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February 10, 2021

The Honorable Mary Hooper
Chair
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The Honorable Jane Kitchel
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Senate Committee on Appropriations

The Honorable Timothy Briglin
Chair
House Committee on Energy and Technology

The Honorable Ann Cummings
Chair
Senate Committee on Finance

Dear Members of the Vermont General Assembly:

The Agency of Commerce and Community Development is providing you this report, “*Analysis of the Financial Viability for Public, Educational and Government Access Television in Vermont*”, per the requirements of Act 137, Section 19 of the 2020 Session of the Vermont General Assembly.

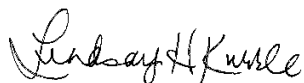
Act 137 required the Agency to, “retain a consultant to review the current business model for Vermont Public, Educational, and Governmental Access (PEG) television channels and provide recommendations concerning how to ensure the future financial stability and viability of PEG channels.” We believe this report adequately responds to the Legislative direction.

However, because ACCD has very limited experience in the delivery of PEG programming, and the legal constraints around telecommunications regulations, we were not able to completely evaluate the feasibility or merit of the proposals and the recommendations provided by the consultant.

Therefore, the recommendations contained in the accompanying report are those of the consultant hired to prepare the document, and are not recommendations from ACCD or any other unit of the Executive Branch.

Should you have any questions about the report, please contact Jessica Vintinner at jessica.vintinner@vermont.gov to arrange a meeting or testimony from the consultant.

Sincerely,



Lindsay Kurrle, Secretary
Vermont Agency of Commerce and Community Development



Analysis of the Financial Viability for Public, Educational and Government Access Television in Vermont

Submitted to

Vermont Agency of Commerce and Community Development



Prepared by

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February 7, 2021

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I. Executive Summary

As cable television developed in the 20th century, so did a parallel obligation to provide Public, Educational and Governmental (PEG) access programming. Today, Vermont has 25 PEG centers, each run locally by a board of directors and mainly financed by mandated payments from cable companies serving the same area. The centers have a complex mission that makes them, as video production centers, something like a combination of town hall, local newspaper, town library, public school, and the Speaker's Corner.

The financial future for these PEG centers is uncertain. Cable company payments and PEG revenues have been relatively stable in recent years, yet it seems likely that over the next six years, the PEG centers will begin to experience budget shortfalls. Under a "low-normal" economy scenario, the budget shortfall by 2026 is estimated at \$1.37 million, which is approximately 17 percent of the current spending level. In addition, the PEG centers face additional substantial risks that we did not quantify. One risk is novel FCC interpretations of the federal law that limits cable company contributions. Another risk is that unexpectedly large numbers of consumers will "cut the cable cord," as many customers have previously done with the "telephone cord." The third is that cable companies may shift their business model from the traditional cable channel service to a streaming video model for customers who buy the company's broadband service.

One way to prepare for a budget shortfall is to find new efficiencies. The report suggests several possible efficiencies that we encourage the PEG centers to pursue. One possibility is to force the PEG centers to reorganize into a more efficient form; but in looking at other states we found no alternative that would be an obvious improvement. Forced mergers and more vertical organization structures are also possibilities, but they do not seem likely to produce savings that outweigh the likely losses to local service quality.

The digital revolution has affected both cable companies and PEG centers, but the current legal and financial structure for PEG centers still reflects the pre-digital economic reality. Most PEG programs today are available over the Internet, and can be viewed at will by anyone with a broadband connection. The benefits of PEG service, in short, are no longer limited to the nearby citizens who can pay a PEG fee on their cable television bill.

As communications have shifted to the Internet and prices have fallen, cross-platform competition has become the norm. Cable companies, telephone companies, wireless internet service providers, and satellite companies all compete for customers to provide similar services. They each offer a version of broadband Internet service capable of carrying PEG service to interested consumers. Yet the regulation and taxation of the telecommunications industry is still organized in industry "silos" that treat competitors quite differently, depending on their delivery

platform. For that reason, the current system for utility regulation and taxation has become anachronistic and even occasionally unfair, as it produces quite different taxation burdens on competitors in different silos.

Assuming that the Vermont Legislature wishes to provide additional funding for PEG service, now or in the future, this report describes five options that would enable the state to provide that supplemental support. Beyond the obvious solution of providing appropriations from the General Fund, the options are:

1. A gross revenue tax on cable revenues for PEG capital costs.
2. A streaming video charge.
3. Modifying the Vermont Universal Service fund by raising the rate.
4. A charge on each attachment to a utility pole.
5. A multipart option that includes a pole attachment charge plus modifications to the Vermont Universal Service Fund, changes to the method of funding PEG capital costs, and repeal of the Telephone Personal Property Tax.

The recommendations at the end of the report encourages particular attention to option #5. This is the most competitively neutral option. It eliminates one obsolete tax and replaces the revenue with a new pole attachment charge to be paid by all companies that use the public rights-of-way for telecommunications purposes. It also utilizes an exception in federal law that allows charges on Internet access to support 911 programs, thereby broadening the base of customers supporting the Vermont E-911 program to include broadband Internet customers. It attempts to define a broad funding base for a competitively neutral telecommunications public benefit fund.

All five options must steer around a variety of obstacles created by federal telecommunications law. Appendix B to the report describes the details of those laws.

II. Scope of This Study

This report was mandated by legislation passed during the summer of 2020.¹ It reviews the funding and operations of the state's 25 providers of public, educational and governmental nonprofit television programming (PEG). The organizations providing these PEG services are officially called "Administrative Management Organizations" (AMOs),² and they are also commonly called "Access Management Organizations." This study is provided to the Vermont House Committees on Appropriations and on Energy and Technology and to the Senate Committees on Appropriations and on Finance.

This report by Berkshire Telecommunications Consulting (BTC) aims to offer options that would allow the state to "ensure the future financial stability and viability of PEG channels."³ We include recommendations that could ameliorate the pressures created by the potential for future revenue reductions from the AMOs' main funders, the cable television companies.

This report briefly summarizes the history of PEG access and its current funding issues. Then it describes policy alternatives relating first to AMO expenditures and second to sources of revenue. We include an Appendix which more deeply explains selected legal issues surrounding those policy alternatives, notably the various federal preemption issues.

This study pursues two broad tasks. The first requires evaluating AMO expenditures, efficiencies and their form of business organization. BTC has addressed this task from a variety of perspectives. Nevertheless, we recognize that the Legislature itself will make the final decision on the benefit of the PEG services being provided compared to the costs the AMOs' face for operations

The second broad task involves AMO revenues. We have sorted through a wide variety of options that could increase those revenues, and we present those with what seem the greatest plausibility. The options presented vary in where they would place additional financial burdens and on how broadly they interact with other taxes and charges in the telecommunications space.

¹ Acts of 2020, No. 137, Sec. 19.

² PUC Rule § 8.408.

³ *Id.* § 19(a).

III. Cable Television and PEG Services

Cable television was introduced first into the United States in 1948. The early companies were usually small businesses with facilities consisting of a “head-end” (often a single antenna on a hilltop), plus some electronics and a small distribution network serving the surrounding area.⁴ Later, the cable companies began offering content from distant areas, and in the 1970s began drawing signals from satellites.

In the early years, Vermont had as many as 50 cable companies. Over time, most were acquired by larger entities, thereby reducing their number. Today, the Vermont Public Utility Commission franchises eleven cable companies with “certificates of public good.” Most of Vermont is served by Comcast, a national company which acquired Adelphia in 2006.

To be able to string video cable to their customers using the public right of way, cable companies historically obtained “franchises” from municipal, or in Vermont, state government. Around the country, those franchises have often come at a price, usually a requirement to pay for some public access benefits. The support of PEG is one of those requirements.

The term “PEG” is an acronym and refers to:

- **Public-access television.** On these channels, citizens can create video programming which is transmitted through the cable television system.
- **Educational-access television.** These channels often include distance education and are sometimes used by public schools to enhance their own curricula.
- **Government-access television.** These channels usually transmit meetings and presentations of local government bodies.

One rationale for requiring cable companies to finance these services is that, like broadcast television with which it originally competed, cable television should have had an obligation to provide some public benefit programming. Broadcast stations used the airwaves, and at one time they had obligations to broadcast at least occasional “public service announcements.” The costs of PEG service were also a way for cable companies to compensate the public for the right to string cables in public rights-of-way.

⁴ These simple early systems were sometimes called “community antenna” systems because they used an often visible antenna or dish and because their geographic scope was small. Occasionally the systems used microwave links to interconnect two or more neighborhood distribution systems.

Technology advances, and especially the conversion to digital technology, have enabled a broad range of current service offerings. In the 1990s, cable companies began upgrading their networks to provide digital signals for their broadcast programs and also to offer Internet services. More and more glass fiber transmission was installed, and coaxial metallic cables were upgraded. The new Internet service offered by cable companies used newly developed “cable modems” that could offer broadband speeds to residential customers. Around 2003, cable companies began offering telephone service using “voice over Internet Protocol” (VoIP) technology, and thus began to directly compete with telephone companies. Today, many cable customers buy a “triple play” package that includes broadcast cable television, VoIP telephone, and Internet. Some cable companies even offer a fourth service, mobile telephone, thus making the cable company a one-stop shop for all a consumer’s communications needs.⁵

A. Federal Regulation of Cable

Regulation of cable systems evolved in stages, just like the cable systems themselves. In 1965 and 1966 the FCC established the first, limited, regulation of cable systems. The FCC rules asserted the new concept of “ancillary” jurisdiction. The theory was that regulation of cable systems was necessary for the FCC to carry out fully and effectively its duty to regulate the television broadcast industry.⁶ The FCC protected cable companies for many years by prohibiting the Bell operating companies from offering video services and by requiring owners of utility poles to allow cable companies to attach their cables at reasonable rates.

In 1984 the U.S. Congress passed a law that ratified many of the jurisdictional assertions the FCC had made, and much more. The Cable Communications Policy Act of 1984 (Cable Act) covered a variety of subjects, including ownership, channel usage, and franchise provisions. Congress has amended the Cable Act several times. It is now commonly referred to as “Title VI” of the Communications Act of 1934, and is further described in Appendix B to this report.

Title VI was enacted in part to ensure that “cable systems are responsive to the needs and interests of the local community.”⁷ In addition, Congress wanted to ensure that “cable

⁵ Likewise, some telephone companies – such as Verizon (in some metropolitan areas) and Vermont Telephone (VTel) – sell retail video services over high speed glass fiber lines. Satellites also offer their own versions of the triple play package.

⁶ Specifically, the FCC adopted the rules to ensure the preservation of local broadcast television service and to effect an equitable distribution of broadcast services among the various regions of the country. The FCC’s action was upheld in *United States v. Southwestern Cable Co.*, 392 U.S. 157 (1968).

⁷ 47 U.S.C. § 521(2).

communications provide and are encouraged to provide the widest possible diversity of information sources and services to the public.”⁸

The Cable Act also defines the jurisdictional limits among federal, state and local authorities for regulating cable television systems. As the so-called “franchising authority,”⁹ Vermont has limited authority over cable companies. Vermont can establish and enforce customer service requirements, for instance,¹⁰ but it has very limited authority over television rates and the technical specifications of the cable network.

The Cable Act allows franchising authorities to mandate PEG “channel capacity” as part of a franchising agreement, and even requires franchising authorities to adopt rules describing their policies.¹¹ To protect the independence of PEG access, the Cable Act provides that PEG channels must remain free from any editorial interference by cable operators.¹²

The Cable Act and the FCC have also adopted detailed rules about PEG financing. These are discussed below in the preemption section. It is notable that although cable companies today offer a broad range of services, much of the legal and regulatory structure under which they still operate was designed in an era when they offered only one service, television. For example, the maximum allowable contribution that can be required as a franchise fee from a cable company is a percentage of its revenue from video operations.

B. State Regulation of Cable and AMOs

Vermont has made a strong commitment to PEG access. “Rule 8.000” was originally adopted in 1994 by the Public Service Board (now renamed the Public Utility Commission) (PUC) and amended three times thereafter.

Rule 8.000 imposed numerous PEG obligations on cable companies.¹³ It also announced that the PUC in the future might impose additional requirements whenever it periodically reviews and renews Certificates of Public Good (franchises).¹⁴ Under the rules, cable operators

⁸ 47 U.S.C. § 521(4).

⁹ State law delegates this authority to the Vermont Public Utility Commission.

¹⁰ 47 U.S.C. § 552(a) (1).

¹¹ 47 U.S.C. § 531(b), (d).

¹² 47 U.S.C. § 531(e).

¹³ PUC Rule § 8.401.

¹⁴ PUC Rule § 8.400 (B).

are required to operate “at least three forward viewable PEG channels,”¹⁵ although only one or two channels are required if the local AMO agrees with that decision.¹⁶

In practice, AMOs generally provide live video feeds to the cable company “head-end” or “hub site” within the AMO’s service territory.¹⁷ This goes a long way to explaining why Vermont has 25 AMOs. The boundary map for Vermont’s AMOs still largely reflects the head-end areas from the original cable system head-end service areas.

Rule 8.000 imposes numerous obligations on cable companies to finance PEG service. They must provide at least a set of minimum capabilities, including “equipment necessary for community members to produce, post-produce, and distribute PEG content from its studios or community locations.”¹⁸

The PUC Rule authorizes two kinds of AMO funding. First, cable companies must pay their local AMOs up to five percent of their annual operating gross revenues from cable services.¹⁹ Second, cable companies must also make capital payments to AMOs, in amounts agreed between them. The rule says that negotiation over these fees is the “preferred method” of setting the amounts.²⁰ Cable companies can pass their AMO costs along to customers as a separate charge, and they typically do so.

