Associated Press 2019c; Snider 2019b; and Associated Press 2019a.
[45] 47 US Code 152 note.
[46] Tennessee Code Annotated, Section 65-25-122; and Tennessee Code Annotated, Section 65-29-129.

satellite only, one that taxes streaming only, one that taxes satellite and streaming but not cable, and six that tax cable and satellite but not streaming. There are also 17 states in which none of these video services are subject to sales tax, while seven other states exempt them from state sales tax but allow for local sales or state or local gross receipts taxes in at least some cases. See table 3 and map 1.

Table 3. Sales Taxes on Cable, Satellite, and Streaming Services, by State

Sales Tax on								Other Tax (no state sales tax)
None of These Services	Cable Only	Satellite Only	Streaming Only	Cable and Satellite Only	Satellite and Streaming Only	Cable and Streaming Only	Cable, Satellite, and Streaming	
AL, AZ, GA, ID, LA, MD, MI, MO, MT^, NV, NH^, NJ, NY, ND, OK, OR^, WY		MA	WA^^	IN, KS, ME, RI, VA, WV	OH		AR, CT, FL, IA, MN, MS, NC, NE, NM, PA, SC, SD, **TN**, TX, UT**, VT, WI	AK^, CA, CO, DE^*, HI, IL, KY***
(17)	(0)	(1)	(1)	(6)	(1)	(0)	(17)	(7)

Source: State laws.

* Delaware does not have a state sales tax but does apply a gross receipts tax to cable and satellite providers.

** Utah applies its general sales tax to streaming and applies an excise tax at a similar rate to cable and satellite in lieu of sales tax.

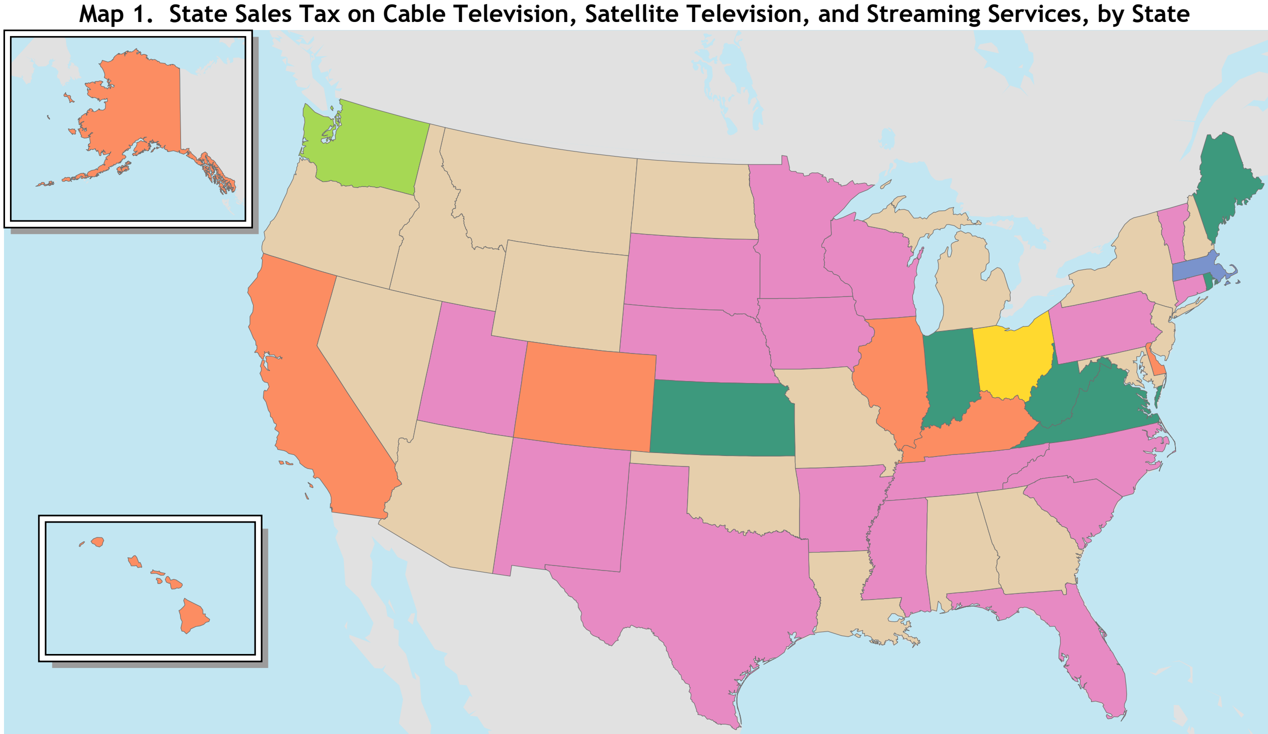
*** Kentucky applies excise and gross receipts taxes to cable, satellite, and streaming providers in lieu of its general sales tax.

^ State doesn't have a general sales tax.

^^ In Washington, only streaming is subject to a sales tax, but all three services are subject to a gross receipts tax at a lesser rate, and cable is subject to local utility taxes.

Note: Underline denotes state that does not have a personal income tax.

Map 1. State Sales Tax on Cable Television, Satellite Television, and Streaming Services, by State



Sales Tax Applies to All or Some of These Services

- Cable, Satellite, and Streaming (17)
- Cable and Satellite (6)
- Satellite and Streaming (1)
- Satellite Only (1)
- Streaming Only (1)

No State Sales Tax on These Services

- Other Similar Taxes Apply in Some Circumstances, e.g. Gross Receipts Taxes, Local Sales Taxes (7)
- Does Not Tax These Services (17)

Source: TACIR staff review of state laws.

Although cable, satellite, and streaming services are all subject to sales tax in Tennessee, there are differences in the way each is treated.

Cable and satellite service[47] receive partial sales tax exemptions in Tennessee, but both are also subject to higher state sales tax rates than streaming services for at least a portion of each customer's monthly bill, which partially offsets the effect of these exemptions. Cable's partial exemption includes both state and local sales tax, with the first $15 of each monthly cable bill exempt from state sales tax and the first $27.50 exempt from local sales tax, under state law.[48] Partially offsetting these exemptions, the state sales tax rate for the portion of each cable bill subject to state sales tax but exempt from local sales tax is 8.25%—greater than the general state sales tax rate of 7%.[49] The portion of each cable bill greater than $27.50 is subject to both the general state sales tax of 7% and the applicable local option rate for each jurisdiction—capped at 2.75%, under state law.[50] Cable has been partially exempt from sales tax in Tennessee, at least since the 1980s. The initial exemption "appeared to stem from the belief that, where access to local television programming was only available by cable service, no tax should be assessed for such service," according to a Tennessee Court of Appeals' review of the exemption's legislative history in *DIRECTV, Inc. v. Roberts* (2015).[51] See table 1 reposted.

Partial sales tax exemptions for cable and satellite service in Tennessee are only partially offset by higher rates.

Satellite service is fully exempt from all local sales tax in Tennessee, but it is also subject to state sales tax at a rate of 8.25%—greater than the general state sales tax rate (see table 1 reposted).[52] As noted above, satellite providers cannot be required to collect and remit most local taxes, including sales taxes, under federal law.[53] Several courts in other states have commented on Congress' intent when adopting this exemption. According to the Kentucky State Supreme Court,

> Congress' intent was not to spare [satellite] providers from taxation as such, but to spare national businesses with little

[47] The exemptions and special rates discussed in this section apply only to cable and satellite television service. Other items often included in the sale of these services, including but not limited to equipment such as satellite dishes or set-top boxes, are subject to state sales tax at a rate of 7% and the applicable local option sales tax for each jurisdiction.
[48] Tennessee Code Annotated, Section 67-6-226; and Tennessee Code Annotated, Section 67-6-714.
[49] Tennessee Code Annotated, Section 67-6-226; and Tennessee Code Annotated, Section 67-6-103(f). When the 8.25% rate was enacted in 1999, it was equal to the sum of the general state sales tax rate (then 6%, now 7%) and the approximate statewide average of local option sales tax rates (then 2.25%, now 2.5%), according to Tennessee Department of Revenue staff interviewed; see telephone interview with Sherry Hathaway, director, Tax Policy and Development Office, Tennessee Department of Revenue, September 26, 2018. The same also applies to satellite's state rate of 8.25%.
[50] Tennessee Code Annotated, Section 67-6-103(f); Tennessee Code Annotated, Section 67-6-202; Tennessee Code Annotated, Section 67-6-702; and Tennessee Code Annotated, Section 67-6-714.
[51] DIRECTV, Inc. v. Roberts, 477 S.W.3d 293 (Court of Appeals of Tennessee at Nashville 2015), cert. denied 136 S. Ct. 401.
[52] Tennessee Code Annotated, Section 67-6-227.
[53] 47 US Code 152 note.

> impact on local resources from the administrative costs and burdens of local taxation in the myriad local jurisdictions where their services would be sold.[54]

Streaming services are subject to the general state sales tax rate of 7% in Tennessee,[55] and although not exempt from local sales tax, they are subject to a uniform local sales tax rate of 2.5% instead of the individual local option rates adopted by cities and counties (see table 1 reposted).[56] Revenue from local sales tax on streaming services is not distributed based on the jurisdiction in which each customer lives. Rather, half of the revenue is distributed based on each county's share of revenue from general local option sales taxes, and the other half is distributed based on population.[57] Businesses, including streaming providers, without a physical presence in the state—such as any place of business or other real property, tangible personal property, or business representatives—have not historically been required to collect and remit sales taxes on behalf of their customers in Tennessee. But some have done so voluntarily, and if they haven't, customers are required to remit the taxes directly to the Tennessee Department of Revenue, though compliance is typically low. In

Table 1 (reposted). Sales Tax Rates Applied to Cable Television, Satellite Television, and Streaming Services in Tennessee

		Sales Tax Rate	
		State	Local
Cable TV	Portion of monthly bill no greater than $15.00	Exempt	Exempt
	—greater than $15.00 but no greater than $27.50	8.25%	Exempt
	—greater than $27.50	7.00%	Up to 2.75%
Satellite TV		8.25%	Exempt
Streaming Video		7.00%	2.50%

Source: Tennessee Code Annotated, Section 67-6-101 et seq., 67-6-201 et seq., and 67-6-701 et seq.; and 47 US Code 152 note.

Note: The effective date of provisions in law that would have replaced all state and local sales taxes on cable with a 9% state privilege tax that would apply only to the portion of each monthly bill greater than $15, with a portion of the tax's revenue required to be distributed to local governments, was extended from July 1, 2019, to July 1, 2021, by Public Chapter 157, Acts of 2019; this is the ninth time the effective date of these provisions has been extended. They would have also replaced satellite's 8.25% sales tax with an equal 8.25% state privilege tax, but all of the revenue from this new tax would be deposited in the state general fund, unlike state sales tax revenue, a portion of which must be shared with local governments, under state law.

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[54] DirecTV, Inc. v. Treesh, 290 S.W.3d 638 (Supreme Court of Kentucky 2009), cert. denied 558 U.S. 1111. For more information on the legislative history of satellite's exemption, see DIRECTV, LLC v. Department of Revenue, 470 Mass. 647 (Supreme Judicial Court of Massachusetts 2015), cert. denied 136 S. Ct. 401.
[55] Tennessee Code Annotated, Section 67-6-233; Tennessee Code Annotated, Section 67-6-202; and Tennessee Code Annotated, Section 67-6-102.
[56] Tennessee Code Annotated, Section 67-36-702(g)(4).
[57] Tennessee Code Annotated, Section 67-6-710(f).

2017, the Tennessee Department of Revenue adopted a rule—often referred to as Rule 129—that expands the state's sales tax collection requirements to businesses with no physical presence in the state that have made more than $500,000 of sales in Tennessee in the previous 12 months. Although its enforcement was put on hold by Public Chapter 452, Acts of 2017,[58] the hold was removed by Public Chapter 429, Acts of 2019, and the rule will now be enforced.

This results in streaming services being taxed at an effective state and local rate of 9.5%, satellite being taxed at a single state rate of 8.25%, and cable being taxed at an effective state and local rate of approximately 8%—based on its exemptions, the current 2.5% statewide average of local option rates, and the national average for monthly cable bills, which according to an industry analyst estimate was $107 in 2018. Total sales tax revenue from these services in fiscal year 2017-18 was approximately $188 million—$157 million in state sales tax and $31 million in local sales tax—based on TACIR staff calculations using estimates provided by the Tennessee Department of Revenue (see table 2 reposted).

Table 2 (reposted). State and Local Sales Tax Revenue in Tennessee for Cable Television, Satellite Television, and Streaming Services in Fiscal Year 2017-18

	Sales Tax Revenue		
	State	Local	**Total**
Cable Television	$ 77,770,340	$ 24,114,043	**$ 101,884,383**
Satellite Television	59,884,077	-	**59,884,077**
Streaming Services	19,675,411	7,026,932	**26,702,343**
Total	**$ 157,329,828**	**$ 31,140,976**	**$ 188,470,804**

Source: TACIR staff calculations based on estimates provided by the Tennessee Department of Revenue.

Note: A portion of state sales tax revenue is shared with local governments, under state law. Columns and rows may not sum to totals because of rounding.

Several attempts to change the effective sales tax rates applied to some video services in Tennessee have failed in recent years.