AMO activities are not regulated in the way that utilities are usually regulated. They are certified to their task by their cable company, not the PUC.²¹ Their rates and quality of service are not directly subject to PUC orders. To maintain accountability, AMOs are required to file detailed annual reports with the Department of Public Service and the Public Utility Commission. These reports include details on their operations and finances.

¹⁵ PUC Rule § 8.402.

¹⁶ PUC Rule § 8.403.

¹⁷ PUC Rule § 8.403(F).

¹⁸ PUC Rule § 8.416(A). Cable companies must also accommodate “reasonable requests” from AMOs to establish “remote” video origination sites, for example as locations where town boards meet regularly. PUC Rule 8.416(C).

¹⁹ PUC Rule 8.417(A), (C).

²⁰ PUC Rule 8.417(D). The rule also says that if the Vermont Legislature should in the future enact a tax or fee that is determined to be a “franchise fee” under federal law, the rule-based funding requirement would be reduced as necessary to bring the total charge to the 5% benchmark. PUC Rule § 8.417(G).

²¹ PUC Rule 8.408.

IV. PEG Access Today

Vermont's regulatory support for PEG access has produced a field of 25 AMOs that produced and published more than 17,000 original public, educational and government access programs in 2019.²² As discussed in more detail below, their published programs included meetings, debates, lectures, forums, information sessions, announcements, sports, graduations, church services, and even local arts and entertainment.

A. PEG's Mission

BTC conducted five video interviews with AMO directors, and 20 directors participated. We drew a number of impressions from these interviews about how the AMOs view their mission.

First, the AMOs serve a government access function. They produce and publish video records of hundreds of local government meetings each year. In interviews, the AMO directors emphasized that "keeping an eye" on the state and local government is a central function that they find important in a democratic society.

The task of recording and disseminating government meetings and other public events extends outside the AMO's' central studios. Vermont AMOs operate "remote origination sites" in various public locations within their communities, where video can be recorded and transmitted.²³ In some cases this capacity is "hardwired" for video by the cable companies. More recently, with the advent of digital devices, AMO's are able to transmit live programs from any location with an adequate internet connection. For example, ORCA Media in Montpelier uses these remote connections to produce live video coverage of Montpelier City Council meetings, high school sports, legislative hearings and state government events, such as the Governor's regular press conferences.²⁴

Training is also an important part of the work of Vermont's community media centers. Usually at no cost, the PEG centers provide facilities and media education that enables students and volunteers of all ages to produce programs that are of local interest and of sufficient quality

²² Sources: authors' calculations and 2019 AMO annual reports.

²³ For example, Vermont Community Access Media (VCAM) has remote sites established at the Shelburne Municipal Offices, the Shelburne School, and the Hinesburg Town Hall.

²⁴ The statewide channel hardware is new, and operates primarily under ORCA in Montpelier. Its video is published in HD, and its hardware is in Burlington.

to warrant airing on PEG channels.²⁵ The AMOs' media education provides skills that can augment the public education curriculum. Youth programming is widely considered a priority in the AMOs, and several AMOs offer "youth camps" for vacation time instruction. The directors proudly report that they have had student volunteers who return year after year, even into their college years and beyond. During the COVID pandemic, training continues online, with some community media centers reporting an increase in internships.

The AMOs also expand the communications capacities of nonprofit organizations and citizen journalists by training volunteers in video technology and producing and distributing their programs on cable TV channels and through online platforms. Media education is delivered in individual and group settings.

AMOs also provide opportunities for community communication. PEG cable channels post many "bulletin board events" advertising upcoming meetings as well as "video announcements" and public service announcements for community organizations. In many Vermont towns, PEG channels are widely considered a great way to find out what's happening locally. The AMOs exercise virtually no editorial control over this content, giving broad editorial freedom to program originators. This local news function may be increasingly important as Vermont's traditional news sources shrink in number and as the newspaper industry transitions from paper to online and in some cases to corporate ownership.

Cultural integration is another way to view these same activities. By capturing and publishing their video programs, the directors feel their media centers strengthen the social cohesion in their communities, build community sentiment and promote the feeling of "being together."

Yet another mission is to serve as the community's video archivist. Just as libraries keep written records of local events and people, the AMOs record and save programs such as public meetings and interviews with local residents. This kind of oral history can capture the spirit of the time and place in a way that a newspapers and official documents cannot. The majority of AMOs preserve their own archives on local computer servers and cloud based storage services and cover these costs through their operating budgets.²⁶

²⁵ For example, GNAT in Manchester VT trained 725 persons in fiscal year 2019, including over 250 in studio production and over 200 in field production. GNAT also provides unstructured training on a daily basis.

²⁶ One AMO currently maintains 41,000 past programs on file, dating back to 1984.

PEG services and centers also can be useful in emergencies. After Hurricane Irene, several AMOs report they were able to broadcast emergency information within their areas. Most AMOs have battery backup that can keep them operational for some hours, and a few have acquired diesel backup generators, anticipating a larger future role in emergency communications.

The 2020 COVID pandemic saw many of the AMOs increase their production of emergency communications, expand their public meeting coverage and offer a variety of new programs to encourage community spirit. One AMO offered an art show. Another offered an online dog show (with judges and prizes). Still others offered live coverage of the November election and virtual concerts with local musicians, thereby helping build audiences for artists who have otherwise been silent during the pandemic.

The COVID pandemic seems to have produced more public involvement in PEG service, perhaps because other forms of community contact have been suspended, and some of the changes may be permanent. As one AMO director put it:

“The advent of Zoom from the Pandemic has changed the way we will be doing production moving forward.... The bottom line is...there is way more community engagement with the on line platform. Whereas in the past, at a select board meeting, perhaps there would be 3 people in attendance, or if a heated topic, maybe 15. In recent months, we have had as many as 60 people on the select board meetings. The School meetings also have more community engagement.”²⁷

In short, Vermont’s AMOs serve a multipurpose role in their communities. The AMO directors see their organizations as integral to the life of their community, serving a role that combines elements of the town hall, local newspaper, town library, public school, and the Speaker’s Corner.

1. Geographic Coverage

Vermont’s most populated towns and cities are almost all within AMO service areas. Appendix A contains a listing of the AMOs and the towns and cities that are within their service areas.

A number of rural towns in Vermont are not formally part of the local AMO’s service area. For example, multiple towns in western Addison County and in the Northeast Kingdom

²⁷ Email 1/12/21 from Paula Wehde Station Director, WOA-TV, Windsor.

have no designated PEG service provider.²⁸ The cause is historical and legal. AMO service areas today generally conform to the areas served by cable companies. Many rural Vermont towns have neither a cable company nor a PEG provider. PEG service and cable service today show many of the same geographic gaps.

The current legal structure makes it difficult for the AMOs to fill these geographic gaps. The AMOs are designated by the cable companies. There is no state review or any state franchise based on communities of interest. Even where an AMO would like to propose expanding its service area, if the candidate town has no cable service, there is no public body with whom the application can be filed.²⁹ Even if that legal problem were somehow solved, there remains the business problem that a town with no cable television does not contribute to the costs of a nearby AMO, other than through incidental contracts or donations.

Towns outside of AMO boundaries are not entirely deprived of PEG service. Events recorded in one town will often have regional interest. For example, in the Northeast Kingdom, a high school graduation recorded on a PEG channel may be watched live or streamed later by parents in many surrounding towns. Likewise, where a PEG channel makes emergency information available, it can often benefit residents of other nearby towns.

AMOs have generally extended benefits to surrounding towns outside their official service areas. Most feel a sense of duty to both subscribers and residents of their larger region, including the “un-cabled” parts that don’t contribute to the costs of the PEG studio. The AMOs generally make their video products available to these out-of-area customers, using various Internet-based platforms. They also provide training of community video producers and providing video coverage of events outside their service areas, such as parades and sporting events.

Uneven geographic coverage is therefore a feature of both cable coverage and the current PEG access system. This may be a reason to consider broadening the mission and funding of PEG access, possibly to begin viewing PEG access as a public benefit of the state’s telecommunications network that serves all Vermonters.

²⁸ Sometime the AMO boundary lies between two communities that are culturally connected. For example, Hardwick Community Television (HCTV) serves Hardwick and Woodbury. Greensboro, which is culturally a part of the larger community, has no AMO.

²⁹ Public Utility Commission rule prescribes a process in which an incipient AMO applies for certification as the certified PEG provider to its local cable operator.

2. Technology Convergence and the Mission of PEG Services

The digital revolution has disrupted many industries, including PEG access. In the 1990s when the current PEG system was established, PEG video was a creature of cable television. The AMOs produced an analog “RF”³⁰ video stream and fed it directly to a cable head-end. Video equipment was expensive at that time, and was used primarily by commercial producers. Television channels were relatively few, even on cable systems, and in rural areas the cable companies were the only way to air video content.

Today, the telecommunications world looks much different. The Internet, broadband, and digital video devices have changed the world. Video recording and transmission is much less expensive and more widely available. Video content can also be stored and broadcast using private company servers at a comparatively small cost, and made available “on-demand” at the customer’s convenience.

The AMOs have responded to this technology change. They have made the transition to digital production and they are publishing their videos both over cable channels and the Internet. They also have found that younger viewers generally don’t watch the cable channels, so to reach these viewers they must use streaming or social media platforms. The AMOs now distribute content via their own web sites, commercial video sites such as YouTube or Vimeo, and social media sites like Facebook and Instagram.

PEG is no longer a “cable only” or even “cable primarily” service. For many of the Vermont AMOs, PEG service has already become, mainly, an Internet-based service. By using these new Internet-based platforms, the AMOs make their content available to more citizens, including those outside the cable company’s service area. Events of regional interest can now be viewed regionally by everyone with a broadband connection, at convenient times, and without a cable television hookup. Thus the Internet, with active cooperation from the AMOs, has partially solved the geographic limitations discussed in the previous section.

AMO’s have not been able to fully take advantage of recent technology upgrades. PEG content published on the cable channels is usually recorded in HD (high definition) format, but for viewing on the cable channels, the video is almost always downgraded to SD (standard definition) format.³¹ The AMOs report that this quality downgrade makes their content less

³⁰ “RF” stands for radio frequency.

³¹ Under their settlement agreement with Comcast, the AMOs are permitted to request that the PUC order Comcast to deliver PEG channels in HD format.

appealing to viewers who have become accustomed to viewing all their commercial channels in HD.³²

Internet video streaming increases the demands on Vermont's AMOs. Most of the Vermont AMOs devote significant resources to recording, storing and distributing video content for on-demand streaming. But no new revenue stream supports these new activities. Any extra expense for the new forms of PEG service must be paid out of the AMO budgets, which in turn are funded mainly by cable television customers in the AMO's nominal service area.

Given the new technology and diversity of distribution platforms, it may be time to conceive of PEG service, not as merely ancillary to cable television, but as an important public benefit of statewide scope delivered through the communications network.

B. Value and Viewership

In this section, we report on PEG viewership data, and also the value that Vermonter's place on that PEG service. PEG programs are not rated by services that measure viewership of commercial television. Instead, we rely on two publications from the Vermont Department of Public Service (DPS). They tell approximately the same story.

The DPS published survey data on viewership in its 2018 Draft Telecommunications Plan. A telephone survey found:

- 72 percent of respondents had watched a public access channel.
- 52 percent of respondents said they watched less than an hour of public access channels per week. 18 percent said they watched three hours or more per week.
- 14 percent of respondents said they had created content material for airing on a public access channel.
- Of those who had watched public access channels, 43 percent said they had watched a town meeting on their public access channel. This was significantly more viewership than was reported three years earlier.

³² The AMOs and the cable companies have also frequently disagreed about where the PEG channels will appear in the cable company's channel lineup. The AMOs object to having their content assigned to very high channel numbers that are difficult to find on the modern cable systems.

- 52 percent of respondents said it is “very important” to have public access channels, and another 31 percent said it is “moderately important.” Only 6 percent said the channels were “unimportant.”³³

At the end of 2020, the Department of Public Service published a “COVID-19 Response Telecommunications Recovery Plan” (COVID Response Plan).³⁴ The plan was flattering to the AMOs, both in its findings and its conclusions.

The plan reported results of a 2020 survey of Vermont residents, during the COVID pandemic. It found that viewership, overall:

“has been steady or increasing, and in many cases, the Vermont community’s engagement with PEG resources has increased significantly, with many stations reporting spikes in Facebook views, YouTube views, and Google website traffic during the pandemic months.”³⁵

The report also reported numerous details about viewership.

- PEG viewers most commonly watched broadcasts of municipal functions, which were viewed by 72 percent of respondents. One-half of PEG viewers accessed information about COVID-19.³⁶
- Technology has changed viewing habits, shifting viewers toward streaming video and away from cable channels. Despite broadband’s limited availability in Vermont, far more respondents said that they had accessed PEG content using their broadband connection than using the local cable channels. 44 percent said they used the PEG website, and 42 percent used online video platforms such as YouTube, and 21 percent used social media. Only 27 percent used the cable television package.³⁷
- Respondents aged 18 to 34 years were more likely than older respondents to be PEG viewers. Middle-aged PEG viewers (ages 45 to 54) were more likely than older and

³³ Department of Public Service, *2018 Telecommunications Plan Final Draft*, Attachment from John Fogli and Eva Meng, dated 3/1/2017 (pages unnumbered).

³⁴ Vermont Department of Public Service, CTC Technology & Energy, and Rural Innovation Strategies, Inc., *COVID-19 Response Telecommunications Recovery Plan*.

³⁵ *Id.* p. 57.

³⁶ *Id.* p. 138.

³⁷ *Id.* p. 182, Fig. 89.

younger viewers to access content about school functions. Men were more likely than women to have watched PEG programming (23 percent vs. 13 percent).³⁸

The COVID Response Plan also made several observations about new roles that PEG access took on during the 2020 COVID emergency, “disseminating information such as educational content, Covid-19 safety guidelines, and municipal events to the public quickly and efficiently.”³⁹ AMOs also provided information on the pandemic, support for remote education, access to governmental affairs, and connections with other community events.⁴⁰ This mission for PEG was particularly useful, the authors concluded because many municipalities “have struggled to engage citizens and elected officials via online tools, and few have made plans for larger engagement challenges like Town Meeting Day.”⁴¹

The 2020 Plan also reported that during the COVID pandemic PEG stations provided “critical content to meet community needs,” including:

- “Ongoing emergency management updates, including access to government press conferences, related to the COVID pandemic.
- “Production and technical support to stream and archive public meetings and events. This involves working with community members and institutions to facilitate best use of virtual meeting tools.
- “Delivery of education programs for students and adults, including live-streamed distance learning opportunities, graduations and school ceremonies, and school sports coverage.
- “Election coverage, including candidate forums, information on absentee ballot casting, and town meeting feeds.
- “Production of community-meeting events and open forums, including anti-racism demonstrations, theater performances, and local fundraising events.”⁴²

More generally, the COVID Response Plan complimented AMOs on their responsiveness to both the COVID pandemic and technology change. It said:

³⁸ *Id.* p. 180.

³⁹ *Id.* p. 2.

⁴⁰ *Id.* p. 57.

⁴¹ *Id.* p. 2, 6.

⁴² *Id.* p. 57-58.

“PEG stations reported responding to the effects of the pandemic by continuing to expand their virtual offerings and design hybrid public meetings and events. They are working to increase security, success, and transparency of these events, as the pandemic continues to change the way that video production can operate, and to change the way that video consumption is done.”⁴³

As it has with many other activities, the COVID pandemic has caused changes to PEG usage. After the pandemic, long term change in PEG viewing habits may be important in planning future PEG operations.

V. Revenue Forecast for AMOs

In this section, BTC provides “a range of estimates of the projected decline in revenues from cable franchise fees.”⁴⁴ Cable fees comprise most of AMO revenues, but not all. Table 1 shows the statewide percentages aggregated for all AMOs for Fiscal Years 2015 through 2019.

Cable Company Franchise Fees	92%
Fees for Services and Other Revenue	5%
Grants and Contributions	2%
Interest	1%

Table 1. Sources of AMO Revenue – FY 2015-19

A high percentage of AMO revenue comes from cable companies, and they are of two principal types, operating revenue and capital revenue. Operating revenue for the AMO is uniformly five percent of the cable company’s annual operating gross revenues from cable services. Capital payments vary over time and from one AMO to another, but they are usually about one-tenth of the operating payments.

⁴³ *Id.* p. 58.

⁴⁴ Acts of 2020, No. 137, Sec. 19(b) (1).

Chart 1 below reports the trend over time in total AMO revenues, by source, from Fiscal Years 2015 through 2019,⁴⁵ and shows a separate line solely for Comcast’s payments.

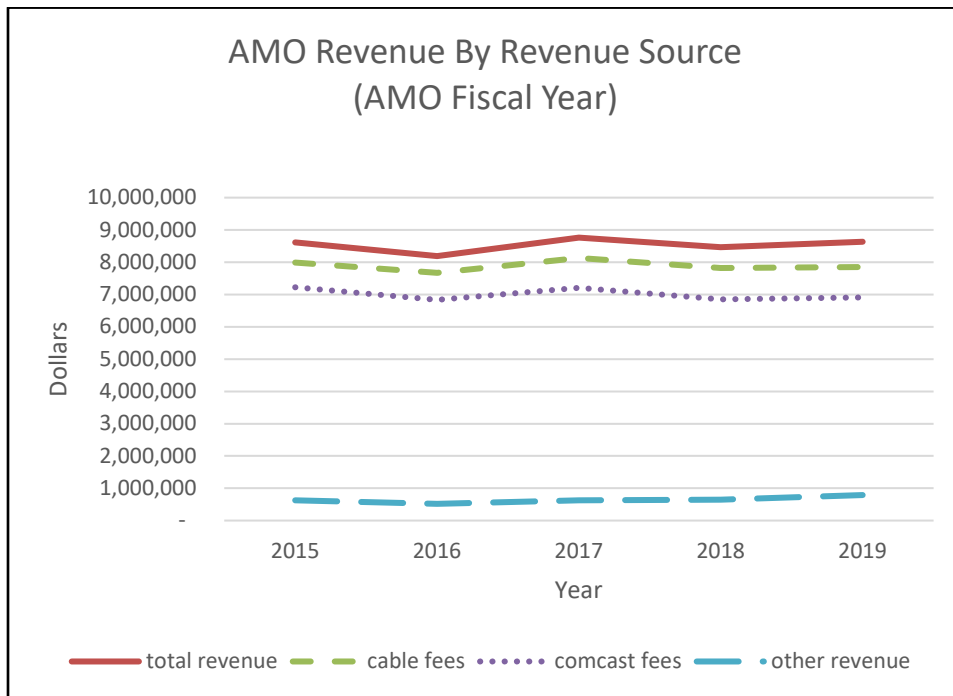


Chart 1. AMO Revenue FY 2015-19

Chart 1 shows a relatively level fiscal picture during the five year period. AMO total revenue dropped slightly in 2018, but increased again in 2019. The chart also illustrates that cable fees are by far the largest revenue source for AMOs and that Comcast, as the state’s largest cable provider, pays a large percentage of that total cable contribution.

Before this six-year period, cable company revenues and AMO contributions had generally increased. Comcast, in particular, reported that its AMO payments rose from \$4.4 million in 2008 to \$6.9 million by 2018. As shown in Chart 1, AMO revenues in recent years have shown smaller changes, both decreases and increases.

A. Assumptions Underlying the Forecast

To forecast the next six years, we assume the consumer trend to use more streaming video will continue, causing a slow decline in cable television subscriptions. On the other hand,

⁴⁵ The AMOs do not have a uniform fiscal year. For any given fiscal year, receipts by AMOs and payments from cable companies do not always match.

the cable companies are responding to the new environment, and we found that their average video revenue per subscriber has been increasing. We therefore assumed that per-customer revenue amount would continue to increase slowly.

Cable companies have a number of ways to enhance their revenues. One is to lower rates for the increasingly competitive video service and to encourage “triple play” packages where customers get deep discounts if they continue to buy cable as well as Internet. Under GAAP revenue recognition policies, this practice reduces cable revenue and AMO payments, but not overall revenue to the company. It appears that cable companies are indeed adjusting their rates and revenue recognition policies in a way that maintains their profitability, even as customers shift away from traditional cable for their video service.

B. Forecast

In the first phase of our forecast we analyzed detailed payment data from Comcast. As mentioned above, Comcast provides the great majority of the PEG payments in Vermont, and it has provided the most detailed data to us. The largest two components of Comcast’s AMO payments are PEG operating fees and PEG capital fees. According to federal law, a cable company can be required to pay for PEG operating fees up to 5 percent of its revenue from cable operations. Comcast pays that percentage to every Vermont AMO serving areas in which Comcast operates. Therefore, dividing the total Vermont operating fees by 5 percent produces an estimate of Comcast’s cable service revenue. Table 2 provides the results for the period 2016 to 2020.⁴⁶

⁴⁶ The 2020 estimate is based on annualizing data for the first 3 quarters of 2020 and estimating operating fees as a share of operating and capital fees. The estimates reflect only fees and do not include one-time payments. The estimates do not agree with AMO payment reports because of differences in fiscal years.

Comcast Video Revenue in Vermont: 2016-2020 (\$ millions)	
Year	Video Revenue
2016	122.4
2017	127.4
2018	120.9
2019	119.9
2020	121.0

Table 2. Comcast Vermont Video Revenue: 2016-2020

Table 2 shows very little change from 2016 to 2020. An increase occurred in 2017. A decrease occurred in 2018. Since 2018, total revenues have remained within a narrow band.

The 2018 Comcast video revenue decline was caused in large part by a change in Generally Accepted Accounting Principles (GAAP).⁴⁷ The change altered the method for calculating how much cable revenue is recognized when a customer purchases a discounted “bundled” services.⁴⁸ Comcast, implemented this change for the first time in 2018, reducing AMO payments by about 5 percent.⁴⁹

The cable companies’ video service revenue is the product of a) the average revenue per unit of sales (ARPU, where “unit” means customer), and b) the number of customers. Over time,

⁴⁷ The GAAP accounting change had a two-prong impact. First, it changed the basis of the allocation of the bundle services from a particular standard offer to the stand-alone price of each service included in the bundle. Because the relative price of Internet service and telephone service were higher compared to cable service under the stand-alone pricing basis than under the standard offer basis, less bundle revenue was assigned to cable revenue. Second, the GAAP change requires cable companies to include additional non-distinct services within the bundle allocation scheme, thereby lowering cable revenue a second time.

⁴⁸ Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers*.

⁴⁹ The Vermont Public Utility Commission opened a docket in 2019 to consider the effects of the rule change. After conducting a workshop and receiving comments, the PUC closed the docket without issuing any orders to cable companies. The closing order acknowledged uncertainty about whether similar reductions would occur from cable companies other than Comcast. PUC Case No. 19-0367 PET, *Order Closing Case*, May 10, 2019.

both variables are likely to change. For this analysis we use only video ARPU and video customer counts.

Our forecast for Comcast is based on Comcast's national residential customer counts⁵⁰ and its national residential video ARPU.⁵¹ Comcast experienced a 3.2 percent loss in residential video customers from 2018 to 2019. Its residential video ARPU increased 2.5 percent in the same period. The annual difference was therefore -0.70 percent.

We extended these same historical factors to forecast Comcast PEG payments until 2026. We consider this a high-normal estimate in that it uses a somewhat optimistic parameter for ARPU. Because PEG fees are directly tied to video revenue, we estimate that cable operating fees paid to AMOs will also decrease by an annual rate of 0.70 percent. The result is shown in Table 3.

⁵⁰ Comcast would not provide Vermont customer counts that we could report in a public document. Comcast considers this information confidential.

⁵¹ We used national ARPU data from the Comcast 2019 10K report because we were not able to obtain Vermont specific customer counts, which would be an input to Vermont ARPU.

Comcast PEG Payment Forecast, High-Normal Assumptions				
(\$ millions)				
Year	Comcast Cable Revenue	PEG Operating Payments	PEG Capital Payments	PEG Total Payments
2020	121.018	6.051	0.799	6.850
2021	120.074	6.004	0.792	6.796
2022	119.137	5.957	0.786	6.743
2023	118.208	5.910	0.780	6.691
2024	117.286	5.864	0.774	6.638
2025	116.371	5.819	0.768	6.587
2026	115.463	5.773	0.762	6.535
Six-Year Change	- 5.554	- 0.278	- 0.037	- 0.314

Table 3. Comcast PEG Payment Forecast, High-Normal Assumptions

Over the period shown, Comcast operating payments are expected to decrease by \$0.28 million. Capital payments are not explicitly limited by law, and they are generally determined by agreements between Comcast and the AMOs. Capital fees commonly are 0.50 percent, but the statewide average has been 0.66 percent of Comcast video revenue.⁵² Applying that 0.66 percent average, we estimate that capital payments to AMOs will also decline over the period. The sum of both forecasted decreases is \$0.31 million.

We also generated a low-normal estimate for Comcast AMO payments over the same period. It is our opinion that Comcast will not be able to maintain its video revenue within the narrow band that Table 2 shows for the last five years. Also, the increased popularity of Internet

⁵² Comcast reported in 2019 that it paid capital payments ranging from 0.25 percent to 1.25% of video gross revenues and that the total capital payments in 2018 amounted to more than \$0.8 million. Most AMOs receive 0.5 percent of cable revenues for capital expenditures. Middlebury Community Television received 1.25 percent of cable revenues as a capital contribution. Both NEK-TV in Newport and Rutland Regional Community Television received no capital contributions in that year. *Comcast Cable Operator Comcast Funding for PEG Access Management Organizations, Calendar Year 2019*, from Comcast's 2019 Annual Report to the Department of Public Service.

streaming is likely to reduce customer counts in a way that will overwhelm Comcast’s strategies that enhance its video revenue. In this low-normal scenario we retained the customer count annual change estimate at -3.2 percent, but we reduced the expected video ARPU from 2.5 to 1.5 percent. The annual change was therefore -1.70 percent. The result is shown in Table 4.

Comcast PEG Payment Forecast, Low-Normal Assumptions				
(\$ millions)				
Year	Comcast Cable Revenue	PEG Operating Payments	PEG Capital Payments	PEG Total Payments
2020	121.018	6.051	0.799	6.850
2021	118.902	5.945	0.785	6.730
2022	116.824	5.841	0.771	6.612
2023	114.782	5.739	0.758	6.497
2024	112.775	5.639	0.744	6.383
2025	110.804	5.540	0.731	6.272
2026	108.867	5.443	0.719	6.162
Six-Year Change	-12.150	-0.608	-0.800	-0.688

Table 4. Comcast PEG Payment Forecast, Low-Normal Assumptions

Table 4 shows a larger loss in PEG support from Comcast over the six year period amounting to \$0.69 million. That is about ten percent of current annual payments.