Past legal and legislative efforts that would have altered the effective sales tax rates applied to cable or satellite services in Tennessee have failed. Satellite providers sued the commissioner of the Tennessee Department of Revenue in 2003, alleging that differences in the way Tennessee's state sales tax structure is applied to cable and satellite service—in particular, the exemption for the first $15 of every monthly cable bill—violate the Commerce Clause of the US Constitution because they discriminate against businesses involved in interstate commerce. But according to the Tennessee Court of Appeals,

[58] Tennessee Advisory Commission on Intergovernmental Relations 2019.

> disparate treatment constitutes discrimination only if the objects of the disparate treatment are, for the relevant purposes, similarly situated. . . .
>
> Despite being competitors, satellite and cable providers do have an important distinction. Cable providers are heavily regulated by the federal government, while satellite providers are minimally regulated. . . .
>
> The difference in regulatory treatment between satellite and cable and the resulting benefits inuring to cable customers mean that *satellite providers and cable providers are not substantially similar entities for purposes of the Commerce Clause*. . . . Therefore, the disparate tax treatment of satellite providers and cable providers does not constitute discrimination.[59] (emphasis added, internal quotations and citations omitted)

According to cable providers, any reforms that would equalize sales tax rates in Tennessee should also include changes to the compensation local governments receive through cable franchise agreements.

Similar lawsuits brought by satellite providers in other states have all failed.[60]

Bills in prior General Assemblies that would have either eliminated cable's partial state sales tax exemption and increased state sales tax rates on cable or replaced cable's current state sales tax exemption with a lesser state sales tax exemption for both cable and satellite also failed. Senate Bill 975 by Senator Jim Kyle and House Bill 1782 by Representative Rinks in the 102nd General Assembly would have eliminated cable's partial exemption from state sales tax and increased the rate on the portion of each cable bill subject to state sales tax but exempt from local sales tax from 8.25% to 12%. Senate Bill 2583 by Senator Haile and House Bill 2486 by Representative Kevin Brooks in the 108th General Assembly would have reduced the amount of each monthly cable bill exempt from state sales tax from $15 to $9.29 and would have similarly exempted the first $9.29 of each monthly satellite bill from state sales tax. Although representatives for cable providers acknowledged that the sales tax rates and exemptions applied to cable, satellite, and streaming vary, they said any reforms, such as equalizing

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[59] DIRECTV, Inc. v. Roberts, 477 S.W.3d 293 (Court of Appeals of Tennessee at Nashville 2015), cert. denied 136 S. Ct. 401.

[60] DIRECTV, Inc. v. Treesh, 487 F.3d 471 (6th Cir. 2007), cert. denied 552 U.S. 1311; DIRECTV, Inc. v. Tolson, 513 F.3d 119 (4th Cir. 2008); DIRECTV, Inc. v. Levin, 128 Ohio St. 3d 68 (State Supreme Court of Ohio 2010), cert. denied 567 U.S. 934; DIRECTV, Inc. v. Utah State Tax Commission, 364 P.3d 1036 (State Supreme Court of Utah 2015); DIRECTV, LLC v. Department of Revenue, 470 Mass. 647 (Supreme Judicial Court of Massachusetts 2015), cert. denied 136 S. Ct. 401; and Florida Department of Revenue v. DIRECTV, 215 So. 3d 46 (State Supreme Court of Florida 2017), cert. denied 138 S. Ct. 645.

sales tax rates, should also include changes to the compensation local governments receive through cable franchise agreements.[61]

Cable Television Franchise Agreements and Local Compensation

To provide cable television service—but not satellite or streaming video—companies are required to obtain cable franchise agreements for the areas in which they offer service, under federal and state law.[62] Franchise agreements grant cable providers not only the privilege to offer cable service in designated franchise areas but, crucially, the authority to build and maintain communications networks needed to provide that service in public rights-of-way. They generally don't exempt providers from the need to obtain work permits, which may be required by local governments for the actual construction of a network—including excavation permits, traffic lane closure permits, and general construction permits, among other generally applicable work permits—according to representatives of providers interviewed. And providers that are attaching equipment to utility poles must separately obtain pole attachment agreements from pole owners, which are often either local electric utilities or incumbent telephone providers.[63] But franchise agreements serve as permission for continued use of public rights-of-way, while also setting out the rights and obligations of providers and local governments in relation to that use.[64] As described by the Mackinac Center for Public Policy, a nonprofit organization that advances the principles of free markets and limited government, this

> regulatory treatment is due to cable's need for rights-of-way for their network of wires. Local governments control these rights-of-way and often own the utility poles and other infrastructure used for cable television delivery. Thus, cable operators must negotiate franchise arrangements . . . for access to rights-of-way.[65]

Franchise agreements grant companies the privilege to offer cable service in designated areas and the authority to place infrastructure needed to provide that service in public rights-of-way.

[61] Interview with representatives for the Tennessee Cable & Broadband Association, Comcast, and Charter, October 4, 2018; and panel discussion of cord cutting and local government revenue, TACIR, January 31, 2019.
[62] 47 US Code 541(b); and Tennessee Code Annotated, Section 7-59-304(a)(1).
[63] Interview with representatives for Comcast, September 12, 2018; and interview with representatives for municipal electric systems and electric cooperatives, December 18, 2018.
[64] For Tennessee examples, see Franchise agreement between Metropolitan Government of Nashville and Davidson County and Comcast of Nashville, approved April 17, 2013; Franchise agreement between Anderson County and Comcast of Tennessee, contract no. 18-206; and Franchise agreement between Town of Nolensville and Comcast of Nashville, ordinance no. 16-07.
[65] Bolema 2008.

Local governments have historically received compensation from cable franchise agreements.

Historically, franchise agreements were issued by local governments, but 24 states now have state-issued cable franchises.[66] Of these, seven, including Tennessee, authorize cable providers to obtain new and renewal franchise agreements from either the state or local governments at each provider's discretion,[67] five allow locally issued franchises in only limited circumstances,[68] and 12 require all new and renewal agreements to be state-issued.[69] The other 26 states still have locally issued franchises only.[70]

Tennessee is one of seven states in which cable providers may obtain franchises from either the state or local governments at each provider's discretion.

In Tennessee, cable franchise agreements can be issued by

- cities, only for service provided within their municipal boundaries;[71]
- counties, only for service provided within their unincorporated areas;[72] and the
- Tennessee Public Utility Commission (TPUC), for any area.[73]

The terms and conditions of locally issued cable franchises are negotiated agreements reached between providers and local officials—subject to certain federal and state limitations.[74] For example, exclusive franchises that grant one company a monopoly by preventing competitors from obtaining franchises in its service area have been prohibited under federal law since passage of the Cable Television Consumer Protection and Competition Act of 1992.[75] And as discussed in more detail below, the maximum compensation that local governments receive through cable franchise agreements is limited under federal and state law. Federal limitations also apply to state-issued franchises; however, unlike locally issued franchises in Tennessee, the terms and conditions of franchises issued by TPUC are not negotiated but are set in state law.[76]

Local governments commonly receive compensation from cable providers through franchise agreements. State-issued franchises in Tennessee also

[66] US Senate Committee on Commerce, Science, and Transportation 1983; National Conference of State Legislatures 2019; and a review of state laws by TACIR staff.
[67] California, Georgia, Idaho, Illinois, Iowa, South Carolina, and Tennessee.
[68] Arkansas, Connecticut, Delaware, Nevada, and New Jersey.
[69] Florida, Hawaii, Indiana, Kansas, Louisiana, Missouri, North Carolina, Ohio, Rhode Island, Texas, Vermont, and Wisconsin.
[70] Alabama, Alaska, Arizona, Colorado, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, New Mexico, New York, North Dakota, Oklahoma, Oregon, Pennsylvania, South Dakota, Utah, Virginia, Washington, West Virginia, and Wyoming.
[71] Tennessee Code Annotated, Section 7-59-102.
[72] Ibid.
[73] Tennessee Code Annotated, Section 7-59-304.
[74] Tennessee Code Annotated, Section 7-59-101 et seq.; 47 US Code 521 et seq.; and 47 Code of Federal Regulations 76.1 et seq.
[75] 102 P.L. 385.
[76] Tennessee Code Annotated, Section 7-59-301 et seq.

include compensation for the local jurisdictions in which service will be provided.[77] Examples of compensation in locally issued and state-issued franchises include but are not necessarily limited to

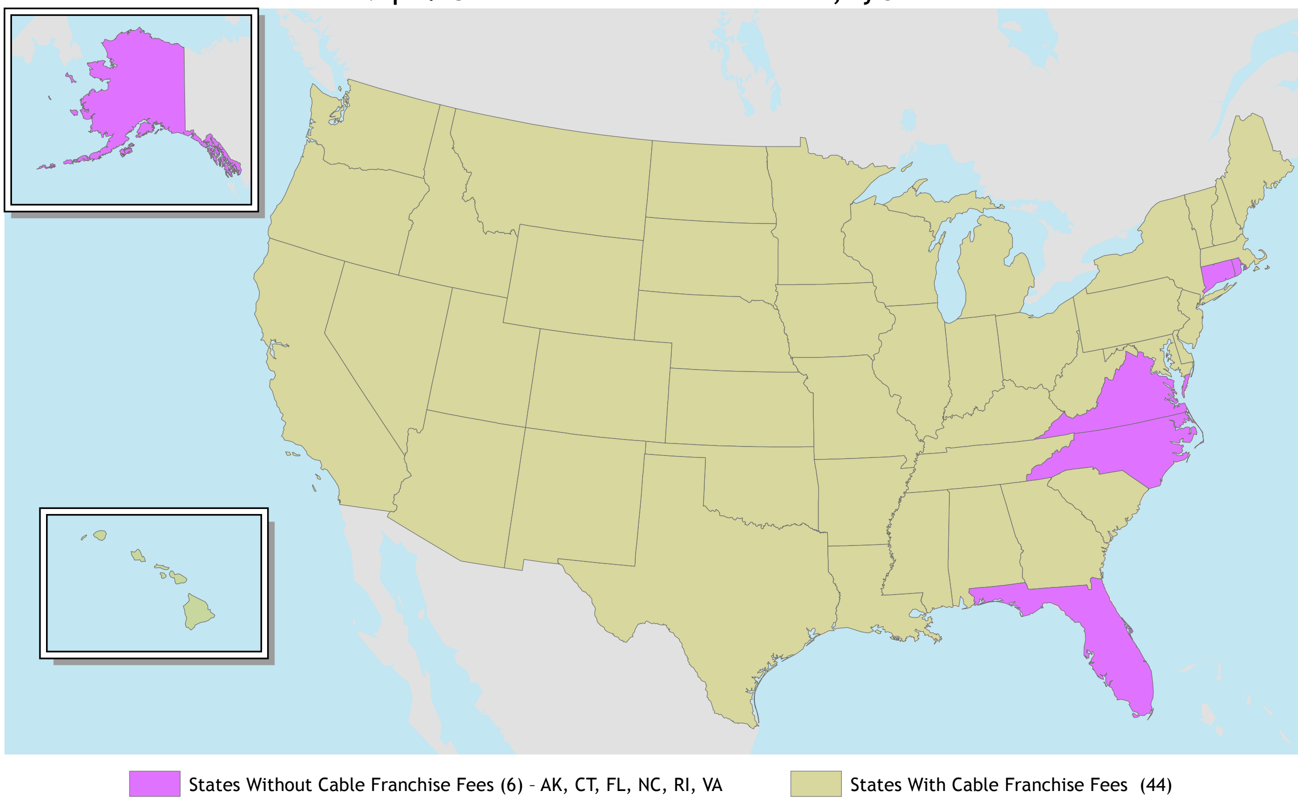
- cable franchise fees—which are capped at 5% of providers' gross revenue from cable service under federal and Tennessee law;[78]
- both monetary and in-kind support for the production and distribution of public access programming—often referred to as public, educational, and governmental (PEG) programming; and
- other in-kind compensation, such as providing fiber capacity or building dedicated networks for government uses and providing free service to public schools, courts, and other government buildings.

In Tennessee, franchise fees are paid directly to the local governments in which providers offer cable service regardless of whether franchises are state-issued or locally issued.

Of the compensation local governments receive through cable franchise agreements, franchise fees in particular will be affected by changes in the market for cable services because they are based on a percentage of cable providers' gross revenue. Under Tennessee law, fees for providers with state-issued franchises are set at 5% of gross revenue from cable service—the federal maximum[79]—while those for providers with locally issued franchises are negotiated with local governments but can be no more than the 5% federal maximum.[80] These fees are paid directly to the local governments in which providers offer cable service regardless of whether franchises are state-issued or locally issued.[81] Tennessee is one of 44 states where providers can be required to pay cable franchise fees; the other six states have eliminated these fees (see map 2).

[77] Tennessee Code Annotated, Section 7-59-304; Tennessee Code Annotated, Section 7-59-306; and Tennessee Code Annotated, Section 7-59-309.
[78] 47 US Code 542(b); Tennessee Code Annotated, Section 7-59-306; and Tennessee Code Annotated, Section 7-59-102.
[79] Tennessee Code Annotated, Section 7-59-306; and 47 US Code 542(b).
[80] Tennessee Code Annotated, Section 7-59-102; and 47 US Code 542(b).
[81] Tennessee Code Annotated, Section 7-59-306.

Map 2. Cable Franchise Fee Authorization, by State



Source: TACIR staff review of state laws.

Franchise fees in Tennessee have continued to increase overall in recent years but will likely decrease in the future if industry trends continue.

Subscriber losses "have not necessarily resulted in video revenue losses" nationwide in recent years "'because of persistent annual rate hikes,'" according to the FCC.[82] But some communities in other states are already reporting franchise fee decreases that they attribute to cord cutting.[83] If the broader trend toward cord cutting persists, it is likely that franchise fee decreases will become more widespread to the extent that the decreasing number of cable subscribers eventually leads to decreases in cable revenue in more communities. NCTA – The Internet & Television Association (NCTA), an industry trade group representing cable providers, estimates that franchise fees total approximately $3 billion annually nationwide.[84]

In Tennessee, cable franchise fees totaled approximately $53 million in fiscal year 2016-17—according to TACIR staff calculations using local government audit data, information provided by local governments, and

[82] Federal Communications Commission 2017. Also see Smith 2018.
[83] Garrick 2017.
[84] Chessen, Goldberg, and Morris 2018.

local income data.[85] The state does not collect complete information on the amount of franchise fees collected annually in Tennessee. Franchise fees have continued to increase on a statewide basis in recent years, but the rate of increase appears to be slowing, and more cities and counties reported individual decreases in the last two years, according to local government audit data and a TACIR survey of local governments. As recently as fiscal year 2014-15, franchise fees increased approximately 7% from the previous year in the 81 counties for which TACIR was able to obtain five years of franchise fee data, but the increase was only 2% in fiscal year 2016-17. Similarly, for the 34 local governments reporting franchise fees that responded to TACIR's survey, the rate of increase has declined from 7% in fiscal year 2014-15 to approximately 1% for fiscal year 2016-17 and fiscal year 2017-18. Of the 81 counties noted above, 16 reported franchise fee decreases for fiscal year 2014-15, compared with 27 in fiscal year 2016-17. And of the 34 local governments reporting franchise fees that responded to TACIR's survey, two had decreases in fiscal year 2014-15, compared with 11 in fiscal year 2016-17 and 17 in fiscal year 2017-18.

Although cable franchise fees have increased on a statewide basis in recent years, their rate of growth has slowed, and they may begin to decrease if the trend toward cord cutting continues because they are based on providers' cable revenue.

The effect of losing these fees would vary by local government. All counties and most cities reported franchise fees that accounted for less than 2% of their total revenue in fiscal year 2016-17, based on local government audit data and information provided by local governments. One local official interviewed noted that decreases could be budgeted for "as long as they were gradual."[86] But at least eight cities reported fees accounting for more than 5% of their revenue, with one as high as 10%. Even in communities where they make up no more than 1% of revenue, several local officials interviewed said that despite their relatively small contribution to local budgets, franchise fees are "not an insignificant" revenue source.[87] Another official interviewed said that "even a few thousand dollars per year could be very beneficial and go a long way for things like police equipment or other smaller items."[88] Moreover, some noted that local governments are losing other revenue sources, specifically mentioning the Hall Tax, which is shared with local governments but will be phased out entirely by 2021.[89]

There are also several local governments that appear to be using franchise fee revenue to fund services that have maintenance of effort requirements—including public K-12 education and highways—though, as noted above, most cities and counties are simply allocating these fees to their general

[85] An alternative estimate of franchise fee revenue in Tennessee—based on the NCTA's 2018 national estimate adjusted for state population—results in a statewide total of approximately $62 million, according to TACIR staff calculations.

[86] Telephone interview with Kirk Bednar, city manager, City of Brentwood, December 18, 2018.

[87] Telephone interview with David Smoak, town administrator, Farragut, December 19, 2018; and telephone interview with Kirk Bednar, city manager, City of Brentwood, December 18, 2018.

[88] Telephone interview with Robin Ruiz, city recorder, Tazewell, March 11, 2019.

[89] Telephone interview with Ted Rogers, city manager, Collegedale, December 19, 2018; telephone interview with Kirk Bednar, city manager, City of Brentwood, December 18, 2018; and telephone interview with Bob Wilson, assistant city manager, Johnson City, December 17, 2018.

funds. Maintenance of effort requirements "prevent local governments from substituting state (or federal) funds for local revenues" when funding certain services, according to the University of Tennessee's County Technical Assistance Service.[90] If franchise fees in these communities decrease, revenue from other local taxes and fees could be needed to ensure that maintenance of effort requirements continue to be met for the services currently relying on franchise fee revenue.

Cable providers and their competitors disagree about whether cable franchise fees place undue burdens on cable service.

Regardless of whether franchise fees are characterized as taxes or fees, cable providers have historically compensated local governments for using public rights-of-way.

Providers disagree about whether increasing competition in the video industry warrants changes in the compensation local governments can receive through cable franchise agreements. At the January 31, 2019, commission meeting, representatives for cable providers said that franchise fees, in particular, place an additional tax burden on cable service that their direct competitors are not subject to. Representatives for DISH Network, a satellite provider that also provides streaming service through a subsidiary, disputed this characterization, saying that franchise fees are simply a cost of doing business for cable providers because they place infrastructure in public rights-of-way, no different than the cost of rocket fuel needed for launching satellites.[91]

Franchise fees do have several traits that are more characteristic of taxes than fees, in part because they can be used for general purposes rather than earmarked for right-of-way management. Neither Tennessee state courts nor federal courts covering Tennessee have addressed this issue as it relates to cable franchise fees. But according to the US Court of Appeals for the Fourth Circuit in *DIRECTV, Inc. v. Tolson* (2008),

> the classic tax is imposed by the legislature upon a large segment of society and is spent to benefit the community at large. The classic fee is imposed by an administrative agency upon only those persons, or entities, subject to its regulation for regulatory purposes, or to raise money placed in a special fund to defray the agency's regulation-related expenses.
>
> Accordingly, we consider three factors: (1) what entity imposes the charge; (2) what population is subject to the charge; and (3) what purposes are served by the use of the monies obtained by the charge.

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[90] University of Tennessee, County Technical Assistance Service 2019.

[91] Panel discussion of cord cutting and local government revenue, TACIR, January 31, 2019. Similar issues were raised in interviews with TACIR staff; see interview with representatives for the Tennessee Cable & Broadband Association, Comcast, and Charter, October 4, 2018; and telephone interview with Damon Stewart, of counsel, Orrick, Herrington & Sutcliffe, and Anna Richardson, partner, McMahan, Winstead, and Richardson, January 11, 2019.

> . . . These [cable franchise] charges were imposed not by an administrative or regulatory agency but by . . . political subdivisions with the authorization of the General Assembly. Franchise charges are also spread among a wide proportion of the population because cable providers are authorized by statute to pass along the costs of franchise charges to their customers. In addition, the only evidence in the record demonstrates that the proceeds of franchise charges go into the general operating funds of the localities that levy them, rather than into discrete funds established for the maintenance of public rights-of-way.[92] (internal quotations and citations omitted)

While not specifically addressing cable franchise fees, the Tennessee State Supreme Court has made a similar distinction between taxes and fees—which was later cited in a case addressing other right-of-way fees assessed on providers of telephone service in Tennessee. According to the State Supreme Court,

> a tax is a revenue raising measure levied for the purpose of paying the government's general debts and liabilities. A fee is imposed for the purpose of regulating a specific activity or defraying the cost of providing a service or benefit to the party paying the fee.[93] (internal citations omitted)

According to local audit data provided by the Tennessee Comptroller of the Treasury and a TACIR staff survey of local governments, most local governments in Tennessee allocate cable franchise fee revenue to their local general funds. Moreover, cable franchise fees are not assessed on the infrastructure cable providers place in public rights-of-way or based on the costs this infrastructure imposes on local governments. Instead, they are assessed as a percentage of gross revenue. According to the Tennessee Court of Appeals in a case addressing other right-of-way fees assessed on telephone service providers, compensation that is based on a percentage of gross revenue "bears no relation to the cost to the city" resulting from a provider's use of public rights-of-way.[94] And to the extent that franchise fees could be considered taxes on video services delivered over right-of-way-based infrastructure, they apply to only one of those services. Streaming services are not subject to these fees, despite consumers often accessing them via the same infrastructure they would use to watch

[92] DIRECTV, Inc. v. Tolson, 513 F.3d 119 (4th Cir. 2008).

[93] City of Tullahoma v. Bedford County, 938 S.W.2d 408 (Supreme Court of Tennessee 1997); cited in Bellsouth Telcoms., Inc. v. City of Memphis, 160 S.W.3d 901 (Court of Appeals of Tennessee at Jackson 2004), cert. denied 2005 Tenn. LEXIS 3.

[94] Bellsouth Telcoms., Inc. v. City of Memphis, 160 S.W.3d 901 (Court of Appeals of Tennessee at Jackson 2004), cert. denied 2005 Tenn. LEXIS 3; also see City of Chattanooga v. Bellsouth Telcoms., Inc., 2000 Tenn. App. LEXIS 32 (Court of Appeals of Tennessee at Knoxville 2000).

traditional cable television. As described by one of MoffettNathanson's founding partners, "the cord itself (that is, the physical infrastructure used to deliver video) remains the same,"[95] though it should be noted that except in cases where a company is not only a streaming provider but also a cable provider, those that are streaming providers are unlikely to deploy any of their own infrastructure in public rights-of-way.

The current federal cap on cable franchise fees was meant to balance federal priorities with the interests of cable providers and local governments.

The current 5% federal cap on cable franchise fees is the result of negotiated compromise between local governments and providers.

Regardless of whether franchise fees share characteristics with taxes, local governments have historically received some compensation from cable providers for using public rights-of-way. Cable franchise agreements during the early stages of the industry's development following World War II imposed "a modest fee for the use of the rights-of-way," according to a 1983 report by the US Senate Committee on Commerce, Science, and Transportation—though it also notes that some agreements might not impose any fees at all.[96]

Prior efforts to resolve disagreements related to cable franchise fees have balanced federal priorities with the interests of providers and local governments. In response to industry concerns that some local governments were charging fees that were too high, the FCC placed the first federal cap on franchise fees in 1972. The FCC found that many local governments appeared to be charging fees "more for revenue-raising than for regulatory purposes," further noting that the effect was "to levy an indirect and regressive tax on cable subscribers" and that "high local franchise fees may burden cable television to the extent that it will be unable to carry out its part in our national communications policy."[97] But the FCC also acknowledged the need to offset costs imposed on local governments. According to the FCC's assessment of its process for arriving at a fee cap, "*we are seeking to strike a balance* that permits the achievement of federal goals and at the same time allows adequate revenues to defray the costs of local regulation."[98] (emphasis added)

Citing similar goals, the US Congress capped cable franchise fees at 5% of gross revenue under federal law in the Cable Communications Policy Act of 1984. The entire Act was the product of negotiated compromise between representatives for cities and cable providers, according to committee reports.[99] As noted by one Senator, "an important addition to the cable bill, which resulted from the National League of Cities and

95 Moffett 2018.
96 US Senate Committee on Commerce, Science, and Transportation 1983.
97 Federal Communications Commission 1972.
98 Ibid.
99 US Senate Committee on Commerce, Science, and Transportation 1983.

National Cable Television Association negotiations, was the establishment of a franchise fee ceiling."[100] The franchise fee cap mirrored the overall effort to balance each side's interests. According to a 1983 report by the US Senate Committee on Commerce, Science, and Transportation,

> the 5% ceiling will permit state or local governments to recover revenues sufficient to cover the cost of cable-related expenses; it will encourage the continued growth of cable by eliminating excessive fee demands; and it will permit the entry of new cable entrepreneurs.[101]

Providers with locally issued franchises can negotiate lower fees with local governments, while federal rule changes may reduce compensation for some communities.

The federal cap on franchise fees has remained unchanged,[102] but whether cable providers in Tennessee pay franchise fees equal to the maximum federally authorized rate varies based on whether they have state-issued or locally issued franchises. The FCC also adopted a rule in August 2019 that could reduce the overall amount of compensation some local governments receive through their franchise agreements.

Some local governments in Tennessee have agreed to lesser rates or have forgone cable franchise fees entirely; others have agreed to accept franchise fees in lieu of any fees for permits issued by the local government for construction of a provider's network.

As noted above, providers with state-issued cable franchises in Tennessee have their franchise fee rates set in state law at the 5% federal maximum, but those with locally issued franchises can negotiate lower rates with local governments. Local governments in Tennessee can negotiate fees up to the federal cap; of the 38 states that authorize locally issued franchises in at least some circumstances, two cap franchise fees below the federal max but only in some situations.[103] Some local governments in Tennessee have agreed to lesser rates or have forgone fees entirely, according to local officials and franchise agreements obtained by TACIR staff.[104] Moreover, under some locally issued franchises in Tennessee, local governments have agreed to accept the negotiated franchise fees in lieu of all other fees for any permits issued by the local government for construction of

[100] US Congress 1983.
[101] US Senate Committee on Commerce, Science, and Transportation 1983.
[102] 47 US Code 542(b).
[103] Tennessee Code Annotated, Section 7-59-102 and TACIR staff review of laws in other states. New Jersey sets fees for some franchises at 4%, and for others local governments must petition the New Jersey Board of Public Utilities to charge fees greater than 2%. Delaware caps fees for franchises in unincorporated areas at 2%. Although New York effectively caps local fees below the federal max, it also has a state franchise fee of up to 2%, so the sum of state and local franchise fees can still be up to the federal max.
[104] Telephone interview with Kirk Bednar, city manager, City of Brentwood, December 18, 2018; telephone interview with Nancy Cobb, treasurer and city court clerk, Tennessee Ridge, March 1, 2019; and Franchise agreement between Town of Nolensville and Comcast of Nashville, ordinance no. 16-07.

a provider's network, though these agreements don't exempt providers from pole attachment fees owed for attaching equipment to utility poles.[105]

The FCC's new rule clarifies that much of the other compensation some local governments currently receive—including in-kind compensation and a portion of the support for PEG programming—must be counted toward the 5% franchise fee cap. Compensation used for the construction of PEG access facilities—such as studios for producing public access programming—would remain exempt.[106] In comments on the rule submitted to the FCC, an industry trade group representing cable providers said the clarifications will "discourage . . . attempts to evade the franchise fee cap and will serve the public interest by protecting cable subscribers from subsidizing excessive costs for in-kind contributions on top of the franchise fees they already pay."[107] But representatives for cities said that the rule's effect on franchise fees would be "felt by local governments of all sizes throughout the country" and that it "would drastically reduce, and in some cases eliminate, the rent Congress intended [local governments] to receive" from cable providers.[108]

The effect of losing franchise fees would vary by local government, though all counties and most cities reported fees that accounted for less than 2% of their total revenue in fiscal year 2016-17.