Our final forecasting step was to extrapolate these Comcast-only results to the entire Vermont cable industry. Comcast paid 87 percent of total Vermont PEG operating fees and 92 percent of total Vermont PEG capital fees.⁵³ To obtain the statewide totals, we divided Comcast PEG operating fees by 87 percent and Comcast PEG capital fees by 92 percent. The resulting high-normal estimate for all Vermont cable revenue is shown in Table 5.

⁵³ Source: AMO annual reports.

Vermont PEG Payment Forecast, High-Normal Assumptions			
(\$ millions)			
Year	PEG Operating Payments	PEG Capital Payments	PEG Total Payments
2020	6.955	0.868	7.823
2021	6.901	0.861	7.762
2022	6.847	0.855	7.702
2023	6.794	0.848	7.642
2024	6.741	0.841	7.582
2025	6.688	0.835	7.523
2026	6.636	0.828	7.464
Six-Year Change	-0.319	-0.040	-0.359

Table 5. Vermont PEG Payment Forecast, High-Normal Assumptions

Table 6 below shows our estimate for the low-normal scenario for all Vermont cable operators.

Vermont PEG Payment Forecast, Low-Normal Assumptions			
(\$ millions)			
Year	PEG Operating Payments	PEG Capital Payments	PEG Total Payments
2020	6.955	0.868	7.823
2021	6.833	0.853	7.686
2022	6.714	0.838	7.552
2023	6.597	0.823	7.420
2024	6.481	0.809	7.290
2025	6.368	0.795	7.165
2026	6.257	0.781	7.038
Six-Year Change	-0.698	-0.087	-0.785

Table 6. Vermont PEG Payment Forecast, Low-Normal Assumptions

Together, Tables 5 and 6 show that Vermont AMOs can expect a revenue loss over the next six years, under a normal range of circumstances, by \$0.36 million to \$0.78 million.

To maintain PEG service levels, expenses matter as much as revenues. AMO expenses for 2019 were \$8.08 million. If expenses were to increase by 1% per year for inflation, by 2026 the AMOs budgets would need another \$0.58 million. Adding the revenue reduction above under the low-normal scenario to that cost increase yields a shortfall of \$1.37 million, which is approximately 17 percent of the AMOs' 2019 expenses.

In all likely cases, therefore, if PEG service reductions are to be avoided, the AMOs will need either to increase efficiency, find new revenues, or both. Beginning with Section VI, the remainder of this report discusses those issues.

C. Additional Risks to Future AMO Revenues

The forecast above disregards two possibly significant additional risks for AMO revenues. The first is the FCC. In August, 2019, the FCC issued a major order (*Third Order*)

expanding the scope of the “franchise fees” that are included within the five percent limit.⁵⁴ This order would allow cable operators to reduce their cash payments to AMOs insofar as they are required to provide certain so-called “in-kind contributions.” The *Third Order* also purported to limit the ability of states to impose certain other taxes on cable companies. The order was appealed by several parties to a federal court,⁵⁵ and the case will likely be decided before the Vermont Legislature adjourns in 2021.

One major branch of this FCC revenue risk involves mandated no-charge Internet and cable services to public institutions. The *Third Order* states that franchise fees include the value of mandated free or discounted cable service to a public building.⁵⁶ Several current arrangements in Vermont arguably fall into that category. Depending on how the cable operators and regulators respond, several kinds of existing services are likely to produce revenue decreases for Vermont AMOs.

- Cable companies provide a variety of services to AMOs for remote origination sites, and most are Internet connections. Most AMOs have from one to five such sites.
- Certificates of Public Good currently in effect for Vermont cable companies often require the cable provider to provide free cable and Internet service to schools, public libraries and municipalities within its service area “at no charge.”⁵⁷
- Comcast is subject to the same requirements,⁵⁸ but Comcast may be under a unique restraint also. Comcast filed a lawsuit in 2019 that was resolved in a settlement agreement. That agreement commits Comcast not to assert that obligations under the

⁵⁴ *Implementation of Section 621(a)(1) of the Cable Communications Policy Act, Third Report and Order*, FCC 19-80 (rel. Aug. 2, 2019) (*Third Order*).

⁵⁵ *City of Eugene, Ore. v. FCC*, Docket No. 19-4161, U.S.C.A., Sixth Circuit. The case had not been decided as of February 1, 2021.

⁵⁶ See Appendix for further discussion of this holding.

⁵⁷ *E.g.* Vermont Telephone Company (VTel) must provide: “...basic cable service to every K-12 public school, public library, and PEG access studio within the VTel Service Territory, and to at least one municipal building within the VTel Service Territory (if any) in every municipality in the VTel Service Territory, upon request of the school, library, PEG entity or municipality....” PUC Docket No. 7746 (CPG of Vermont Telephone Company, Inc.), Order of 9/20/2011, para. 21; VTEL must also provide “commercial-class Internet service” and “at no charge.” para. 54. *See also*, PUC Docket No. 7461 (CPG of ValleyNet, Inc.), Order of 1/22/2010, ¶ 30 (similar).

⁵⁸ Vermont PUC Docket No. 8301, *Renewed and Consolidated Certificate of Public Good Issued Pursuant to 30 V.S.A. §§ 231, 503, 504, and 506*, entered Jan. 13, 2017, ¶¶ 21(a), 56.

agreement are franchise fees.⁵⁹ The settlement could limit Comcast from reducing AMO payments for certain in-kind services, but possibly not all.⁶⁰

The *Third Order* created a similar revenue risk regarding the value of PEG television channels themselves. The FCC declared these channels to be an in-kind service and part of the “franchise fee.” Under the statutory structure, the consequence would be that cable channels could start deducting from their PEG payments the value of the channels provided to the PEG centers. However, the FCC did not implement this part of the order because it said the record was not sufficient to determine a way to value those channels. The order left open the possibility that a future FCC would fill in this gap, further reducing AMO payments.

If the *Third Order* is eventually enforced as written, Vermont AMOs could suffer revenue declines as early as this year, and the losses could be substantial. At present we are not able to estimate the amount or the probability of these losses because they are contingent on so many unknowns.

- The court may reverse or narrow the FCC’s decision.
- The FCC vote was three to two, along party lines. After the court issues its decision, a new FCC might change some or all of the holdings in the original order.
- We cannot predict how many cable companies that will choose to make in-kind service claims, what services they will include, or how they will value those services.
- We do not know how many schools, libraries and public buildings are using the PUC-mandated free cable and Internet service. There are something on the order of 600 schools, town halls and libraries in Vermont that could potentially be benefitting now from complimentary cable and Internet service, with an estimated unit value of \$100 to \$200 per month.
- We cannot predict the extent to which Comcast’ in-kind claims, if any, will be constrained by its 2019 settlement agreement.

A second and independent source of revenue risk is that our forecast does not anticipate unusual or one-time events. As a result, we may have understated the future decline in video customer numbers, video revenues of the cable companies, or both. One branch of this risk could

⁵⁹ Settlement Agreement of Comcast, Vermont Department of Public Service and Vermont Access Network, July 11, 2019, ¶. 5.b.

⁶⁰ The settlement agreement prevents Comcast from including costs described in the settlement agreement in its calculation of “franchise fees,” but not all possible in-kind services were included in the settlement agreement.

arise from customer behavior. If customers “cut the cable cord” in the same way they behaved a dozen years ago with landline telephones, at some point an unexpectedly large number of customers will cancel their television service. That event would be outside the boundary of our assumptions. The risk is enhanced to the extent that cable television pricing remains high and by the frustration that many customers feel at the large number of commercials interrupting live television programming, commercials that can be avoided by streaming.

A second branch of the same risk might arise from the cable companies themselves. As we described above, cable television companies also sell Internet service. It might be possible in the future for a cable company to simply stop offering video (or television) services, or to allow the service to greatly degrade in quality, while at the same time encouraging customers toward Internet service and streaming video. Cable companies have even begun to offer Internet streaming as an alternative way to view their own live programs, and some of the larger cable companies have even begun to air their own unique programming. Moreover, smaller cable companies sometimes cannot get video programming at good rates, and they make comparatively little profit from their cable operations. All of this diversification suggests that some cable companies may have a future in which “video revenue” plummets, voluntarily or involuntarily, and possibly to zero. Since PEG revenue is proportional to video revenue, any such event would be catastrophic for Vermont’s AMOs.

VI. Efficiency Options

BTC has reviewed the budgets of the AMOs that provide PEG services, including salaries,⁶¹ operations, and equipment, and other substantial categories of outlays and expenditures.⁶² In this section, we discuss “ways to contain costs without losing effectiveness.” We specifically discuss options to “consolidate administrative functions or share resources and exploring partnership opportunities with other public entities, such as schools.”⁶³

⁶¹ To review salary information, we reviewed the annual reports of all the AMOs. Nearly all those reports included financial statements which described total employee compensation. Many AMOs also included federal tax forms which reported individual salaries of Executive Directors. The Executive Director salaries among the AMOs varied considerably, and some of the smaller AMOs have unusually low salaries. The higher salaries are paid by the larger, better financed, AMOs, and these seemed generally consistent with the ranges for state employees which we viewed online from the Burlington Free Press website, and with regional cost of living differences.

⁶² Acts of 2020, No. 137, Sec. 19 (b) (2).

⁶³ Acts of 2020, No. 137, Sec. 19 (b) (4).

Our task was limited by the instruction that we should examine “how to ensure the future financial stability and viability of Vermont PEG television channels.” We read this charge as assuming that AMOs have a high value to the state. In considering options for efficiency and organization, therefore, we discuss only those which can be fairly thought to either: 1) improve some aspect of AMO functioning or efficiency while preserving or enhancing the existing level of functionality; or 2) produce more uniform service levels across the state by strengthening any weak elements of the existing system.

A. Horizontal Mergers with Other AMOs

Vermont has 25 AMOs. A few of them serve only a few towns and have budgets that are a small fraction of the larger AMOs. Given this diversity and number, we considered whether the state should incentivize or mandate organizational mergers between two or more as a condition of any new state funding.

We conclude that adopting a policy of mandated horizontal mergers, by itself, would likely produce only a small expense reduction. Unless some video recording studios were also closed, approximately the same number of staff would be needed, especially if the merger is between two AMOs with small budgets. A staff position currently titled “executive director” might be replaced by a “site director” at a slight cost saving and some reduction in duties. But nearly all the same work would continue, and the same number of staff would likely be retained.

Mergers might also produce more uniform policies and service levels. The change would be minor, in our view. The AMOs have an active umbrella organization, VAN, and they are in frequent communication to share ideas on improving services and finding efficiencies. Merging their governance structures would be unlikely to substantially alter that flow of information.

The cost of forced mergers would be loss of local control and, depending on the details, a loss in the quality of place-connected services. Each AMO has strong connections to its local community, trains many local people in video technology, and provides video recordings of many events of local interest, including sports events and government meetings. The AMOs often provide free or reduced-fee services to local nonprofits as well, creating an inexpensive way to communicate with the larger public. The AMOs all have local boards of directors, and they spend considerable effort trying to meet the particular needs of their local communities. If mergers were mandated, some of these dynamics would be at risk.

Larger savings are possible if the state mandates the closing of some AMO studios, but the obvious cost would be service reductions. Availability of these AMO video facilities to the local community and general public would be reduced. A volunteer who today has to drive 10 miles to an AMO studio to access equipment, training and support might have to drive 40 or more miles, and participation would likely decrease. Another possible cost is loss of community

spirit. Some of the smaller AMOs have strong relationships with their communities and government bodies within their area. PEG access has become an important component in the community's ability to interact. Loss of the local AMO would alter that dynamic.

In a few particular cases, mergers or at least closer operational cooperation might make sense. For example:

- A few rural AMOs have very small budgets that make it very difficult to provide service at a scale comparable to the AMOs in the cities. Several urban AMOs have personnel costs in the \$200 K to \$300 K range, yet one rural AMO has annual current payroll of only about \$26 K. In the latter case, a merger with a nearby AMO might improve the scope of the services provided but would be unlikely to reduce total expense.
- In Chittenden County, two of the three AMOs are in the process of merging.⁶⁴ They both are currently housed in their new "Media Factory" in Burlington where they share storage and production facilities. In that sense mergers and greater cooperation have achieved efficiency by increasing the service level, if not by reducing the costs. The geographic situation in Chittenden County is unique, however, because of high population density and relatively large annual budgets.

We do not recommend forcing mergers in any of these cases. The AMO boards understand the benefits and disadvantages in mergers. Leaving these arrangements to local judgment seems the better course under the current system. If the state does adopt a new funding mechanism that includes appropriating money for the AMOs, the state could then consider using those appropriations at a later date to incentivize efficiencies, possibly including mergers.

B. Shared Resources

Group purchasing and other forms of shared resources are another kind of efficiency. Vermont AMOs are already using shared resources to a considerable degree. Notably:

- Vermont's AMOs also use their statewide umbrella organization, the Vermont Access Network (VAN), to reduce some costs. VAN currently provides some group purchasing functions. VAN provides legal services for contract negotiations and for legislative services. Having such an active umbrella organization positions the AMOs well to obtain more efficiencies through group purchasing and possibly through service or employee sharing.

⁶⁴ VCAM and RETN in Chittenden County are in the process of merging.

- The AMOS have set up the Vermont Media Exchange (VMX), with its servers based in Burlington to store programming of statewide interest. This VMX programs allows any Vermont AMO to obtain and air a stored video that was previously produced by another AMO.
- Vermont is beginning to operate a new statewide PEG channel in HD quality, initiated by Comcast. The Vermont Community Channel will promote further sharing of content among the AMOs and will provide another venue to watch programs of statewide interest.