Some states have adopted other tax and fee frameworks for video services.

States and local governments have responded to changes in the video services market in a variety of ways. Some have applied or attempted to apply existing taxes—including sales taxes and other similar taxes—to streaming services that weren't subject to them before.[109] But as discussed above, Tennessee already applies state and local sales tax to streaming services.

A review of other states' laws identified several alternatives to Tennessee's current tax and franchise fee framework. These alternatives include

- authorizing cable providers to credit at least some of their franchise fees against state taxes;
- capping fees below the federal 5% maximum;
- adopting new sales taxes on cable, satellite, and streaming services in lieu of a variety of other taxes and fees on these services, including cable franchise fees; and

[105] Interview with representatives for Comcast, September 12, 2018; for examples, see Franchise agreement between Metropolitan Government of Nashville and Davidson County and Comcast of Nashville, approved April 17, 2013; Franchise agreement between Anderson County and Comcast of Tennessee, contract no. 18-206; and Franchise agreement between Town of Nolensville and Comcast of Nashville, ordinance no. 16-07.
[106] Federal Communications Commission 2019.
[107] Chessen, Goldberg, and Morris 2018.
[108] Werner 2018.
[109] Garrick 2017; Santo 2017; Snider 2017; Moser 2015; and Bouma 2018.

- replacing cable franchise fees with other right-of-way use fees that aren't calculated as a percentage of gross revenue from cable service.

However, each of these alternatives would either impose costs on the state or its local governments—in the form of forgone revenue or increased administrative costs—or increase taxes on other services, including the video services of cable's competitors that don't deploy infrastructure in public rights-of-way. Another alternative identifed in this review—adopting right-of-way fees calculated as a percentage of gross revenue on internet service—has been preempted by the FCC.

Tax Credits for Franchise Fees Against Other State Taxes

Two states—Utah and Kentucky—authorize cable providers to credit at least some of their cable franchise fees against specified state taxes. Utah allows cable providers to credit up to half of their franchise fees against the state's excise tax on cable and satellite services, which are applied to cable and satellite in lieu of Utah's state and local sales taxes.[110] The value of the credits taken must be passed through to customers, under Utah Code Annotated, Section 104.5(4), but staff interviewed from the Utah State Tax Commission said the state only occasionally audits providers to determine whether they are complying with this requirement. They also said the credit is easy to administer.[111] Applying Utah's approach in Tennessee would authorize cable providers to take credits against state taxes totaling approximately $26 million annually, based on TACIR staff estimates of total franchise fees for fiscal year 2016-17.[112]

Kentucky allows cable providers to credit all of their franchise fees against the state's excise and gross receipt taxes, which apply to cable, satellite, and streaming services.[113] Similar to Utah, these taxes are applied to the services in lieu of sales tax. Applying Kentucky's approach in Tennessee would authorize cable providers to take credits against state taxes totaling approximately $53 million annually, based on TACIR staff estimates of total franchise fees for fiscal year 2016-17.[114]

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[110] Utah Code Annotated, Section 59-26-104.5; Utah Code Annotated, Section 59-26-102; Utah Code Annotated, Section 59-26-103; and telephone interview with James Shaw, tax compliance manager, Utah State Tax Commission, March 21, 2019.

[111] Telephone interview with James Shaw, tax compliance manager, Utah State Tax Commission, March 21, 2019.

[112] Using the greater $62 million estimate for statewide franchise fees—which is based on the NCTA's 2018 national estimate adjusted for state population—would increase the estimated amount of these tax credits to approximately $31 million annually.

[113] Kentucky Revised Statutes, Section 136.602; Kentucky Revised Statutes, Section 136.604; Kentucky Revised Statutes, Section 136.616; and Kentucky Revised Statutes, Section 136.660.

[114] The estimated amount of tax credits would be approximately $62 million annually if using the estimate for statewide franchise fees based on the NCTA's 2018 national estimate adjusted for state population.

Tennessee already provides other tax incentives for broadband providers, including those that also provide cable service. Public Chapter 501, Acts of 2019, exempted the cost of labor for installing fiber optic cable from state and local sales tax, replacing existing credits against state taxes for broadband investments in underdeveloped areas classified as tier 3 and tier 4 enhancement counties by the Tennessee Department of Economic and Community Development. It is estimated that the new sales tax exemption will decrease state sales tax revenue from the installation of fiber by approximately $4.5 million annually and will decrease local sales tax revenue by approximately $1.6 million annually, according to the Joint Fiscal Review Committee. The decrease in state sales tax revenue will be at least partially offset by the elimination of the existing credit on other state taxes. The total value of credits taken by providers in the most recent year was approximately $2 million.[115]

Two states allow cable providers to credit at least a portion of their franchise fees against state taxes, and two others cap fees below the 5% federal max in some circumstances.

Capping Franchise Fees below Federal Max

Two states—New Jersey and Delaware—cap cable franchise fees below the 5% federal max in some circumstances. New Jersey sets fees at 4% of cable revenue for certain franchises, with local governments receiving 3.5% and the state receiving the remaining 0.5%, under state law. While other cable franchises in New Jersey can include franchise fees up to the federal max, local governments must petition the New Jersey Board of Public Utilities to charge fees greater than 2% of cable revenue. Delaware caps franchise fees at 2% only for franchises in unincorporated areas. Setting franchise fees at 4% or capping them at 2% would decrease local revenue for some communities in Tennessee, and requiring local governments to receive state approval for fees greater than 2% could also result in franchise fee decreases.[116]

Sales Taxes in Lieu of Other Taxes and Fees

Of the six states that prohibit local governments from assessing any franchise fees on cable providers,[117] Florida and North Carolina replaced these fees with sales taxes that have approximately equal effective rates on cable, satellite, and streaming services. Because Tennessee already applies sales tax to all three of these services, it would have to increase its equalized rates higher than the general sales tax rates—similar to what was done in Florida—for this approach to be revenue neutral. Florida's tax replaced several different taxes and fees—including state and local

[115] Fiscal memorandum for Amendment 009020 to House Bill 605 and Senate Bill 1458, Joint Fiscal Review Committee, April 30, 2019.
[116] New Jersey Annotated Statutes, Section 48-5A-30; Gilbert 2012; and Delaware Code Annotated, Section 26-1-610. New York has a state franchise fee on cable service that is up to 2% of gross revenue, effectively limiting the local franchise fees that can be charged, though the state and local total is still capped at the federal 5% max. New York Consolidated Law Service, Public Service Law, Section 217 and 218.
[117] Alaska, Connecticut, Florida, North Carolina, Rhode Island, and Virginia.

sales tax, local utilities taxes, and local franchise fees—on video and other telecommunications services with a single tax framework. It now applies state and local communications services sales taxes to cable and streaming and a state communications services sales tax to satellite at a rate approximately equal to the effective combined state and local rates for cable and streaming. Florida's tax was also intended to be revenue neutral, and as a result, its rates are higher than the state's general state and local sales tax rates—efforts to equalize the rates of these taxes have failed because it would involve increasing the state's general sales tax rates to remain revenue neutral.[118] In Tennessee, adopting Florida's approach would result in sales tax rates of approximately 10.75% for both satellite's state rate and the effective combined state and local rates for cable and streaming, based on TACIR staff estimates.[119] Although this approach would increase taxes on satellite and streaming subscribers, it would result in an overall decrease in taxes and fees for cable subscribers because revenue currently collected only from cable franchise fees would be spread across all three services.

Replacing the current tax and fee structure with a sales tax that applies equal rates to cable, satellite, and streaming while remaining revenue neutral—as was done in Florida—would result in combined state and local rates of approximately 10.75% for these services in Tennessee.

North Carolina applies a state sales tax to cable, satellite, and streaming services at a rate equal to its combined state and local general sales tax rates. The tax is in lieu of cable franchise fees and other franchise compensation, including compensation for PEG programming. A portion of the tax is distributed to local governments based on their share of franchise fees and PEG-related compensation in 2006, the year before the new tax structure took effect, adjusted for changes in population. Adopting the new tax structure in lieu of franchise fees did not decrease government revenue in North Carolina because cable providers were previously authorized to credit franchise fees against sales taxes, and the sales tax rate applying to satellite and cable at the time was less than the combined state and local rate, while streaming was not taxed. The decision to adopt the new framework was in part related to a broader push to simplify the tax code, according to staff interviewed from the North Carolina League of Municipalities.[120] If Tennessee adopted North Carolina's approach, it would decrease the combined amount of state and local revenue currently collected from Tennessee's existing sales taxes and franchise fees by

118 Telephone interview with Amber Hughes, senior legislative analyst, Florida League of Cities, March 20, 2019; interview with representatives for the Tennessee Cable & Broadband Association, Comcast, and Charter, October 4, 2018; Florida League of Cities 2017; and Garcia 2016.

119 Using the greater $62 million estimate for statewide franchise fees—which is based on the NCTA's 2018 national estimate adjusted for state population—would result in an estimated rate of 11.15%.

120 Telephone interview with Chris Nida, director of research and policy analysis, North Carolina League of Municipalities, March 11, 2019; North Carolina Department of Revenue 2006; and North Carolina League of Municipalities 2019.

approximately $28 million annually, though it would still result in tax increases for satellite service, based on TACIR staff estimates.[121]

Right-of-Way Fee Alternatives That Aren't Based on Providers' Revenue

Another alternative would replace existing cable franchise fees with annual right-of-way fees that aren't based on a percentage of gross revenue. Virginia has done this, adopting a state-administered program in 2006. Virginia's program replaced a variety of local taxes and fees that applied to cable and telephone service, including cable franchise fees, with a state sales tax on these services and satellite service and right-of-way fees on cable service—a similar right-of-way fee already applied to wireline telephone service. Streaming service is not taxed in Virginia. The Virginia Department of Transportation calculates right-of-way fees for the state's program each year by

Adopting North Carolina's approach, which would replace the existing tax and fee structure with a sales tax on all three services equal to the combined state and local rates for the general sales tax, would reduce state and local revenue by approximately $28 million annually.

1. multiplying total highway mileage in the state by $425 per mile;
2. adding the number of new feet of network construction reported by providers, multiplied by $1 per foot;
3. dividing the sum from steps 1 and 2 by the total number of wireline telephone subscribers in the state reported by providers, including traditional telephone service and voice over internet protocol service; and
4. dividing by 12 to get a monthly, per-subscriber rate.

The fee is passed through to cable and wireline telephone subscribers on their monthly bills, and in cases where customers package those services together, it applies only to their cable bill. Fees collected from cable bills are remitted to the Virginia Department of Taxation and distributed to local governments along with revenue from the state sales tax on cable and satellite service. The distributions are based on each local government's share of revenue from the local taxes and fees replaced by the new state-administered program. Fees from telephone bills are remitted to the department of transportation or local governments and used to offset the cost to providers of relocating their equipment for road projects.[122]

But because Virginia's method for calculating its right-of-way fees is based in part on the number of wireline telephone subscribers in the state and

[121] The estimate does not include compensation for PEG programming. The state does not collect complete information on the amount of PEG-related compensation each local government currently receives. Using the greater $62 million estimate for statewide franchise fees—which is based on the NCTA's 2018 national estimate adjusted for state population—would result in a decrease of approximately $37 million annually.