Despite this progress, there still seem to be other, minor, opportunities for sharing resources.

- The AMOs buy various kinds of insurance individually, and some AMOs may not have comprehensive coverage. Buying a group policy through VAN could save money and improve coverage.
- All or nearly all AMOs use their own preferred accountants and payroll systems. In some cases the providers are not even in the AMO's local community. A common accounting and payroll system could reduce costs and produce more uniform annual reports to the Department of Public Service. The extra burden on the AMOs should be minimal, given the modern banking and telecommunications environment.
- A small savings might be possible if the AMOs purchased electronics through a bulk purchase system. This would be plausible only if the selected vendor also has a good reputation for repair and support services.
- Most or all of the AMOs operate a "broadcast server." This device is expensive, both in the large capital cost but also in recurring software license fees and service fees. If two or more smaller AMOs could share a broadcast server in the future, some savings could result. While this idea is interesting, it is not yet clear that it is technically workable.

C. Miscellaneous Revenue Enhancements

Vermont AMOs rely on cable company payments for about 90 percent of their revenue. Nevertheless, they have taken steps in recent years to diversify their revenue sources, and their other revenues are growing.

One such resource is "underwriting." This is revenue from businesses who wish to be known as supporters of the local PEG programming. Some AMOs generally provide a small amount of advertising in return, such as listing the underwriter on the AMO's web site as a supporter. AMOs do not interrupt their video programs to air what on traditional television we

know as “commercials.” Some AMOs have developed this revenue source more thoroughly than others.

Local governments are another source of revenue. A few AMOs receive contract compensation for recording and transmitting government meetings.⁶⁵ In some cases these contracts recover all the AMO’s cost for meeting coverage. In other cases the towns receive a substantial discount. Another common approach is for the AMO to seek voluntary donations that are approved by voters at town meetings. Managing these voluntary donations can sometimes be time consuming for AMO directors. Some of the AMOs have advanced farther than others in developing municipal revenue, and they can serve as a model.⁶⁶

Both underwriting and local government revenue are business opportunities for some AMOs. The same is true for memberships (which some AMOs encourage) and voluntary contributions. Although the resulting gains ordinarily support only a small share of the budget, most AMOs already are pursuing these options at some level.

D. Interactive Meeting Venues

Vermont Interactive Television (VIT) provided dedicated, video-covered, classroom-like meeting spaces where groups could interact even though physically remote from one another. VIT was decommissioned in 2015, but that may have left open an economic niche in the state. Cloud software companies like YouTube and Zoom have largely filled this niche, replacing actual meetings with virtual online meetings in many cases. Nevertheless, after the pandemic passes, there may be a continuing need for meeting spaces where people can physically congregate and communicate with others in similar situations. Government agencies, statewide nonprofits and colleges are potential clients.

A few of the AMOs have modest community meeting spaces which they sometimes use for public meetings that the AMO records. One AMO can broadcast video from nearby college classrooms, if a larger space is needed. Developing this function further could potentially replace some of the functionality lost to the Legislature and state agencies when VIT ceased operations.

If the state wishes to functionally replace VIT, providing funding for the AMOs would be a suitable means. In some AMOs very little additional capital investment would be needed. With

⁶⁵ For example, Catamount Access Television contracts with the Town of Bennington to cover government meetings. Mount Mansfield Community TV also has contracts for the same purpose.

⁶⁶ RETN has a fee schedule describing fees and varying the fees by customer class. MMTV also has a fee schedule.

a relatively modest state capital investment, all the AMOs likely could be persuaded to provide VIT-like functionality.

VII. Business Model Options

The Act requires BTC to review AMO budgets and to “review PEG television channel business models.”⁶⁷ We found that AMO business organization in other states is generally very similar to Vermont’s. In every state we checked, AMOs are nonprofit organizations, and they are often tax exempt as well. Many state laws say little or nothing about PEG access, and no state’s laws seemed to offer a major opportunity for improvement on the current Vermont statewide regulatory model. In the sections below we consider three organizational changes that we considered specifically.

A. Municipal Negotiations

States with local franchising sometimes negotiate PEG payments from cable companies to the AMOs using the municipality rather than the PEG provider as the negotiating party. In Massachusetts, for example, cable companies negotiate for PEG contributions with separate town and city governments. Sometimes the towns form informal groups to conduct the negotiations, and these towns sometimes feel that they get a better result. Whatever the towns and the cable companies negotiate then becomes the revenue for the local PEG provider.

We see no advantage in the Massachusetts business model. Vermont’s franchising is done at the state level through the PUC, and Vermont AMOs negotiate their revenue directly from the cable companies. Thus the AMO organizations that provide the service also negotiate directly for their budget and all specialized services, like remote operation sites. Such direct negotiations impose less burden on the towns served and are more likely to produce a satisfactory result for the parties in interest.⁶⁸

⁶⁷ Acts of 2020, No. 136, Sec. 19(b) (5)

⁶⁸ Later in this report we suggest some additional funding sources for AMOs that would move some PEG funding through the state treasury. The state would be involved only because these options impose some kind of statewide tax, fee or charge. We see no other reason to interrupt the direct payment of funds from cable companies to AMOs.

B. Joint Operations with Educational Institutions

Vermont AMOs perform valuable educational functions for the state. They conduct youth camps to expose school age children to video technology and production techniques. Most accept interns from local colleges, usually for no compensation.

Some of the AMOs do have relationships with the public schools. One AMO is even located in a public high school. But with a few exceptions the AMOs report that public schools have little interest in joint ventures. A few AMO directors reported that they have tried to establish closer formal relationships, but the education establishments either had little interest or allowed existing arrangements to wane. Informal relationships are common. Several PEG centers report they have local students volunteering on a regular basis. One AMO reported that a nearby public high school established a video studio in its own building, despite the fact that the AMO is a short walk away.

The same general conclusion applies to Vermont's colleges. Several colleges have sent interns to various AMOs. The AMOs have trained the students at no charge, as they would for any member of the public. Some of those students have graduated and become valued volunteers or staff members at the AMO itself. Financial compensation to the AMOs, however, was rarely reported.

It seems there could be a strong synergy between the AMOs and any public schools where students are interested in video technology or journalism. Both organizations are nominally interested in training students. While most educational institutions are currently suffering from revenue shortfalls, they have proven reluctant to consider AMO staff to be adjunct faculty or to otherwise form joint ventures that involve sharing financial resources.

C. A More Hierarchical Organizational Structure

As reported above, the AMO structure was created when PEG service was entirely a creature of the cable television industry. Accordingly, there are geographic gaps where there is no cable or PEG service. Also, the statewide organization structure of AMOs is flat, with each being a nonprofit corporation accountable to its own local board of directors. Nevertheless, the AMOs have done a good job of sharing resources and knowledge. They frequently do use their umbrella organization, the Vermont Access Network, through which they share some resources and do some group purchases.

We see little to be gained by disrupting the existing local board structure. If state funding were granted to AMOs at a substantial level, we would suggest, at most, a state agency that would operate something along the lines of the Department of State's Attorneys and Sheriffs. The state's role would be to support the local and regional activity rather than to direct the local

organizations officials. The state would also have a role in managing any state appropriations that may be provided in the future.

Overall, we do not recommend making any structure change to AMOs that would impose a more vertical structure. In our view, such a state agency would not be likely to achieve much beyond what VAN currently provides, and it might reduce the current level of motivation for local fundraising and accountability.

VIII. Goals for New Revenue Options

The second major task in this project is to develop revenue options for funding PEG access. Before doing that, we first provide some context. First, we describe the traditional kinds of communications industry “silos” that have been defined in state and federal law. We then summarize how federal law restricts state choice over funding of telecommunications-related benefits. Finally, we discuss goals for considering new revenue options.

A. Service Types

Traditional “silos” of communications service types still exist. To varying degrees, each has been subject to cross-platform competition that offers similarly functioning services.

1. Telephone

Telephone service still exists and has some unique regulatory earmarks. It still uses legacy protocols inherited from the old Bell monopoly, including a common numbering system and a signaling system that can route calls through telephone switches. In addition, telephone service providers must still offer a minimum set of ancillary public benefits, including 911 calling and “TRS” or “relay” substitute services for hearing impaired customers.

Telephone service is available, as always, from traditional companies, but it is now offered on many other platforms, including cable, broadband and satellite. Additionally, functionally competitive non-telephone services can run on any broadband connection. For example, many Vermonters have used Zoom software to conduct virtual meetings, especially in the past year. Likewise, the users of Apple products are familiar with that company’s “FaceTime” software that allows audio and even video calling, often running only on Wi-Fi and without any interaction with the legacy telephone network. Many of these telephone-like audio services impose no extra cost on the user.

2. Cable Video and Streaming Video

Cable technology can also be bypassed for delivery of video content. Streaming video services like Netflix and Hulu can be delivered over any medium that offers a high speed Internet connection, wireline or wireless. Those streaming services compete directly with broadcast cable television programming. As discussed above, this competition has produced a decline in the video revenues of cable companies, which has reduced payments to Vermont AMOs as well.

3. Satellite Services

Satellite service also provides packages offering data, streaming video, Internet, and telephone services. Satellite service relies on specialized antennas and is subject to some degradation during snow and rain events.

Some satellite companies operate geosynchronous satellites which remain in the same apparent position in the sky, revolving at the same angular rate as the earth. The long travel distance slightly delays the signals, creating a “latency” of about a quarter of a second. Latency is less important for some uses, such as streaming video. For two-way communications, such as telephones and some gaming uses, however, latency is considered undesirable.

Lower satellites or “low Earth orbit” (LEO) satellites avoid the latency problem but require many satellites and different kinds of customer equipment. As with other satellite services, there is some question about both the quality of the signal and the pricing, making it difficult to determine whether this technology will be a major competitor.

4. Internet Services

The buyer of an Internet service gains the ability to communicate with the outside world using standardized packets that direct their own routing. As mentioned above, fast and reliable Internet service is a foundation for many kinds of modern audio and video communication. What the consumer buys today is simply called “Internet access service,” and it can be purchased from several sources, including telephone companies, wireless telephone companies, cable companies, wireless Internet service providers (WISPs) and satellite companies.

B. Federal Constraints

1. Cable Act Preemption

Federal law imposes a limit on the size of a “franchise fee” that can be imposed on a cable television provider. That limit is 5 percent of its revenue from cable operations.⁶⁹ In Vermont, all of that amount goes to AMOs for PEG operations. Under Vermont Public Utility Commission Rule 8.000, Vermont cable companies pay AMOs amounts at or near the maximum allowed by federal law. The details are controlled by contracts formed between the cable companies and the AMOs.

If Vermont wishes to increase fees on cable companies, it must avoid creating an impermissibly large “franchise fee.” One exemption to the franchise fee limit is for “any tax, fee, or assessment of general applicability.” Thus, for example, applying the Vermont Sales and Use Tax to cable service, as Vermont does, is not considered to be a franchise fee and is not subject to the 5 percent limit. A second exemption is that cable companies may be required to pay an additional amount for “capital costs” for AMOs.⁷⁰

The FCC has defined in several orders what is included in “franchise fee” and what is allowable as a “capital cost.” In 2019 the FCC issued a controversial order,⁷¹ discussed above. A major holding was that cable companies can reduce their annual PEG contributions by the amount of certain “in-kind” services provided to the AMOs. These deductions would include value of any mandated cost-free cable and Internet service to public buildings. Also, deductions would be made for provision of equipment, services, and similar contributions for PEG access facilities. The case is under appeal.⁷² If the court sustains the FCC’s order, the in-kind ruling could reduce AMO revenues and impose other kinds of limits on any taxes or charges that Vermont might impose on cable companies in the future.⁷³

⁶⁹ The 5 percent charge maximum does not apply to revenues from other services provided over the same system, such as Internet revenues and telephone revenues.

⁷⁰ “Capital cost” is defined by the FCC as a cost incurred in acquiring or improving a capital asset.

⁷¹ *Implementation of Section 621(a)(1) of the Cable Communications Policy Act, Third Report and Order*, FCC 19-80 (Aug. 2, 2019) (*Third Order*).

⁷² *City of Eugene, Ore. v. FCC*, Appeal No. 19-4162, etc., U.S. Court of Appeals for the Sixth Circuit. The case had not been decided as of February 1, 2021.

⁷³ The preemption issues raised in the *Third Order* are discussed in Appendix B in more detail.

2. Universal Service Preemption

The Vermont Universal Service Fund (VUSF) was created in 1994, almost three decades ago.⁷⁴ The title “universal service” reflected an expectation of using the fund to protect landline telephone service from the depredations of local exchange competition in and the deregulation of that market. The concept was that all of Vermont’s telephone users would fund a program that provides telephone-related benefits to telephone users. A principal intended purpose was to keep telephones operating and affordable in the state’s many high-cost rural areas. Once the fund idea was accepted, the Legislature decided that it should also fund other telephone-related programs, such as E-911 and programs for hearing impaired telephone users.

a. The VUSF Revenue Base

The revenue base for the VUSF was controversial in 1994. Unlike some other states, Vermont elected to impose a surcharge on both “intrastate” and “interstate” telecommunications. In making this decision, the Legislature relied on recent U.S. Supreme Court precedent.

At the time, some criticized that decision as inappropriately violating the boundary between, the “intrastate” and the “interstate” jurisdictions.⁷⁵ This distinction has been fundamental to telephone regulation since the 1920s. In the universal service context, the argument is that revenues separated for regulation should also be separated for taxation.

In 1996, Congress passed major legislation authorizing both federal and state universal service programs, but today that legislation severely limits the funding of those programs. A key decision was to include dual jurisdiction and several vague standards as requirements for state universal service programs. The law says, for example, that state contributions must be “equitable and nondiscriminatory,” that support mechanisms must be “specific, predictable, and sufficient,” and that mechanisms cannot rely on or “burden” federal universal service support mechanisms. Each of these plausible sounding requirements, has been implemented in the courts in a way that creates serious risks for state universal service programs. The net effect has been to create uncertainty for state programs, particularly around funding options.⁷⁶ Nevertheless,

⁷⁴ The VUSF currently does not provide any funding for PEG. We discuss it here, however, because changes to the VUSF might be an element of a plan to provide for more secure PEG funding.

⁷⁵ The details of this theory are discussed in more detail in Appendix B.

⁷⁶ Appendix B discusses in more detail the legal background of preemption risk for the VUSF.

Vermont's 1994 statute was never challenged,⁷⁷ and the existing funding mechanism seems relatively secure.

b. VUSF and the Internet

For several reasons, the VUSF program has not evolved as originally expected. A high percentage of VUSF proceeds have been spent on the E-911 program. In contrast, support for telephone service in high cost areas, the eponymous purpose, made only a brief appearance and no longer exists.

The Internet has made the 1994 concept of “universal (telephone) service” outmoded. Today, telephone is only a minor part of telecommunications traffic on the nation's network. Moreover, broadband has largely displaced telephone as the main program goal. Today's imperative is to get broadband deployed to all rural areas, as evidenced by the recent “connectivity initiative” funded through the VUSF. Telephone coverage is little more than an afterthought, and the original VUSF concept appears dated.

The revenue base for the VUSF has become imbalanced as the Internet has waxed and the telephone has waned. Telephone customers today pay a surcharge while broadband customers contribute nothing, yet a portion of the fund is used only for broadband deployments.⁷⁸ The incongruity is particularly apparent to telephone customers who do not have broadband available at home or who cannot afford broadband.

Finally, technological convergence and competition have reduced VUSF revenue. Toll calling bills, formerly a major expense for business customers, have largely disappeared. Revenues reported to the VUSF administrator have been on a declining trend,⁷⁹ in part because

⁷⁷ A likely reason is that Vermont's 1994 enactment predated the federal law of 1996, was clearly based on the Legislature's sovereign taxing power, and complied with recent Supreme Court precedent regarding taxation of telecommunications.

⁷⁸ The VUSF includes a “Connectivity Fund” which provides funds to expand broadband service in rural areas. It is funded by an additional 0.4 percent VUSF rate increase on retail telephone bills. Connectivity Fund expenditures were \$667,000 in FY 2018, zero in FY 2019, and \$30,000 in FY 2020. The 2020 pandemic made it even more obvious that broadband is a modern essential for everything from schooling to medicine. The Vermont Legislature acknowledged this shift when it recently allocated a large portion of federal CARES Act monies to broadband expansion.

⁷⁹ The VUSF received \$6.3 million in FY 2015, and only \$5.4 million in FY 2020, despite the intervening increase in the VUSF contribution rate from 2.0 percent to 2.4 percent.

there are fewer contributors and in part because demand for traditional landline telephone service is decreasing.⁸⁰

The FCC has not indicated any willingness to permit states to impose charges on retail Internet access service for any universal service purpose. In 2019, state members of the Federal-State Joint Board on Universal Service presented the FCC with a formal proposal. They proposed a connection-based charge for a portion of the funding of federal universal service programs. The charge would have applied to both telephone and Internet connection. The FCC has taken no action on the proposal, and it has said that until it does take such action, if ever, states are prohibited from taking parallel action for their own programs.

3. Barrier to Entry Prohibition

The Telecommunications Act of 1996 prohibits states and local governments from taking any action that would prohibit a new entity to enter a market for interstate or intrastate telecommunications service. This is known as the “barriers to market entry” provision.⁸¹ The statute also contains a “safe harbor” exception that allow states and local governments to manage rights of way. To qualify for the safe harbor, a state tax, charge or practice must be competitively neutral. It also must be fair and reasonable in the amount, based upon an examination of the totality of the circumstances.⁸²

4. Internet Tax Freedom Act

The federal Internet Tax Freedom Act (ITFA) broadly prohibits state and local governments from taxing Internet access. This means, for example, that Vermont cannot impose a sales tax or gross revenue tax on broadband Internet access. The ITFA has two important exceptions.⁸³ First, it exempts taxes and fees imposed for the support of 911 programs. This is further discussed below under revenue option #5.

⁸⁰ *Report of Independent Auditor and Financial Statements for Vermont Universal Service Fund, June 30, 2020 and 2019*, pages.6, 7,
<https://publicservice.vermont.gov/sites/dps/files/documents/Telecom/USF/Monthly/VermontPublicServiceDepartment%20FS%20FINAL%20YE2020.pdf> (viewed 1/2/21).

⁸¹ 47 U.S.C. § 253.

⁸² Appendix B contains a more detailed discussion of section 253.

⁸³ A third exemption in ITFA is for franchise fees, but other limitation in federal law impose separate limits on franchise fees.

A second exemption is for state universal service programs. This exception seems appealing, but it is ultimately hazardous. To qualify for the exemption, the state universal service program must be “authorized” by the section 254 of the federal Telecommunications Act of 1996. Vermont’s VUSF program was authorized before 1996, and does not state that it relies on federal authority in any way. So to qualify for the ITFA exemption, any amendment to the VUSF that imposes a charge on broadband would first have to acknowledge that it was enacted under authority from section 254. As a consequence, Vermont would become subject to the limitations of section 254 and most likely to the FCC’s interpretation of that statute.

The FCC has consistently, across two administrations, opposed funding universal service from a charge on broadband access.⁸⁴ The FCC has broad discretion under section 254 to declare that a state funding mechanism is not “equitable and nondiscriminatory” and that it is a “burden” on federal universal service mechanism. Therefore, given the consistently announced FCC position, this second ITFA exemption offers little opportunity here.

5. FCC Broadband Internet Preemption

The FCC has spent many pages in its orders discussing whether broadband Internet service is, under federal law, a “telecommunications service” or an “information service.” In its latest order, the *Restoring Internet Freedom Order*, the FCC purported to preempt state government regulation of broadband Internet service. As discussed in more detail in Appendix B, these preemption declarations were broad and amounted to a preemptive policy of non-regulation.

As to taxes, the same FCC order declared that states are preempted from using their universal service funds to require any contributions based on broadband internet access service. The order left the door partly open to future change, saying that states might in the future be allowed to impose universal service charges on broadband, but only after the Commission has decided to use that source for its own universal service programs, which it has not yet done.

The FCC order was appealed, and in *Mozilla v. FCC*, the court overturned much of the FCC’s claimed preemption language. The court held that before the FCC needs could preempt a state, the FCC needed to have an underlying statutory power, and that the FCC had undercut its own authority by declaring broadband access to be an “information service.”⁸⁵

⁸⁴ The FCC position is explained below in the Appendix B section discussing recent actions by the state members of the Federal-State Joint Board on Universal Service.

⁸⁵ *Mozilla Corp. v. FCC*, 940 F.3d 1 (2019 D.C. Cir.).

Nevertheless, we think substantial risk remains if Vermont were to attempt to add broadband Internet to the VUSF base. Even though the FCC probably cannot preempt a state from regulating an information service, it has less direct authority under a variety of other federal statutes, and it is common for the FCC to reach deeply into its basket of authorities when it wants to reach a particular result. For this reason, even though *Mozilla* limited the FCC's preemption authority, there still is litigation risk if Vermont were to impose a direct tax on broadband access.

C. Competitive Neutrality

Any state's tax system must find a compromise among many competing goals. There is no single list, but most of the lists are similar. In one state, an official study identified six goals: "reliable, simple, neutral, transparent, fair, and modern."⁸⁶ Another state's list included five: "fairness, adequacy, simplicity, transparency, and administrative ease."⁸⁷ Vermont's "Blue Ribbon Tax Commission" listed eight goals in 2011.⁸⁸ Still another goal might be to encourage private investment in desirable capital assets⁸⁹ or (especially in the telecommunications policy area) to minimize the risk of federal preemption.

BTC claims no special expertise in balancing these many goals. Nevertheless, we do introduce here one more goal. In the modern era, telecommunications taxes should be, as far as possible, competitive neutral. In a nutshell, that means the tax system should treat services that are in competition with one another in a like manner.

As the preceding section illustrates, the telecommunications industry has traditionally been regulated based on an industry-specific or "silo" classification system created and perpetuated by the federal Communications Act, as amended. The treatment of telephone companies has been different from cable television providers, which in turn has been different

⁸⁶ Florida Communications Services Tax Working Group, *Report*, Feb. 1, 2013.

⁸⁷ Oklahoma Policy Institute, *Characteristics of an Effective Tax System*, <https://okpolicy.org/resources/online-budget-guide/revenues/an-overview-of-our-tax-system/characteristics-of-an-effective-tax-system>. (viewed 12/18/20)

⁸⁸ The eight principles were: actual and perceived fairness; economic competitiveness; simplicity; transparency; tax neutrality; sustainability; executive and legislative accountability to tax payers; and revenue neutrality and interoperability. *Tax Reform in Vermont: Final Report*, Caucus Presentation of Blue Ribbon Tax Structure Commission, Jan. 18, 2011.

⁸⁹ For example, see Katz and Callorda, *Assessment of the Economic Impact of Taxation on Communications Investment in the United States: A report to the Broadband Tax Institute*: November, 2019, available at https://www.broadbandtax.org/downloads/Katz%20Study%20-%20Broadband_Tax_Institute_2019_Report_v.Final_9.pdf. (viewed 12/18/20).

from wireless cellphones, and so on. In this tradition, services were taxed primarily by the products and method of service delivery chosen by the company providing the service.

Vermont already has several systems for promoting public benefits related to communications. In addition to PEG access on the cable side, these include emergency service systems and various affordability subsidies for customers. Some of these benefits are funded through the Vermont Universal Service Fund, which historically arose within the single silo of the telephone industry.

As communications have shifted to the Internet and prices have fallen, cross-platform competition has become the norm. Companies that once provided only cable television now offer telephone and Internet services. Likewise, telephone companies now virtually all offer some kind of Internet access and even, sometimes, video services. Many kinds of platforms today offer “triple play” packages that includes all three services for a single price. In short, the old “silo” system for utility regulation and taxation has become at best anachronistic and at worst unfair.⁹⁰

For these reasons, BTC recommends that Vermont look seriously at equalizing the tax burden on competitive telecommunications providers. In such a tax environment, investment decisions by providers would be most rational, the public benefit would be maximized, and providers would have an incentive to find the most efficient means of providing any desired telecommunications service.

IX. Revenue Options

In this section, BTC “sets forth and analyzes various sources of existing and potential revenue, including fees levied against voice and broadband providers.”⁹¹ We are tasked with considering, at minimum:

- fees on voice and broadband;
- connection charges;
- the telephone personal property tax; and
- right-of-way fees.

⁹⁰ Technology change has also made some traditional taxes unreliable. When internet speeds improved, many customers switched from live cable programming to streaming video, thereby darkening the forecast for traditional cable television and for the PEG organizations that depend on cable television revenues.

⁹¹ Acts of 2020, No. 136, Sec. 19(b)(3).

The topic is broad, and many possible changes could enhance Vermont's AMO funding. Each option is itself complex in that it can affect more than one type of service and more than one type of provider. Each option can also create administrative problems and face federal preemption risks.

Before considering specific new taxes or charges, it should be noted that the Legislature can always address any shortfall or emergency failure in PEG funding with a General Fund appropriation. We interpret our charge in Act No. 136 to discuss specific kinds of new and old taxes and charges. We recognize that a General Fund solution, while perhaps a direct and uncomplicated solution, would put a strain on the fund at a time when there are many other demands. Also, unlike most of the options explained in this section, a General Fund appropriation would have no connection to the telecommunications services, and would postpone dealing with the cross-industry burden imbalances which we describe below.

A. Fees on Voice and Broadband Communications

BTC was asked to examine the possibility of imposing additional or new fees on voice and broadband providers. The common element here is a particular kind of telecommunications service delivered to a consumer and surcharged according to its price. Revenue can be generated through a sales tax, a gross revenue tax or an excise tax.

1. Sales Tax Options

The Vermont sales and use tax applies to eight categories of sales, notably beginning with "tangible personal property," and it also applies to telecommunications services, which includes telephone service from any provider.⁹² Cable television service is also taxed, but as an entertainment service⁹³ rather than as a variety of telecommunications service.⁹⁴ Audio or video programming delivered by satellite is similarly subject to the tax, as entertainment.⁹⁵ Vermont

⁹² 32 V.S.A. § 9771(1), (5). VoIP is included in the definition of telecommunications service. 32 V.S.A. § 9701(19).

⁹³ 32 V.S.A. § 9771(4) (tax applies to "admission to places of entertainment, including ... access to *cable television systems* or other audio or video programming systems that operate by wire, coaxial cable, lightwave, microwave, satellite transmission, or by other similar means.")

⁹⁴ 32 V.S.A. § 9701(19) (G) (telecommunications service excludes "Radio and television audio and video programming services, regardless of the medium, including the furnishing of transmission, conveyance, and routing of such services by the programming service provider. Radio and television audio and video programming services shall include cable service ... and audio and video programming services delivered by commercial mobile radio service providers....")

⁹⁵ 32 V.S.A. § 9771(4).

exempts Internet access service, although prewritten software that is delivered over the Internet is taxed.⁹⁶ Streaming services like Netflix are also subject to the sales tax, which considers them to be “prewritten software.” Proceeds from the Vermont Sales Tax fund the state’s Education Fund.