[122] Telephone interview with Ed Land, transportation engineer, Right of Way and Utilities Division, Virginia Department of Transportation, March 19, 2019; telephone interview with Joe Mayer, lead tax policy analyst, Virginia Department of Taxation, March 21, 2019; and Virginia Department of Taxation 2015.

does not account for the growing number of mobile wireless subscribers, it is still subject to shifts in the broader market for communications services. As more subscribers have shifted from wireline to wireless phone service, the per-subscriber rate has increased from approximately $0.35 per month to $1.20 per month. Moreover, the overall revenue collected from right-of-way fees and sales taxes on cable, satellite, and wireline telephone service has been decreasing—despite increases in the right-of-way fee's per-subscriber rate—in part because streaming service and wireless phone service are exempt from these taxes and fees.[123]

Instead, cable providers note Michigan's state-administered program for determining right-of-way fees for wireline telecommunications providers.[124] Companies that provide cable service in Michigan, it should be noted, can still be required to pay cable franchise fees, under state law, regardless of whether they also provide wireline telecommunications service. And the state-administered telecommunications right-of-way fee applies only in communities that have opted into the program, though most have.[125]

Rather than a percentage of gross revenue, Michigan's telecommunications right-of-way fees are based on the amount of linear feet of right-of-way each company's wireline infrastructure occupies, except for some incumbent telephone providers. For those subject to a per-linear-foot fee, the rate varies by company. To calculate rates for each incumbent telephone provider (those classified as incumbent local exchange carriers or ILECs),

1. the linear footage of right-of-way occupied by the largest incumbent telephone provider in the state—based on number of wireline telephone subscribers—is multiplied by $0.05 per linear foot to create a fee base;
2. the fee base from step 1 is divided by the total number of wireline telephone subscribers for the largest incumbent telephone company in the state to produce a per-subscriber rate;
3. all other incumbent telephone providers pay the lesser of the amount produced by multiplying the

[123] Telephone interview with Ed Land, transportation engineer, Right of Way and Utilities Division, Virginia Department of Transportation, March 19, 2019; telephone interview with Joe Mayer, lead tax policy analyst, Virginia Department of Taxation, March 21, 2019; interview with representatives for the Tennessee Cable & Broadband Association, Comcast, and Charter, October 4, 2018; and Virginia Department of Taxation 2015.
[124] Panel discussion of cord cutting and local government revenue, TACIR, January 31, 2019; and interview with representatives for Comcast, September 12, 2018. Michigan's program also includes uniform permit applications and fees.
[125] Telephone interview with Bob Bruner, administrator, Local Community Stabilization Authority, and Sean Kelly, specialist on telecommunications, Michigan Public Service Commission, March 21, 2019; telephone interview with Michael Watza, PROTEC General Counsel, attorney, Kitch Drutchas Wagner Valitutti & Sherbrook, March 7, 2019; and Michigan Department of Licensing and Regulatory Affairs 2012.

a. number of linear feet of right-of-way they occupy by $0.05 per linear foot or the

b. number of wireline telephone subscribers they have by the per-subscriber rate calculated in step 2.

Rates for companies classified as competing telephone providers (those categorized as competing local exchange carriers or CLECs) are calculated differently. For each CLEC, a per-linear-foot rate is calculated by dividing the total right-of-way fee for the incumbent in whose service area the CLEC is operating by the number of linear feet of right-of-way occupied by the incumbent, regardless of whether the incumbent uses a per-linear-foot rate or a per-subscriber rate for its own right-of-way fee. As a result, some companies classified as CLECs pay $0.05 per linear foot while others pay less than $0.02 per linear foot, and they may have different rates for each incumbent's service area in which they provide telephone service.[126]

Replacing franchise fees with a uniform statewide fee or rate based on the amount of right-of-way each provider uses would not account for local variation in the cost of right-of-way management.

In contrast, telecommunications companies classified as cable providers—which are generally those that began life as cable providers—would pay telecommunications right-of-way fees equal to $0.01 per linear foot of right-of-way occupied. But these cable providers are also able to credit all investments in broadband infrastructure made since 1996 against their telecommunications right-of-way fees each year. As a result, no companies classified as cable providers pay these right-of-way fees in practice. ILECs and CLECs are authorized to credit their right-of-way fees against other state taxes or any cable franchise fees that they owe for providing cable service.[127]

The revenue generated from Michigan's right-of-way fee program is equal to approximately one-quarter to one-third of the revenue generated from franchise fees in the state, according to estimates provided by an attorney who represents cities in Michigan on telecommunications issues.[128] And the program is difficult to administer, in part because providers' fees can be calculated multiple ways, according to staff interviewed, who said annual funding for the office administering the program is approximately $300,000.[129]

[126] Telephone interview with Bob Bruner, administrator, Local Community Stabilization Authority, and Sean Kelly, specialist on telecommunications, Michigan Public Service Commission, March 21, 2019; telephone interview with Michael Watza, PROTEC General Counsel, attorney, Kitch Drutchas Wagner Valitutti & Sherbrook, March 7, 2019; and Michigan Department of Licensing and Regulatory Affairs 2012.

[127] Telephone interview with Bob Bruner, administrator, Local Community Stabilization Authority, and Sean Kelly, specialist on telecommunications, Michigan Public Service Commission, March 21, 2019; telephone interview with Michael Watza, PROTEC General Counsel, attorney, Kitch Drutchas Wagner Valitutti & Sherbrook, March 7, 2019; and Michigan Department of Licensing and Regulatory Affairs 2012.

[128] Telephone interview with Michael Watza, PROTEC General Counsel, attorney, Kitch Drutchas Wagner Valitutti & Sherbrook, March 7, 2019.

[129] Telephone interview with Bob Bruner, administrator, Local Community Stabilization Authority, and Sean Kelly, specialist on telecommunications, Michigan Public Service Commission, March 21, 2019.

While a uniform statewide fee or rate would likely make such a program easier to administer, it would not account for local variation in the cost of right-of-way management, according to a consultant interviewed from the University of Tennessee's Municipal Technical Advisory Service (MTAS).[130] Consideration would also need to be given to whether local governments or the state have the capacity to verify right-of-way information reported by providers. In interviews, Virginia Department of Transportation staff said auditing this information would be a challenge; currently, neither Michigan nor Virginia has a formal process for auditing the information they receive from providers for their state-administered programs.[131]

Similar to the right-of-way fees for telecommunications providers in Michigan, local governments in Tennessee are currently authorized to charge rental fees from telephone providers for their use of public rights-of-way. These fees are not related to whether providers offer cable service. Unlike in Michigan, telecommunications right-of-way fees are not state-administered in Tennessee, and state law doesn't establish a formula for calculating them.[132] But Tennessee courts have ruled that they shouldn't be based on a percentage of gross revenue.[133] According to the Tennessee Court of Appeals,

> an ordinance requiring telecommunications service providers to pay a franchise fee of [5%] of their gross revenue [is] not a reasonable exercise of the city's police powers under T.C.A. § 65-21-103. . . .
>
> In [this] case, the city recognizes that it has no authority to tax BellSouth, and argues its [5%] fee is a fee and not a tax. However, the record indicates that the revenue derived from such a fee is allocated to different city functions and apparently bears no relation to the cost to the city in supervising and regulating the use of BellSouth's rights-of-way. The fee charged by the city under its police power must bear a reasonable relation of the cost to the city for the use and maintenance of the rights-of-way. On its face,

For any program based on the amount of right-of-way each provider uses, consideration would need to be given to whether local governments or the state have the capacity to verify information reported by providers.

[130] Telephone interview with Melissa Ashburn, legal consultant, University of Tennessee, Municipal Technical Advisory Service, October 30, 2018.
[131] Telephone interview with Ed Land, transportation engineer, Right of Way and Utilities Division, Virginia Department of Transportation, March 19, 2019; and telephone interview with Bob Bruner, administrator, Local Community Stabilization Authority, and Sean Kelly, specialist on telecommunications, Michigan Public Service Commission, March 21, 2019.
[132] Tennessee Code Annotated, Section 65-21-103; Ashburn 2006; and telephone interview with Melissa Ashburn, legal consultant, University of Tennessee, Municipal Technical Advisory Service, October 30, 2018.
[133] Bellsouth Telcoms., Inc. v. City of Memphis, 160 S.W.3d 901 (Court of Appeals of Tennessee at Jackson 2004), cert. denied 2005 Tenn. LEXIS 3; and City of Chattanooga v. Bellsouth Telcoms., Inc., 2000 Tenn. App. LEXIS 32 (Court of Appeals of Tennessee at Knoxville 2000).

> the percentage of gross profits bears no relation to the cost to the city.[134] (internal quotations and citations omitted)

Several cities are now charging telecommunications right-of-way fees based on the amount of right-of-way occupied by each provider.[135] But according to staff attorneys for the Metropolitan Government of Nashville and Davidson County, some telecommunications providers still choose to pay fees based on a percentage of gross revenue and have waived their right to pay use-based fees in Nashville.[136]

Because the fees "can only be applied to maintenance of . . . rights-of-way," according to MTAS, "most cities do not pursue rentals or fees from phone companies,"[137] though in interviews a legal consultant for MTAS said that more cities are starting to charge them.[138] While some companies that originally provided only telephone service but now also provide cable are being charged both cable franchise fees and recurring telecommunications right-of-way fees in some communities, TACIR staff have not found any examples of companies that were originally only cable providers being charged both fees.[139]

Applying Right-of-Way Fees to Internet Service

Some local governments in Oregon have been requiring internet service providers to remit right-of-way fees calculated as a percentage of revenue from internet service. These telecommunications right-of-way fees—which are classified as license fees—don't apply to cable television service and are separate from cable franchise fees, which are still authorized in Oregon. Although the federal Internet Tax Freedom Act (ITFA) prohibits the taxation of internet service in most circumstances, Oregon courts have ruled that the fees in question fall into the law's exception for permit fees

[134] Bellsouth Telcoms., Inc. v. City of Memphis, 160 S.W.3d 901 (Court of Appeals of Tennessee at Jackson 2004), cert. denied 2005 Tenn. LEXIS 3; also see City of Chattanooga v. Bellsouth Telcoms., Inc., 2000 Tenn. App. LEXIS 32 (Court of Appeals of Tennessee at Knoxville 2000); and Metro. Gov't of Nashville & Davidson County v. Teleport Communs. Am., 552 S.W.3d 203 (Court of Appeals of Tennessee at Nashville 2017) cert. denied 2018 LEXIS 196.

[135] Telephone interview with Melissa Ashburn, legal consultant, University of Tennessee, Municipal Technical Advisory Service, October 30, 2018; telephone interview with Phillip Noblett, city attorney, Chattanooga, March 1, 2019; telephone interview with Brook Fox, attorney, Department of Law, Metropolitan Government of Nashville and Davidson County, March 1, 2019; and telephone interview with Theresa Costonis, attorney, Department of Law, Metropolitan Government of Nashville and Davidson County, March 1, 2019.

[136] Telephone interview with Theresa Costonis, attorney, Department of Law, Metropolitan Government of Nashville and Davidson County, March 1, 2019.

[137] Ashburn 2006.

[138] Telephone interview with Melissa Ashburn, legal consultant, University of Tennessee, Municipal Technical Advisory Service, October 30, 2018.

[139] Telephone interview with Theresa Costonis, attorney, Department of Law, Metropolitan Government of Nashville and Davidson County, March 1, 2019; and telephone interview with Joelle Phillips, president, AT&T Tennessee, and Dennis Wagner, director, External and Legislative Affairs, AT&T Tennessee, December 11, 2018.

"imposed for a specific privilege, service, or benefit conferred." According to the Oregon Supreme Court,

> ITFA bars state and local governments from imposing taxes on internet access. The parties disputed whether the license fee [on telecommunications service] is, in fact, a tax. ITFA defines tax as any charge imposed by any governmental entity for the purpose of generating revenues for governmental purposes, and is not a fee imposed for a specific privilege, service, or benefit conferred.
>
> Comcast argued that the city imposes the license fee to generate revenue for governmental purposes, thus qualifying the fee as a tax. The city argued, however, that the fee was imposed for a specific privilege—namely, the right to provide cable modem services over the city's rights-of-way. Comcast countered that the license could not confer that privilege on Comcast because Comcast had a pre-existing right under its cable franchise to provide cable modem services over the city's rights-of-way.[140] (internal quotations and citations omitted)

The Oregon Supreme Court sided with the city, rejecting the provider's interpretation,[141] and local governments in at least one other state—Ohio—have adopted similar fees.[142]

But the FCC adopted an order in August 2019 preempting right-of-way fees on internet service that when combined with cable franchise fees exceed 5% of providers' cable television revenue.[143] And as noted above, local governments in Tennessee aren't authorized to apply right-of-way fees to telecommunications providers based on a percentage of gross revenue.

Additional issues warrant further study.

Numerous concerns raised by commission members, providers, local officials, and others interviewed that could affect the expansion of broadband in Tennessee warrant further study, in part because no state appears to have comprehensive, ready-made solutions to them. Issues identified include

- whether adopting stronger build-out requirements for state-issued cable franchises would improve access to broadband in unserved areas;

[140] City of Eugene v. Comcast of Or. II, Inc., 359 Ore. 528 (Supreme Court of Oregon 2016), reconsideration denied 2016 Ore. LEXIS 493.
[141] Ibid.
[142] Chessen, Goldberg, and Morris 2018.
[143] Federal Communications Commission 2019.

- whether local permitting processes and fees hinder deployment of broadband networks;
- whether processes for obtaining pole attachments and the terms and conditions of pole attachment agreements similarly hinder deployment;
- whether alleged instances of providers deploying infrastructure in public rights-of-way and attaching infrastructure to utility poles without first obtaining required permits or pole attachment agreements are representative of widespread practices or localized incidents;
- whether a more efficient process for resolving disputes among providers, local governments, and utility pole owners is warranted; and
- whether any modifications to the state's grant program for expanding broadband access are necessary.

According to local officials, the most common broadband-related complaints they receive from constituents are related to availability of service.