Under nearly all scenarios, a sales tax on Internet access service would be preempted by the federal Internet Tax Freedom Act.⁹⁷

Some states have enacted what they call “communications services taxes.” New Hampshire, for example, applies a tax rate of 7% on all “two-way communications services.”⁹⁸ The tax operates in the same manner as a general sales tax, which New Hampshire has not adopted.

Florida also has had a communications services tax since 2001, even though it also has a sales tax. The state rate varies from 4.92 percent for most services to 9.07 percent on direct-to-home satellite service.⁹⁹ Florida also has a general sales tax, mostly at 6 percent, but with varying rates for some items.¹⁰⁰ Communications services are taxed only under the communications services tax in Florida. On the contrary, prepaid telecommunications services (like calling cards) and the installation of telecommunications equipment are subject only to the sales tax.¹⁰¹

We conclude that the Vermont sales tax would not be a profitable area to explore for AMO funding. The tax already covers nearly all telecommunications-related service that might

⁹⁶ 32 V.S.A. § 9701(17).

⁹⁷ See Appendix B for a discussion of the Internet Tax Freedom Act.

⁹⁸ New Hampshire RSA 82-A-3 and RSA 82-A-4.

⁹⁹ Florida statutes Title XIV, Chapter 202 § 202.12. Florida local governments can also impose an add-on rate.

¹⁰⁰ Florida statutes Title XIV, Chapter 202 § 202.05(1) (a)

¹⁰¹ Florida statutes Title XIV, Chapter 212 § 212.05(e). Florida appears to be conflicted about this dual tax system. A Florida study committee examined the communications service tax in 2012. It found that during the 12 years the tax had by then been in effect, regulatory changes and technology developments had “blurred the lines” between taxable and non-taxable services and eroded state revenue. The report identified two causes. First, the federal preemption of state taxes on Internet service caused revenue erosion. Also, the increasing use by consumers of “over-the-top” services that are often free further eroded the revenues. The commission recommended abolition of the tax and replacement by the general sales tax. Notwithstanding this study, eight years later the Florida communications services tax is still in effect.

be tapped for AMO funding, within the limits set by federal law. More important, the dedication of all sales tax proceeds to education makes the use of sales tax proceeds for AMO funding implausible under current conditions.

2. Gross Revenue and Excise Tax Options.

Gross revenue taxes in Vermont are used to fund the Public Utility Commission and Public Service Department.¹⁰² Excise taxes function in a similar way, usually applying to the revenue received by the seller. An excise tax may be imposed on gross revenue or on some other basis. Both gross revenue and excise taxes are imposed on the seller.

3. Option # 1 –Gross Revenue Tax on Cable Revenues for PEG Capital Costs.

Federal law allows franchising authorities to require cable company payments for PEG capital costs in addition to franchise fees. There is no explicit limit in federal law on the amount of capital costs.

The Vermont PUC has an administrative rule that requires capital contributions from cable companies. The rule also states that negotiation is the preferred method to determine the amounts.¹⁰³ Accordingly, cable companies and AMOs routinely discuss capital contribution issue in their periodic bilateral contract negotiations. A common rate is 0.5 percent of cable revenues, although the state average is 0.66 percent of cable revenues. The extra “capital” contribution therefore, would equal, on average, to 0.33 percent of cable revenue, or one-fifteenth of the amount that cable companies now pay for PEG operating costs.

The first option we propose is a one percent gross revenue charge on video revenues, with the proceeds to be used only by AMOs for capital costs. The proceeds would be collected by the state and appropriated to the AMOs. Like the existing franchise fees that cable companies pay to AMOs, this new PEG capital fee would be imposed only on the video revenues of those cable companies.

¹⁰² The Gross Revenue Tax on telephone companies and on cable companies is 0.5 percent. 30 V.S.A. § 22(a) (1) and (a) (2).

¹⁰³ PUC Rule §§ 8.417(D), 8.420(A) (8).

The new charge would necessarily replace existing AMO capital payment arrangements.¹⁰⁴ The tax would produce gross revenue of approximately \$1.2 million, which would be appropriated to the AMOs for capital expenses.¹⁰⁵ After deducting the existing \$0.8 million in existing capital payments, the net increase for AMOs would be approximately a \$0.4 million.

To comply with federal law, the proceeds of this new fee must be used only for “capital costs” of AMOs. AMOs would need to ensure that the funding is used for permissible capital costs. This restriction should not be burdensome to most AMOs.

- The FCC defines a capital cost as one “incurred in acquiring or improving a capital asset.” It is not limited to construction of the PEG facility.
- Capital assets can be a broad category. It includes costs for studios, vans and cameras used for the PEG facility. Real estate mortgages would also qualify, as would some long-term leases.¹⁰⁶

If the Legislature pursues this option, it may need to delay the effective date. Current capital payments are based on a delegation of state authority to the PUC, but also on existing contracts between the cable companies and the AMOs. Although the contracting system is authorized in state law, it is not clear that the state has authority to void existing contracts. We advise, therefore, applying the new capital charge only after a) current contracts expire; or b) when and if the PUC declares that the existing contracts can be amended, consistent with federal law, due to changes in circumstances and state policy.

This option would allow more flexible capital budgeting. PEG capital needs tend to be uneven over time. For example, upgrades for studio and field production equipment don't

¹⁰⁴ The PUC would need to amend its rules to state that capital contributions to AMOs will no longer be negotiated and will no longer be made as direct payments.

¹⁰⁵ Middlebury Community Television receives capital payments at 1.5 percent of gross cable revenues. If the Legislature were to enact this option, each year it could make a correspondingly larger appropriation if it wished to MCTV or to any other AMO.

¹⁰⁶ Under GAAP, a lease can be classified as a capital lease if any the following conditions is met:

- At the end of the term, ownership is automatically transferred or the lessee has an option to purchase at a discounted price;
- The term of the lease is greater than or equal to 75% of the useful life of the asset; or
- The present value of the lease payments is greater than or equal to 90% of the asset's fair market value.

happen every year. Having the entire AMO capital budget appropriated from one fund could allow greater flexibility in coordinating payment spikes across AMOs and across years.

Appropriating capital funds would also allow the Legislature to increase the funding for those AMOs that currently have smaller capital budgets. Given the variance in the size of subscriber bases, the current system does not always ensure that every AMO has modern equipment.¹⁰⁷ If capital funding flowed through the state appropriations process, the AMOs would have more of an opportunity to allocate more capital dollars to the AMOs with the oldest equipment.

California has a gross revenue charge structure similar to this proposal, but with a twist. California, like Vermont, franchises cable companies at the state level. It imposes two franchise-like fees:

- A “state franchise fee” of 5 percent is “payable as rent or a toll for the use of the public rights-of-way.” Local governments can set a lower rate in their areas if they wish.¹⁰⁸ The state franchise fee is paid to the city or county government, which can use the money for any lawful purpose.¹⁰⁹ Some of these local governments do use part of the proceeds for PEG access.
- A “local entity” (county or city) may impose an additional PEG fee of up to one percent of cable revenues. The proceeds are used solely for PEG purposes.¹¹⁰

The California system is considered to be in compliance with federal law. The 1 percent additional PEG fee is nominally used only for capital expenses, and is therefore not included in the federal 5 percent limit on franchise fees.

Some Illinois municipalities also have a similar pair of fees. The city of St. Charles, Illinois, for example, has a 5 percent “cable and video provider service fee” plus a one percent “PEG access support fee.”¹¹¹

¹⁰⁷ For example, the AMO in Middlebury reported in 2019 that its vintage video equipment is so old that parts were getting difficult to find. Service at its remote site at Middlebury Union High School had “degraded so much during Town Meeting [in 2018] that the broadcast became unwatchable.”

¹⁰⁸ California Public Utilities Code § 5840(q) (1).

¹⁰⁹ California Public Utilities Code § 5860(a).

¹¹⁰ California Public Utilities Code § 5870(n).

¹¹¹ City of St. Charles Municipal Code Book, §§ 3.48.002, 3.48.003, available at <https://codebook.stcharlesil.gov/title-3-revenue-and-finance/c348> (viewed 1/10/21)

This is the first option in this paper proposing a new tax, something that is never simple. Nevertheless, if the Legislature decides to pursue this option, administration may be simplified by the fact that there are relatively few cable companies operating in Vermont and they already know their gross video revenue as a factor in calculating AMO payments.

4. Option # 2 –Streaming Video (and Satellite) Charge

Streaming video, like Netflix, that is sold at retail to end users is currently subject to the Vermont Sales and Use Tax. It is not, however, subject to the Vermont Universal Service Fund charge. This option suggests creating a new, additional, streaming video charge for PEG service.

Historically, AMOs have been supported by a charge on cable company revenues. As cable television usage declines, streaming video over the Internet grows, displacing portions of the cable market. A new streaming video charge therefore could be a reasonable adaptation to technology change. As cable television once picked up PEG obligations on an analogy to older duties imposed on broadcast television, so to could streaming video pick up PEG obligations on analogy to older duties imposed on cable companies. The charge could be administered on the same principles as the existing Vermont Sales and Use Tax on streaming video.

A streaming video charge would better match PEG financing with the current geographic scope of PEG access. AMOs are victims of an odd conjunction of geographic events. They provide service primarily to cabled areas using cable channels. But they also provide video streaming service of increasing value to nearby towns outside the AMO's service area, towns that have no cable service. Broadband makes it possible to share this content more broadly, regardless of residence. Yet video streaming-only residents pay nothing toward the cost, other than the occasional charitable contribution. This imbalance will increase as the state's more rural areas begin to have high quality broadband provided by the newly organized communications union districts. A gross revenue charge on streaming video would fall on all streaming customers, but the change would allow the AMOs to derive new revenue from their community of interest, including customers who live outside the cable footprint area.

Some states have begun to impose taxes on streaming services. Vermont's Sales and Use tax already does so, and the proceeds, under state law, go to the Education Fund. In jurisdictions such as Chicago, Illinois, streaming video taxes have been upheld against Commerce Clause challenges.¹¹²

¹¹² An Illinois court in the fall of 2019 upheld Chicago's 9 percent tax on streaming video, concluding that it did not violate the Commerce Clause. *Labell v. City of Chicago*, 147 N.E.3e 742 (Appellate Ct. of Ill., 4th Div., 2019).

In Massachusetts, a bill introduced in 2020 would have imposed a new 5% fee on digital streaming providers that use public rights of way. The proceeds would be collected by a special fund, and 40 percent of the proceeds would have been distributed to municipalities with the purpose of supporting PEG organizations, which in Massachusetts are called “community media centers.”¹¹³

Satellite services also carry video programming, both of the “direct” (scheduled program) variety and of the streaming, on-demand variety.¹¹⁴

Imposing charges on satellite video has been upheld against constitutional challenge. Massachusetts imposes a 5 percent excise tax on satellite video programming, and that tax was upheld against a challenge that it violated the federal “dormant” Commerce Clause. The court noted that the satellite rate matched the existing rate for cable franchise fees imposed on similar services.¹¹⁵ In Florida, a tax on satellite video service of 10.8 percent was upheld, even though the cable rate was only 6.8 percent. That court held that the tax was not discriminatory in purpose or effect. The court noted that the legislature had restructured separate taxes and fees “into a revenue-neutral communications services tax ... [to] ensure that the growth of the industry is unimpaired by excessive governmental regulation.”¹¹⁶

Administration of a streaming charge should be simplified by the fact that streaming video is already subject to the Vermont Sales and Use Tax. A new streaming video charge for PEG support could follow the existing sales tax rules about who must pay, who must collect and remit, and what sales are subject to the charge.

A possible constitutional issue is that a particular streaming video provider may be constitutionally exempt from collecting any Vermont tax. The so-called “dormant” Commerce Clause of the Constitution requires a “nexus” with the state in order to impose any charge or duty on a seller. The United States Supreme Court has recently liberalized this constitutional restriction. Recognizing that the Internet has changed the nature of retail sales, the Court held in 2018 that states can impose sales tax duties on sellers, including the duty to collect and remit sales taxes, even though the seller does not have a physical presence in the state. Justice Kennedy’s opinion noted that the Commerce Clause in the Constitution does not prevent those

¹¹³ Massachusetts House Bill No.4045 of 2019, Section 4(A).

¹¹⁴ As noted above, satellite video services pay the Vermont Sales and Use Tax, but do not contribute to the Vermont Universal Service Fund.

¹¹⁵ *Directv, LLC, & Dish Network v. Department of Revenue*, 470 Mass. 647, 25 NE3d 258 (2015).

¹¹⁶ *Florida Dept. of Revenue v. Directv, Inc.*, 215 So.3d 46 (2017).

engaged in interstate commerce from paying “their just share” of a state’s tax burden.¹¹⁷ The nexus requirement still exists, but it can be satisfied merely by showing that a seller “avails itself of the substantial privilege of carrying on business” in Vermont.¹¹⁸ A new streaming video tax would require a careful analysis to ensure that it meets current constitutional requirements for state tax collections.

If the Legislature decides to pursue the option of a new streaming video charge for PEG, it should consider including satellite direct television charge as well. One possible method would be to deposit the proceeds in the General Fund, in which case a charge rate of 5 percent would match the rate currently paid by cable companies for AMO operating costs. Another method would be to add the new services to the base of the existing Vermont Universal Service Fund (VUSF), which is currently at a 2.4 percent rate. In either case, the proceeds of the charge would be appropriated from the General Fund to the AMOs.