Providers with state-issued cable franchises are already subject to build-out requirements under state law.[144] But some commission members said that adopting stronger requirements for providers with state-issued franchises could improve access to broadband in unserved areas. These commission members and local officials interviewed said that the most common broadband-related complaints they receive from constituents are related to availability of service, not right-of-way access or the fees required of cable providers.[145] Although providers with locally issued franchises are not subject to build-out requirements under state law, the boundaries of their service areas are set with local officials during the franchising process. Other build-out requirements exist for electric cooperatives that choose to provide broadband in Tennessee. These electric cooperatives must offer broadband throughout their entire electric service areas if they are providing broadband through a subsidiary instead of a third-party partner, regardless of whether they have state-issued or locally issued cable franchises, under state law.[146]

Broadband providers, local officials, and electric utilities all raised concerns related to the permitting processes and fees associated with deploying high-speed wireline communications networks. These concerns include both the permits and fees needed to gain access to public rights-of-way and those necessary for attaching communications equipment to utility

[144] Tennessee Code Annotated, Section 7-59-305(c); Tennessee Code Annotated, Section 7-59-311; and panel discussion of cord cutting and local government revenue, TACIR, December 13, 2018.
[145] Panel discussion of cord cutting and local government revenue, TACIR, January 31, 2019; panel discussion of cord cutting and local government revenue, TACIR, December 13, 2018; and telephone interview with Bob Wilson, assistant city manager, Johnson City, December 17, 2018.
[146] Tennessee Code Annotated, Section 65-25-134(a)(2); Tennessee Code Annotated, Section 65-25-102(1); and panel discussion of cord cutting and local government revenue, TACIR, January 31, 2019.

poles.[147] The processes for obtaining right-of-way permits and pole attachment agreements are separate but parallel. While right-of-way permits are issued by local governments, pole attachment agreements are issued by the entity that owns each utility pole. Pole owners generally include telephone providers and electric utilities, which in Tennessee are typically either electric cooperatives or municipal electric systems—even if an electric utility is municipally owned, the pole attachment process is separate from the right-of-way permitting process, with pole attachment agreements negotiated with the utility rather than the affiliated local government.[148]

Right-of-way permits and fees are separate from cable franchise agreements and franchise fees. They are the same generally applicable permits and fees required of any entity performing similar work in public rights-of-way. Representatives for some providers interviewed said that the permits and fees required vary by jurisdiction and that delays in obtaining these permits can result in lost customers and revenue. They also said that permit fees in some communities are too high, and they noted that Michigan is one state that has adopted uniform permitting processes and fees. Although Tennessee's Broadband Ready Communities program—which was enacted by the Tennessee Broadband Accessibility Act, Public Chapter 228, Acts of 2017—allows communities that adopt specified permitting guidelines and fee caps to signal providers that they have removed barriers to broadband deployment, providers said it lacks an enforcement mechanism for communities that have opted into the program but don't abide by its guidelines.[149]

Tennessee's Broadband Ready Communities program allows communities to signal providers that they have removed barriers to broadband deployment, but providers say it lacks an enforcement mechanism to ensure compliance.

On the subject of right-of-way permits and fees, representatives for county highway officials and other local officials interviewed said that they have found instances where providers have installed network equipment in

[147] Interview with representatives for Comcast, September 12, 2018; interview with representatives for Charter, November 1, 2018; interview with representatives for municipal electric systems and electric cooperatives, December 18, 2018; interview with David Connor, executive director, Tennessee County Services Association, and Rodney Carmical, executive director, Tennessee County Highway Officials Association, November 19, 2018; interview with Chad Jenkins, deputy executive director, Tennessee Municipal League, July 24, 2018; telephone interview with Rick McClanahan, director, engineering department, Bartlett, March 19, 2019; telephone interview with Phillip Noblett, city attorney, Chattanooga, March 1, 2019; and telephone interview with Theresa Costonis, attorney, Department of Law, Metropolitan Government of Nashville and Davidson County, March 1, 2019.

[148] Interview with representatives for Comcast, September 12, 2018; interview with representatives for municipal electric systems and electric cooperatives, December 18, 2018; and interview with Chad Jenkins, deputy executive director, Tennessee Municipal League, July 24, 2018.

[149] Interview with representatives for Comcast, September 12, 2018; and interview with representatives for Charter, November 1, 2018.

public rights-of-way without obtaining necessary permits.[150] This issue was also raised by commission members at the January 31, 2019, commission meeting.[151]

Similar concerns were raised regarding pole attachment processes and fees. Cable providers interviewed said that the fees for attaching to utility poles owned by municipal utilities and electric cooperatives in Tennessee are too high.[152] The Commission addressed this topic in its 2017 report *Broadband Internet Deployment, Availability, and Adoption in Tennessee*. That report found that a formula adopted by the Tennessee Valley Authority (TVA) in 2016 for calculating fees for attaching to the poles owned by the municipal utilities and electric cooperatives in TVA's service area "results in higher pole attachment fees than would be charged under FCC guidelines for poles owned by for-profit utilities."[153] But the report noted that "because of TVA's authority to regulate the utilities and cooperatives it serves, Tennessee likely lacks authority to override TVA's formula, according to a 2014 opinion by the state's attorney general."[154] TVA staff interviewed said that its formula remains unchanged.[155]

Although the Tennessee Valley Authority's pole attachment formula results in higher rates, Tennessee likely lacks authority to override it.

Cable providers and others interviewed also said that the amount of time some municipal utilities and electric cooperatives take to act on pole attachment applications can be a barrier to expanding coverage.[156] Although FCC rules cap the amount of time for-profit utilities can take when acting on these applications, they don't apply to either government-owned or nonprofit utilities.[157] And TVA staff said it does not regulate the amount of time taken by municipal utilities and electric cooperatives in its service area when responding to pole attachment requests.[158]

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150 Interview with David Connor, executive director, Tennessee County Services Association, and Rodney Carmical, executive director, Tennessee County Highway Officials Association, November 19, 2018; telephone interview with Rick McClanahan, director, engineering department, Bartlett, March 19, 2019; telephone interview with Phillip Noblett, city attorney, Chattanooga, March 1, 2019; and telephone interview with Theresa Costonis, attorney, Department of Law, Metropolitan Government of Nashville and Davidson County, March 1, 2019.

151 Panel discussion of cord cutting and local government revenue, TACIR, January 31, 2019.

152 Interview with representatives for Comcast, September 12, 2018; interview with representatives for CenturyLink, October 16, 2018; and interview with representatives for Charter, November 1, 2018.

153 Tennessee Advisory Commission on Intergovernmental Relations 2017.

154 Ibid.

155 Telephone interview with Jennifer Brogdon, director, Regulatory Assurance, Tennessee Valley Authority, December 11, 2018.

156 Interview with representatives for Comcast, September 12, 2018; interview with representatives for Charter, November 1, 2018; telephone interview with Levoy Knowles, executive director, Tennessee Telecommunications Association, October 6, 2018; telephone interview with Amanda Martin, senior rural policy advisor, Tennessee Department of Economic and Community Development, and Crystal Ivey, broadband director, Tennessee Department of Economic and Community Development, February 28, 2019; and panel discussion of cord cutting and local government revenue, TACIR, January 31, 2019.

157 47 Code of Federal Regulations 1.1401 et seq.; and Federal Communications Commission 2018.

158 Telephone interview with Jennifer Brogdon, director, Regulatory Assurance, Tennessee Valley Authority, December 11, 2018.

But representatives for municipal utilities and electric cooperatives said that, similar to alleged instances where providers have not obtained right-of-way permits, there are instances where they find unauthorized attachments on their utility poles.[159] Past allegations of unauthorized attachments have resulted in electric utilities threatening to remove providers' equipment.[160]

There is currently no venue or standard procedure for resolving these or similar disputes involving right-of-way permits or pole attachments. At least one dispute appears to have been resolved only when representatives for both the US Department of Agriculture and the state stepped in to broker a compromise.[161] The desire to preserve working relationships also creates a disincentive for those involved to address these issues through litigation.[162]

The Commission will evaluate these issues in the update to its 2017 broadband report required by Public Chapter 228, Acts of 2017, which is due in January 2021. The findings of the Commission's ongoing study of local revenue sources and local services may also provide helpful context to the extent that any future recommendations in the broadband update could affect local government revenue sources, including franchise fees or fees for local permits.

Moreover, the Commission will also evaluate the programs for improving availability and adoption of broadband enacted in Public Chapter 228, Acts of 2017, including but not limited to the state's broadband accessibility grant program.

[159] Interview with representatives for municipal electric systems and electric cooperatives, December 18, 2018.
[160] Brodkin 2017; and Jones 2017.
[161] Telephone interview with Levoy Knowles, executive director, Tennessee Telecommunications Association, October 6, 2018; and telephone interview with Amanda Martin, senior rural policy advisor, Tennessee Department of Economic and Community Development, and Crystal Ivey, broadband director, Tennessee Department of Economic and Community Development, February 28, 2019.
[162] Interview with representatives for CenturyLink, October 16, 2018.

References

Albergotti, Reed and Sarah Ellison. 2019. “Apple Auditions for Hollywood: The making of a Streaming Service.” *The Washington Post*, March 22. https://www.washingtonpost.com/technology/2019/03/22/apple-auditions-hollywood-making-streaming-service/?utm_term=.f89aeefea949.

Anderson, Mae. 2019. “Netflix and Chill No More - Streaming Is Getting Complicated.” *Associated Press*, January 5. https://www.apnews.com/f74aaa23daa74cefb9eb15c805d13bce.

Ashburn, Melissa. 2006. “Telephone Franchise Regulation.” University of Tennessee, Municipal Technical Advisory Service. Legal opinion, October 30. https://www.mtas.tennessee.edu/knowledgebase/telephone-franchise-regulation.

Associated Press. 2019a. “AT&T Shares Slump as More TV Customers Leave.” *Chattanooga Times Free Press*, April 24. https://www.timesfreepress.com/news/breakingnews/story/2019/apr/24/att-shares-slump-more-tv-customers-leave/493349/.

———. 2019b. “Comcast Loses Cable Users, But Internet Subscribers Surge.” *Chattanooga Times Free Press*, January 23. https://www.timesfreepress.com/news/business/aroundregion/story/2019/jan/23/comcast-loses-cable-users-internet-subscriber/487291/.

———. 2019c. “Netflix Raising Prices for 58 Million US Subscribers as Costs Rise.” *Chattanooga Times Free Press*, January 15. https://www.timesfreepress.com/news/breakingnews/story/2019/jan/15/netflix-raising-prices-58m-us-subscribers-costs-rise/486712/.

———. 2019d. “Sinclair Debuts Streaming Service for Its Local TV Stations.” *Chattanooga Times Free Press*, January 16. https://www.timesfreepress.com/news/business/aroundregion/story/2019/jan/16/sinclair-debuts-streaming-service-its-local-t/486808/.

———. 2019e. “You Dumped Cable? Comcast Hopes to Reel You Back In.” *Chattanooga Times Free Press*, March 21. https://www.timesfreepress.com/news/business/aroundregion/story/2019/mar/21/you-dumped-cable-comcast-hopes-reel-you-back/491096/.

AT&T. 2018. *2018 Annual Report*. https://investors.att.com/~/media/Files/A/ATT-IR/financial-reports/annual-reports/2018/complete-2018-annual-report.pdf.

———. 2019. “Get More TV Freedom.” *DirecTV Now*. Accessed April 22, 2019. https://www.directvnow.com/.

Barron, David. 2019. “Super Bowl on the Big Stream: More Cord-Cutters Will Be Watching.” *Houston Chronicle*, January 30. https://www.houstonchronicle.com/sports/texans/article/Super-Bowl-on-the-big-stream-more-cord-cutters-13573601.php.

Baumgartner, Jeff. 2017. “Analyst: The Cord-Cutting Future Has Arrived.” *Multichannel News*, May 3. http://www.multichannel.com/news/content/analyst-cord-cutting-future-has-arrived/412599.

Bolema, Theodore. 2008. “An Evaluation of Legislative Proposals for Higher Cable Fees to Finance Public, Education and Government Access Channels.” Mackinac Center. Policy brief, November 10. https://www.mackinac.org/archives/2008/2008-11REGfeesWEB.pdf.

Bouma, Luke. 2018. “Virginia Cancels Plans For a Proposed ‘Netflix Tax’ on Streaming Services.” *Cord Cutters News* (blog), January 30. https://www.cordcuttersnews.com/virginia-cancels-plans-proposed-netflix-tax-streaming-services/.

Brodkin, Jon. 2017. "Utility that Says Comcast Didn't Pay Bills Threatens to Pull Wires Off Poles." *Ars Technica*, June 21. https://arstechnica.com/information-technology/2017/06/utility-that-says-comcast-didnt-pay-bills-threatens-to-pull-wires-off-poles/.

cg42. 2016. *2016 Cord Cutter and Cord Never Study*. http://cg42.com/wp-content/uploads/2016/12/cg42_CordCutters.pdf.

Channick, Robert. 2017. "Streaming Becomes Mainstream as Cord-Cutting Accelerates." *Chicago Tribune*, December 26. http://www.chicagotribune.com/business/ct-biz-cord-cutting-accelerates-20171219-story.html.

Charter Communications. 2019. "Video on Demand and Subscription on Demand FAQ." Accessed April 22, 2019. https://www.spectrum.net/support/tv/spectrum-demand/.

Chessen, Rick, Neal Goldberg, and Steven Morris. 2018. "Comments of NCTA—The Internet & Television Association." *In the Matter of Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*. Submitted November 14.

Comcast. 2019. "XFINITY On Demand Movies, TV Shows & More." Accessed April 22, 2019. https://www.xfinity.com/xod.

DISH Network. 2019a. *Annual Report: Year Ending December 31, 2018*. https://ir.dish.com/static-files/1500d9f6-3b27-4e59-b4a0-d7f3257cb992.

———. 2019b. "On Demand." Accessed April 22, 2019. https://www.dish.com/programming/on-demand/.

eMarketer. 2017. "eMarketer Lowers US TV Ad Spend Estimate as Cord-Cutting Accelerates." News release, September 13. https://www.emarketer.com/Article/eMarketer-Lowers-US-TV-Ad-Spend-Estimate-Cord-Cutting-Accelerates/1016463.

Federal Communications Commission. 1972. *In the Matter of Amendment of Part 74, Subpart K, of the Commission's Rules and Regulations Relative to Community Antenna Television Systems; and Inquiry into the Development of Communications Technology and Services to Formulate Regulatory Policy and Rulemaking and/or Legislative Proposals; Amendment of Section 74.1107 of the Commission's Rules and Regulations to Avoid Filing of Repetitious Requests; Amendment of Section 74.1031(C) and 74.1105 (A) and (B) of the Commission's Rules and Regulations as They Relate to Addition of New Television Signals; Amendment of Part 74, Subpart K, of the Commission's Rules and Regulations Relative to Federal-State or Local Relationships in the Community Antenna Television System Field; and/or Formulation of Legislative Proposals in This Respect; Amendment of Subpart K of Part 74 of the Commission's Rules and Regulations with Respect to Technical Standards for Community Antenna Television Systems*.

———. 2016. *In the Matter of Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992: Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment—Report on Cable Industry Prices*.

———. 2017. *In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming—Eighteenth Report*.

———. 2018. *In the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment: Third Report and Order and Declaratory Ruling*.

———. 2019. *In the Matter of Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992: Third Report and Order*.

Florida League of Cities. 2017. *2017 Florida League of Cities Legislative Agenda*. http://publications.flcities.com/2017_FLC_Legislative_Action_Agenda/.

Fung, Brian. 2019. "Verizon TV Customers Suffer Blackout of Key Channels Days Before the NFL Playoffs." *The Washington Post*, January 1. https://www.washingtonpost.com/technology/2019/01/01/verizon-tv-customers-suffer-blackout-key-channels-days-before-nfl-playoffs-sec-college-championship-games/?utm_term=.d1a4f939fbb0.

Garcia, Jason. 2016. "A Bad—But Bulletproof—Tax." *Tallahassee Trend*, October.

Garrick, David. 2017. "Cities Facing Revenue Losses as Cord Cutting Trend Shrinks Cable Franchise Fees." *San Diego Union-Tribune*, December 1. http://www.sandiegouniontribune.com/news/politics/sd-me-cord-cuttiing-20171201-story.html.

Gilbert, Lawanda R. 2012. "Guide to Franchise Renewal." *State of New Jersey Board of Public Utilities*. https://www.state.nj.us/bpu/pdf/cablepdfs/FranchiseRenewalGuide.pdf.

HULU. 2019. "HULU + Live TV." Accessed April 22, 2019. https://www.hulu.com/live-tv.

Jones, Luke. 2017. "Comcast Customers Could Lose Service in Tipton County." *WREG*, June 20. https://wreg.com/2017/06/20/comcast-customers-could-lose-service-in-tipton-county/.

Leichtman Research Group. 2017. "Major Pay-TV Providers Lost About 795,000 Subscribers in 2016." News release, March 16. https://www.leichtmanresearch.com/major-pay-tv-providers-lost-about-795000-subscribers-in-2016/.

———. 2018a. "Major Pay-TV Providers Lost About 1,495,000 Subscribers in 2017." News release, March 12. https://www.leichtmanresearch.com/major-pay-tv-providers-lost-about-1495000-subscribers-in-2017/.

———. 2018b. "78% of TV Households Subscribe to a Pay-TV Service." News release, October 31. https://www.leichtmanresearch.com/78-of-tv-households-subscribe-to-a-pay-tv-service/.

———. 2019a. "Defining Subscriber Losses." *Research Notes, 1Q 2019*. https://www.leichtmanresearch.com/wp-content/uploads/2019/04/LRG-Research-Notes-1Q-2019.pdf.

———. 2019b. "Major Pay-TV Providers Lost About 2,875,000 Subscribers in 2018." News release, March 6. https://www.leichtmanresearch.com/major-pay-tv-providers-lost-about-2875000-subscribers-in-2018/.

Levin, Michael R. and Joshua N. Lowitz. 2019. "Amazon Exceeds 100 Million US Prime Members." *Consumer Intelligence Research Partners*. News release, January 17. https://files.constantcontact.com/150f9af2201/a37a79a7-0eff-4a38-b05a-ce3c459addc2.pdf.

Levy, Ari. 2019. "Disney Says ESPN+ Has 2 Million Paid Subscribers, But Streaming Is Still Losing Money." *CNBC*, February 5. https://www.cnbc.com/2019/02/05/disney-says-espn-has-2-million-paid-subscribers-but-is-losing-money.html.

Liesman, Steve. 2018. "Nearly 60% of Americans Are Streaming and Most with Netflix: CNBC Survey." *CNBC*, March 29. https://www.cnbc.com/2018/03/29/nearly-60-percent-of-americans-are-streaming-and-most-with-netflix-cnbc-survey.html.

McAlone, Nathan. 2017a. "The Dreaded Future Is Here for Cable TV, and We'll Soon See Which Business Models Will Rule." *Business Insider*, May 9. http://www.businessinsider.com/cable-tv-history-chart-2017-5.

———. 2017b. "Get Ready for Traditional TV to Have Historically Brutal Subscriber Losses This Quarter." *Business Insider*, June 6. http://www.businessinsider.com/cable-tv-subscriber-losses-q2-chart-2017-6.

Michigan Department of Licensing and Regulatory Affairs. 2012. *Metro Authority 2012 Annual Report*.

Moffett, Craig. 2018. Testimony to the United States House of Representatives Committee on Energy and Commerce; Subcommittee on Communications and Technology, September 27. https://docs.house.gov/meetings/IF/IF16/20180927/108727/HHRG-115-IF16-Wstate-MoffettC-20180927-U11.pdf.

Moser, Whet. 2015. "Chicago's Netflix Tax: Targeting the Cord Cutters?" *Chicago Magazine*, July 2. http://www.chicagomag.com/city-life/July-2015/Chicagos-Netflix-Tax-Targeting-the-Cord-Cutters/.

Munson, Ben. 2018. "The Top 6 Cable, Satellite and Telco Pay TV Operators in Q3 2018: Ranking Comcast, DirecTV, Charter and More." *Fierce Video*, November 8. https://www.fiercevideo.com/cable/top-6-cable-satellite-and-telco-pay-tv-operators-q3-2018-ranking-comcast-directv-charter-and.

———. 2019. "Netflix Shows Weakness as It Loses 130K U.S. Subscribers." *Fierce Video*, July 18. https://www.fiercevideo.com/video/netflix-shows-weakness-after-losing-126k-u-s-subscribers.

National Conference of State Legislatures. 2019. "Statewide Video Franchising Statutes." *Telecommunications and Information Technology*. Last modified May 31, 2019. Accessed August 13, 2019. http://www.ncsl.org/research/telecommunications-and-information-technology/statewide-video-franchising-statutes.aspx.

Nielsen. 2019. "Super Bowl LIII Draws 98.2 Million TV Viewers, 32.3 Million Social Media Interactions." *Nielson Insights*, February 4. https://www.nielsen.com/us/en/insights/news/2019/super-bowl-liii-draws-98-2-million-tv-viewers-32-3-million-social-media-interactions.html.

North Carolina Department of Revenue. 2006. "Important Notice: Sales Tax on Video Programming Services." Public notice, October. https://files.nc.gov/ncdor/documents/important-notices/VideoNotice10-06.pdf.

North Carolina League of Municipalities. 2019. *State-Collected Local Taxes: Basis of Distribution*. https://www.nclm.org/resourcelibrary/Shared%20Documents/Tax%20Basis/Basis%20of%20Distribution%20Memo%202019.pdf.

Poletti, Therese. 2018. "Netflix is Growing at a Stunning Rate—And So Is Its Profit." *MarketWatch* (blog), April 21. https://www.marketwatch.com/story/netflix-is-growing-even-faster-and-streaming-to-record-profit-totals-2018-04-16.

Pressman, Aaron. 2018a. "Why Cord Cutters Actually Are Saving a Huge Amount Over Cable Subscribers." *Fortune*, July 23. http://fortune.com/2018/07/23/cord-cutters-netflix-average-bill/.

———. 2018b. "Why the Price of Cable TV Stopped Going Up So Fast This Year." *Fortune*, November 15. http://fortune.com/2018/11/15/average-cable-tv-bill-cord-cutting/?utm_source=twitter.com&utm_campaign=fortunemagazine&xid=soc_socialflow_twitter_FORTUNE&utm_medium=social.

Ramachandran, Shalini. 2014. "Pay-TV 'Cord Cutting' Accelerates." *The Wall Street Journal*, November 6. https://www.wsj.com/articles/pay-tv-cord-cutting-accelerates-1415321442.

Richter, Felix. 2019. "Netflix's International Growth Still Picking Up Pace." *Statista: The Statistics Portal*. News release, April 17. Accessed April 22, 2019. https://www.statista.com/chart/16700/netflix-net-subscriber-additions/ (information in link since modified).

Santo, Brian. 2017. "San Diego Sees Diminishing Tax Revenues Due to Cord-Cutting Trend." *Fierce Video*, December 4. https://www.fiercecable.com/cable/san-diego-sees-diminishing-tax-revenues-from-cord-cutting-trend.

Sherman, Alex. 2019. "The Future of Cable May Be No TV at All, as One Small Company from Arizona Shows." *CNBC*, March 4. https://www.cnbc.com/2019/03/03/cable-future-may-not-include-tv-as-cable-one-shows.html.

Sling TV. 2018. "sling." Accessed April 22, 2019. https://www.sling.com/.

Smith, Gerry. 2018. "Who Killed the Great American Cable-TV Bundle?" *Bloomberg*, August 8. https://www.bloomberg.com/news/features/2018-08-08/who-killed-the-great-american-cable-tv-bundle.

Snider, Mike. 2017. "A 'Netflix Tax'? Yes, and It's Already a Thing in Some States." *USA Today*, August 18. https://www.usatoday.com/story/tech/news/2017/08/17/netflix-tax-yes-and-its-already-thing-some-states/500416001/.

———. 2019a. "Avoiding the Cold? You May As Well Binge. Streaming Video Is Only Going to Grow in 2019." *USA Today*, January 30. https://www.usatoday.com/story/tech/2019/01/03/cord-cutting-continue-cut-into-cable-pay-tvs-base-2019/2448974002/.

———. 2019b. "Hulu Updates Monthly Pricing: Live TV Bill Goes Up While On-Demand Cost Drops." *USA Today*, January 23. https://www.usatoday.com/story/tech/talkingtech/2019/01/23/hulu-price-increase-live-tv-bill-goes-up-while-demand-cost-drops/2655717002/.

Sony Interactive Entertainment. 2019. "Plans & Pricing." *PlayStation Vue*. Accessed August 13, 2019. https://www.playstation.com/en-us/network/vue/plans/.

Sorrentino, Mike and Joan E. Solsman. 2019. "Disney Plus Streaming Service: Release Date, Price, Shows and Movies to Expect." *CNET*, April 16. https://www.cnet.com/news/disney-plus-shows-movies-price-release-date-launch-to-expect-streaming-service-seven-dollars/.

Spangler, Todd. 2019. "Hulu Tops 25 Million Subscribers, Claims Nearly $1.5 Billion in 2018 Ad Revenue." *Variety*, January 8. https://variety.com/2019/digital/news/hulu-25-million-subscribers-2018-ad-revenue-1203102356/.

Tennessee Advisory Commission on Intergovernmental Relations. 2017. *Broadband Internet Deployment, Availability, and Adoption in Tennessee*. https://www.tn.gov/content/dam/tn/tacir/documents/2017_Broadband.pdf.

———. 2019. *Leveling the Playing Field: Internet Sales Tax in Tennessee: An Interim Report Prepared as the First Installment of TACIR's Study on Local Government Revenue and Services*. https://www.tn.gov/content/dam/tn/tacir/2019publications/2019InternetSalesTax_2.pdf.

University of Tennessee, County Technical Assistance Service. 2019. "Maintenance of Effort." Accessed May 3, 2019. http://eli.ctas.tennessee.edu/printpdf/book/export/html/722.

US Congress. 1983. *Congressional Record: Proceedings of the 98th Congress, First Session, Volume 129—Part 12, June 13, 1983 to June 22, 1983*. US Government Printing Office: Washington, DC.

US Department of Commerce, Bureau of the Census. 2018. "Table H1. Households by Type and Tenure of Householder for Selected Characteristics: 2018." *Data—America's Families and Living Arrangements: 2018*. November 14. https://www.census.gov/data/tables/2018/demo/families/cps-2018.html.

US Senate Committee on Commerce, Science, and Transportation. 1983. Cable Communications Act of 1983. S. R. Rep. No. 98-67.

Virginia Department of Taxation. 2015. *Report of the 2015 Communications Sales and Use Tax Study*. https://rga.lis.virginia.gov/published/2015/HD19/pdf.

Werner, Nancy L. 2018. "Comments of the National Association of Telecommunications Officers and Advisors, the United States Conference of Mayors, the National Association of Counties, the National League of Cities, the National Association of Regional Councils and the National Association of Towns and Townships." *In the Matter of Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*. Submitted November 14.

Westcott, Kevin, Jeff Loucks, Kevin Downs, and Jeanette Watson. 2018. "Digital Media Trends Survey: A New World of Choice for Digital Consumers, 12th edition." Report by the Center for Technology & Media Telecommunications, Deloitte. https://www2.deloitte.com/content/dam/insights/us/articles/4479_Digital-media-trends/4479_Digital_media%20trends_Exec%20Sum_vFINAL.pdf.

YouTube TV. 2019. "Cable-Free Live TV Is Here." Accessed April 22, 2019. https://tv.youtube.com/welcome/.

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Appendix A: Taxes and Fees Applying to Providers of Video Entertainment Services in Tennessee, By Type of Service and Provider

			Cable Television				Satellite Television	Streaming Video
			For-Profit Provider	Non-Profit Provider				
				Telephone Cooperative	Electric Cooperative	Municipal Electric System		
Taxes and Fees Directly Passed Through on Customer Bills	Fees Pursuant to Cable TV Franchise Agreements	Franchise Fee	YES	YES	YES	YES	NO Exempt under federal law Also not applicable b/c of business model*	NO Not applicable b/c of business model*
		PEG Fee	YES	YES	YES	YES	NO Exempt under federal law Also not applicable b/c of business model*	NO Not applicable b/c of business model*
	Sales and Use Tax	State****	YES Special rates and partial exemptions apply, see next page	YES Special rates and partial exemptions apply, see next page	YES Special rates and partial exemptions apply, see next page	YES Special rates and partial exemptions apply, see next page	YES Special rates apply, see next page	YES**
		Local****	YES Partial exemptions apply, see next page	YES Partial exemptions apply, see next page	YES Partial exemptions apply, see next page	YES Partial exemptions apply, see next page	NO Exempt under federal and state law	YES** Special rates apply, see next page
Other Taxes and Fees that Contribute to Operating Costs	Fees Pursuant to Cable TV Franchise Agreements	Application Fee	YES	YES	YES	YES	NO Exempt under federal law Also not applicable b/c of business model*	NO Not applicable b/c of business model*
		TPUC Fee	YES For state-issued franchises only	YES For state-issued franchises only	YES For state-issued franchises only	YES For state-issued franchises only	NO Not applicable b/c of business model*	NO Not applicable b/c of business model*
	Business Tax (Privilege / Gross Receipts)	State	YES	NO Exempt under state law	NO Exempt under state law	YES (PILOT)	NO Exempt under state law	YES
		Local	YES	NO Exempt under state law	NO Exempt under state law	YES (PILOT)	NO Exempt under federal and state law	NO Not applicable b/c of business model***
	Pole Attachment Rates		YES	YES	YES	YES	NO Not applicable b/c of business model^	NO Not applicable b/c of business model^
	Property Tax		YES	YES	YES	YES (PILOT)	YES	NO Not applicable b/c of business model^^
	Franchise Tax		YES	NO Exempt under state law	NO Exempt under state law	YES (PILOT)	YES	YES
	Excise Tax		YES	NO Exempt under state law	NO Exempt under state law	YES (PILOT)	YES	YES

* Not required to enter franchise agreements with state or local governments to provide video service and, therefore, not subject to fees included in those agreements, because type of video service provided does not meet definition of "cable service," for which a franchise would be required, under state or federal law.

** Sellers of retail services are required to collect and remit sales tax on behalf of customers if the seller either A) has a physical presence in the state, including any place of business or other real property, tangible personal property, or business representative, or B) made more than $500,000 of sales in Tennessee in the previous 12 months; however, even if a seller doesn't meet either of these criteria and doesn't collect and remit tax voluntarily, the sale is still subject to tax, and the customer is then responsible for remitting tax directly, under state law.

*** Local business tax applies only to entities with physical locations, outlets, or places of business within a municipality in the state.

**** Chart shows state and local sales taxes applied to video service itself. For cable and satellite, other equipment or services included in monthly bill, such as set-top boxes, cable modems, satellite receivers, installation, and protection plans, are subject to state sales tax at the general 7% rate and local sales tax at the applicable local option rate. Satellite's federal exemption from local taxes does not apply to these additional items or services.

^ Provider does not typically place equipment in public rights-of-way or on utility poles in the course of providing its video service and, therefore, would not be subject to these fees.

^^ Provider unlikely to have any taxable property in jurisdiction.

Note: Local governments in Tennessee are also authorized to collect annual right-of-way rental payments from providers of telecommunications services, including those that also provide cable television services. Unlike cable franchise fees, these right-of-way fees must be reasonably related to the cost of right-of-way management. Staff have found at least one instance of a provider being charged both a recurring right-of-way fee and a cable franchise fee by a local government, but in other cases, local governments have declined to assess both fees to providers. Both satellite providers and streaming service providers are generally not subject to these fees because they are unlikely to place equipment in public rights-of-way. Satellite providers are also exempt from most local fees under federal law. TN Code Ann., Section 65-21-103, 7-52-603(a)(2), and 65-25-134(d)(2); Bellsouth Telcoms., Inc. v. City of Memphis, 160 S.W.3d 901 (Court of Appeals of Tennessee 2004), cert. denied 2005 Tenn. LEXIS 3; and 47 US Code 152 note.

Cable providers are also subject to any local permits required for performing construction in public rights-of-way, including but not limited to construction permits, excavation permits, and permits for traffic lane closures. Some providers are not required to pay fees for obtaining these local permits under the terms of the locally issued franchise agreements they have negotiated with local governments, which stipulate that the provider's cable franchise fee is in lieu of all other local permitting fees.

Appendix A: Taxes and Fees Applying to Providers of Video Entertainment Services in Tennessee, By Type of Service and Provider (continued)

			Citations and Other Details
Taxes and Fees Directly Passed Through on Customer Bills	Fees Pursuant to Cable TV Franchise Agreements	Franchise Fee	--Locally issued franchises: Fee capped at 5% of gross revenue. TN Code Ann., Section 7-59-102, 7-52-603(e), 65-25-102(3), and 65-25-134(d)(2); and 47 US Code 542(b). --State-issued franchises: Fee equal to 5% of gross revenue, including revenue from subscribers, non-subscriber ad revenue, and home shopping network commissions. TN Code Ann., Section 7-59-306(a), 7-52-603(e), 65-25-102(3), and 65-25-134(d)(2).
		PEG Fee	--Locally issued franchises: Fee covering capital costs for providing PEG services under franchise agreement is uncapped. Fee covering all other PEG costs counts toward 5% franchise fee cap. TN Code Ann., Section 7-59-102, 7-52-605, and 65-25-134; and 47 US Code 542(g)(2)(C). --State-issued franchises: Fee must be equal to fee of incumbent operating under locally-issued franchise in place as of 1 Jan 2008 until terms and conditions of incumbent's franchise agreement are no longer in effect. Thereafter, a) if jurisdiction had fee prior to 2008, then state-issued fee capped at greater of I) 1% of gross revenue or II) amount required for jurisdiction to receive fee no lower than it previously did on a per-subscriber basis; b) if jurisdiction didn't have fee prior to 2008, then fee capped at 1% of gross revenue and counts toward 5% franchise fee cap. TN Code Ann., Section 7-59-309(j), 7-52-605, and 65-25-134.
	Sales and Use Tax	State	Rates vary by service: --Cable TV: a) first $15 of monthly bill exempt; b) portion of monthly bill greater than $15 and no greater than $27.50 taxed at 8.25%; c) portion of monthly bill greater than $27.50 taxed at 7%. TN Code Ann., Section 67-6-103(f), 67-6-226, and 7-52-606(b). --Satellite TV: taxed at 8.25%. TN Code Ann., Section 67-6-227. --Streaming: taxed at 7%. TN Code Ann., Section 67-6-233.
		Local	Rates vary by service: --Cable TV: a) first $27.50 of monthly bill exempt; b) portion of monthly bill greater than $27.50 taxed at up to 2.75%, depending on jurisdiction. TN Code Ann., Section 67-6-103(f), 67-6-702, 67-6-714, and 7-52-606(b). --Satellite TV: exempt. 47 US Code 152 note. --Streaming: taxed at 2.5% uniform rate, distributed based on formula in state law. TN Code Ann., Section 67-6-702(g)(4) and 67-6-710(f).
Other Taxes and Fees that Contribute to Operating Costs	Fees Pursuant to Cable TV Franchise Agreements	Application Fee	--TN Code Ann., Section 7-59-102, 7-59-303, 7-59-304, 7-59-305(b), 7-52-605, and 65-25-134; and 47 US Code 152 note, 47 US Code 522, and 47 US Code 541.
		TPUC Fee	--Applies only to state-issued franchises, and total fees paid by all providers are not to exceed $107,000 per year. Athough the cap is subject to increase by TPUC of no more than 5% from the previous year's total fee, it has never been increased since being enacted in 2008, according to TPUC staff. The fee funds TPUC's expenses for administering the Competitive Cable and Video Services Act of 2008, which among other things authorized TPUC to issue cable franchises. TN Code Ann., Section 7-59-303, 7-59-304, 7-59-305(f)(2), 7-52-605, and 65-25-134; and 47 US Code 522 and 47 US Code 541. Also see Public Chapter 932, Acts of 2008.
	Business Tax (Privilege / Gross Receipts)	State	--TN Code Ann., Section 67-4-702, 67-4-704, 67-4-708(3)(c)(iv), 67-4-709, 67-4-713, 67-4-717, 7-52-606(b), 65-25-122, and 65-29-129.
		Local	--TN Code Ann., Section 67-4-702, 67-4-705, 67-4-708(3)(c)(iv), 67-4-709, 67-4-713, 67-4-717, 7-52-606(b), 65-25-122, and 65-29-129; and 47 US Code 152 note.
	Pole Attachment Rates		Regulation of rates varies based on pole owner: --Attachments to poles owned by for-profit entities subject to rate caps set by Federal Communications Commission. --Attachments to poles owned by municipal electric systems or electric cooperatives that purchase power from the Tennessee Valley Authority (TVA) subject to rates set by TVA. --Rates for attachments to poles owned by other non-profit or government-owned entities negotiated with pole owner. --47 US Code 224(f); 47 Code of Federal Regulations 1.1401 et seq.; TN Code Ann., Section 65-21-105, 7-52-605, 7-52-603(a)(2), 65-25-134(d)(1); Memorandum from John M. Thomas, III, executive vice president and chief financial officer, Tennessee Valley Authority, to Tennessee Valley Authority Board of Directors, January 22, 2016; and Minutes of the Meeting of the Board of Directors, Tennessee Valley Authority, February 11, 2016, approved May 5, 2016.
	Property Tax		--TN Code Ann., Section 67-5-801(a)(2), 67-5-901(a)(2), 67-5-501, 65-25-122, 65-29-129, 7-52-606(a), and 7-52-304.
	Franchise Tax		--TN Code Ann., Section 67-4-2004, 67-4-2105(a), 67-4-2106(a), 67-4-2108, 7-52-606(b), 65-25-122, and 65-29-129.
	Excise Tax		--TN Code Ann., Section 67-4-2004, 67-4-2007(a), 7-52-606(b), 65-25-122, and 65-29-129.

Appendix B: Historical Average Prices for Cable Television Services

Attachment 7
Historical Averages
1995-2015

Year	Basic Tier Price	Expanded Basic Service					Next Most Popular Service & Equipment	CPI	
		Price	Channels		Price per Channel			All Items	Cable
			No.	Index	Dollars	Index			
Jul. 1995	---	$22.35	44.0	100.0	0.600	100.0	---	100.0	100.0
Jul. 1996	---	$24.28	47.0	106.8	0.610	101.7	---	103.0	106.9
Jul. 1997	---	$26.31	49.4	112.3	0.630	105.0	---	105.2	114.9
Jul. 1998	$12.06	$27.88	50.1	113.9	0.650	108.3	$38.58	107.0	122.6
Jul. 1999	$12.58	$28.94	51.1	116.1	0.650	108.3	$38.43	109.3	127.0
Jul. 2000	$12.84	$31.22	54.8	124.5	0.660	110.0	$39.64	113.3	132.9
Jul. 2001	$12.84	$33.75	59.4	135.0	0.600	100.0	$45.33	116.4	139.1
Jul. 2002	$14.45	$36.47	62.7	142.5	0.660	110.0	$46.59	118.1	147.8
Jan. 2003	$13.45	$38.95	67.5	153.4	0.650	108.3	$49.03	121.2	157.1
Jan. 2004	$13.80	$41.04	70.3	159.8	0.660	110.0	$51.76	123.5	163.1
Jan. 2005	$14.30	$43.04	70.5	160.2	0.620	103.3	$56.03	127.2	169.6
Jan. 2006	$14.59	$45.26	71.0	161.4	0.650	108.3	$59.09	132.2	174.4
Jan. 2007	$15.33	$47.27	72.6	165.0	0.670	111.7	$60.27	135.0	179.0
Jan. 2008	$16.11	$49.65	72.8	165.5	0.680	113.3	$63.66	140.8	183.9
Jan. 2009	$17.65	$52.37	78.2	177.7	0.710	118.3	$67.92	140.8	186.5
Jan. 2010	$17.93	$54.44	117.0	204.7	0.560	110.3	$71.39	144.5	191.9
Jan. 2011	$19.33	$57.46	124.2	217.3	0.569	112.0	$75.37	146.9	192.0
Jan. 2012	$20.55	$61.63	149.9	262.2	0.505	99.4	$78.91	151.2	199.8
Jan. 2013	$22.63	$64.41	159.6	279.2	0.484	95.3	$81.64	153.6	206.5
Jan. 2014	$22.78	$66.61	167.3	292.6	0.496	97.6	$84.65	156.0	212.0
Jan. 2015	$23.79	$69.03	181.3	317.1	0.456	89.3	$86.83	155.8	216.4
Compound Average Annual Rate of Change									
5 year average	5.8%	4.9%	---	9.2%	---	-4.0%	4.0%	1.5%	2.4%
10 year average	5.2%	4.8%		7.1%		-1.4%	4.5%	2.0%	2.5%
Years 1995-2015	---	5.8%	---	5.9%	---	-0.5%	---	2.2%	3.9%

Source: Federal Communications Commission 2016.