5. Option # 3 – Raise the VUSF Rate

The Vermont Universal Service Fund (VUSF) was originally enacted to provide benefits to users of the telephone network. The programs were paid for by a surcharge on those same users’ bills. The eponymous purpose was to provide assistance to telephone companies that continued to serve rural areas.

The VUSF continues to operate today, but it has become something of a mongrel. It does very little for its nominal purpose, maintaining universal telephone service in rural areas.¹¹⁹ Instead, the VUSF continues to use 90 percent of its revenue to fund the E-911 program. In addition, the VUSF rate was raised to 2.4 percent in order to provide funding for a new broadband initiative called the “connectivity initiative.” The VUSF is no longer devoted in any real sense to preserving universal telephone service.

If the program were to be conceptualized again in light of today’s competitive environment, a good candidate would be something like a “Vermont Communications Benefit Fund.” In that context, using the VUSF to provide supplemental funding for PEG access would

¹¹⁷ *South Dakota v Wayfair, Inc.*, 138 S.Ct. 2080, 2094 (2018).

¹¹⁸ The South Dakota tax applied only to entities that sold more than \$100,000 of goods and services per year in South Dakota. This, the Court held, was a sufficient nexus. The Court also noted with approval that South Dakota had adopted the provision of the Streamlined Sales and Use Tax Agreement, which reduces the cost of compliance for sellers.

¹¹⁹ Although high cost funding had a brief life in the VUSF in recent years, that funding was abandoned in FY 2019.

not be a foreign concept. PEG video is after all one of the many public benefits delivered by the telecommunications network and supported funding mechanisms imposed by law.

The VUSF currently raises \$2.3 million in revenue for every 1.0 percent in the charge rate. Thus if the Legislature wished to raise an additional \$500,000 for PEG access, it would raise the VUSF rate from 2.40 percent to 2.62 percent. Not that the analogy is perfect, but the current FCC universal service surcharge rate exceeds 30 percent.

B. Connection Charges

BTC was asked to examine the possibility of supplementing AMO income with connection charges. These are repeating charges imposed on sellers or buyers of specified telecommunications services, where each “connection” generates the same monthly charge, without reference to the size of the bill. Possibilities include a fixed monthly surcharge on all telephone numbers and a fixed monthly charge on all end user Internet connections.

1. Network Connection Fees

Connection charges are seen by some as a better way to fund a telecommunications benefit program, especially a universal service program. A connection charge reduces the administrative burden of the support mechanism because it is no longer necessary to examine bills and allocate revenue to different service baskets

a. Internet Connections

A major attraction of a connection charge is that it could possibly raise money from Internet access. The Internet Tax Freedom Act (ITFA) offers some hope, because it has an exception for universal service charges.¹²⁰ Unfortunately, the FCC would probably block any connection charge on Internet access.

During one period the FCC was seriously considering changing the basis for federal universal service charge fees from the retail bill to a per-connection charge. That FCC interest waned, however, without producing any actual changes to federal universal service programs.

A variation of the connection charge mechanism has been developed that would apply to some but not all customers. In this system, residential customers would pay universal service charges based on a connection fee, but business customers would continue to contribute based on retail bills. The rationale is that residential telephone lines are all more or less alike. Business

¹²⁰ Appendix B has a detailed discussion of the ITFA.

connections, however, very enormously in size and capacity, and it has proven difficult to devise a formula for weighting large capacity lines. Something like “line equivalents” would be needed, but there are many choices, and an optimal solution has been elusive.¹²¹

Imposing a connection charge on Internet usage to support universal service would almost certainly be preempted. Although the FCC dabbled in the idea of switching federal universal service programs to a connection charge basis, it has not left the door open for states innovation of this sort. The FCC has broad powers under federal universal service law to decide when state programs burden the federal one.¹²² The FCC has repeatedly indicated that it would preempt any attempt by a state to impose a connection fee on broadband Internet access service for universal service purposes.

b. Telephone Connections

Maine has adopted another variant of the connection charge for its own state universal service program. Under the Maine system, telephone companies pay a quarterly charge based on their numbers of “active residential and business Lines or Working Telephone Numbers.” The number of chargeable lines is limited at no more than 25 per “active billing account number.” This system shifts the burden of universal service from customers with large intrastate telephone bills to customers with smaller intrastate bills. The Maine USF distributes approximately \$7.4 million annually to ensure that provider of last resort telephone (POLR) service is available to consumers throughout all areas of the State at reasonably comparable rates.¹²³

The Maine system might be considered in Vermont as a modification to the VUSF, but it offers little for PEG funding purposes. Charging telephone customers for PEG access would likely make the competitive environment worse, as telephone customers, who already pay a VUSF charge partially devoted to funding broadband would pay a higher rate to help finance PEG service which they can view only by using broadband, which would remain immune from the VUSF charge.

¹²¹ One problem with the bi-modal proposal is that it would likely be difficult to police the boundary between residential and business customers. Customers would self-identify, and in all likelihood some would choose the option with the lower rate. It isn’t clear how this kind of cheating could be policed or by whom.

¹²² Preemption under universal service statutes is discussed in Appendix B.

¹²³ Maine Public Utilities Commission Rules Chapter 288, Maine Universal Service Fund, §§ 4. 5. Available at <https://www.maine.gov/mpuc/telecom/musf/index.shtml> (viewed 1/11/21).

In conclusion, connection charges would have great appeal if they could be applied to Internet connections, but the FCC stands firmly in the way of that proposal. Converting the VUSF to connection charges, following Maine's lead, might be an appealing change, but it is outside the scope of this study of PEG access funding. Therefore, we do not present a connection fee proposal as an option for consideration by the Legislature.

C. Telephone Personal Property Tax

BTC has been tasked here to provide an analysis of the Telephone Personal Property Tax (TPPT). This is a Vermont tax on "each person or corporation owning or operating a telephone line or business within the State." The tax amount is 2.37 percent of the company's "net book value." It is paid by 16 companies in Vermont. It does not apply to wireless telephone companies.

This study aims to develop options to ensure the future financial stability and viability of PEG channels. The TPPT currently provides no revenue to PEG channels. Nevertheless, it is potentially relevant in two ways. First, if the TPPT were repurposed or modernized, without adjusting other taxes, it could be used to supplement other PEG revenue sources. Second, adjustment or repeal of the tax might be part of a larger restructuring of telecommunications taxes. Option #5 below is one such proposal.

The TPPT was first imposed in 1961, a time when operating "a telephone line or business" was a distinct line of business with unique characteristics. It was certainly interconnected with the national Bell system, and it operated on protocols and standards set by that system. It made intercarrier payments and charged retail rates that were regulated by state and federal regulators.

The TPPT is unusual in several ways. First, it is imposed on personal property, a category that is exempt from property taxes in most of Vermont. Second, the TPPT produces state, not local, revenue. Perhaps in compensation, Vermont has greatly reduced the local property taxes due from telephone companies. Telephone companies pay local real property taxes only on their land and buildings. Their cables, lines, poles and fixtures are exempt.¹²⁴

Telecommunications technology and its regulatory environment have both changed dramatically in the decades since the TPPT was enacted. The boundary of what is a "telephone company" is less clear. Cable and wireless companies both offer competitive alternatives. Today

¹²⁴ 32 V.S.A. § 3803. Division of Property Valuation and Review, Vermont Department of Taxes *Lister and Assessor Handbook*, pages. 43, 48. In contrast, electric utility poles and wires are taxable locally.

a customer who has broadband can even buy “VoIP” telephone service from a company that has no property in Vermont and which pays no TPPT.

As shown in Chart 2, revenue from the TPPT has been declining steadily for years. With the exception of Fiscal Year 2016, the graph shows a consistent pattern of annual revenue decline over the last ten years.¹²⁵

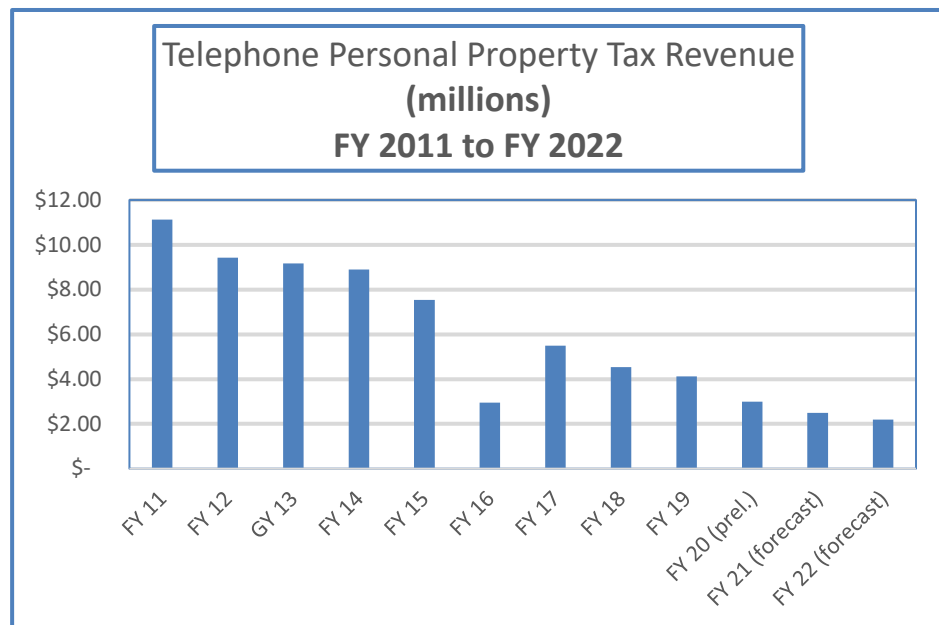


Chart 2. TPPT Revenue FY 2011-22

This revenue decline has several causes.

- For telephone companies still subject to the TPPT, the valuation basis under the TPPT is “net book value.” Much telephone company operating plant today is highly depreciated, because it was installed many years ago. “Net” book value means original cost less accumulated depreciation, and it may be no more than salvage value.
- Excluding “nonregulated” property means that a major part of today’s network disappears from “net book value.”¹²⁶ Regulatory policy allows telephone companies to segregate their “regulated” telephone investment from their investments used to provide cable and Internet services. The value of the latter is not part of “net book” value.
- Moore’s Law has reduced the cost of telecommunications networks, particularly for switching and control equipment. The investment needed to operate a telephone network

¹²⁵ Legislative Joint Fiscal Office, Source General Fund Revenue Forecast Update for August, 2020 and earlier years.

¹²⁶ Two-thirds of the revenue reported by telecommunications carriers (wireline, wireless, satellite and VoIP) in 2018 was reported by the FCC as “non-telecommunications revenues.” Sources: 2018 Federal-State Joint Board Monitoring Report, authors’ calculations.

is simply lower today than in years past, and new switching equipment can be purchased at a small fraction of the original cost of the equipment it replaces.

An unusual feature of the TPPT is that a telephone company may elect to pay a completely different alternative tax on its gross revenues.¹²⁷ Any company that uses this option bypasses the TPPT entirely as well as the state's personal and corporate income taxes.¹²⁸ The Department of Taxes reports that very few, if any, taxpayers use this alternative.¹²⁹

In summary, it appears that the TPPT does not raise revenue from:

- Companies that were never regulated as telephone companies in the past. This includes most of the providers of telecommunications in the state.
- Property owned by telephone companies that has been fully depreciated.
- Property owned by telephone companies that is used for other purposes, such as providing Internet service or video service.

Despite its many problems, BTC does not recommend any changes to the TPPT in order to improve the security of PEG services. We do suggest below a more complex option (#5) that would repeal the TPPT as part of a larger restructuring of telecommunications public benefits.

D. Right-of-Way Fees

BTC has been tasked with evaluating right-of-way (ROW) fees. Although the subject is complex, we believe it holds great promise as a way to migrate telecommunications tax policy into a configuration that is more suitable to the competitive environment for telecommunications service and that does not create preemption obstacles.

Fees for access to public rights-of-way are an implicit factor in many financial arrangements in Vermont. In the early days of cable television, when the service was often called "community antenna" service, franchise fees were seen as a way to compensate the government (usually local) for the use of the public ways. Much of the historical discussion of cable franchise

¹²⁷ 32 V.S.A. §8521. The rate varies by company size, from 2.25 percent to 5.25 percent. The option is no longer open to companies that have not exercised it previously.

¹²⁸ 32 V.S.A. § 8522(a).

¹²⁹ If this Alternative Tax were repealed, the state could also see an offsetting increase in its income tax revenue.

fees explicitly refers to this history. California, for example, still recites in statute that its “state franchise fee” for cable service is “rent or a toll for the use of the public right-of-way.”¹³⁰

1. Option # 4 – Utility Pole Attachment Charge

Option four is an “attachment charge,” a new fee on every attachment to a utility pole interconnected to the telecommunications network. Any telecommunications entity would pay a fixed amount per year for each telecommunications pole attachment it controls.¹³¹ The charge would apply solely to communications attachments, not to electric lines or connections, which are technically more complex, which are generally not owned by telecommunications service providers, and which raise much different policy issues.

Vermont’s outdoor telecommunications plant is mainly strung on utility poles.¹³² This is based on a variety of historical, climatic and geologic reasons, but it does not appear to be likely to change dramatically. Buried cable and cable-in-conduit are much more expensive in Vermont’s typically rocky soils.

Nearly every variety of telecommunications provider uses cables in the public rights-of-way, which are sometimes metallic¹³³ but more commonly of glass fiber.

- Traditional wireline telephone companies typically have their own cables, ordinarily at the lowest attachment point on any pole.
- Wireless telephone companies typically purchase service from, or lease cables from, wireline telephone companies to connect their cell towers, antennas and switching centers. The so-called “wireless network” is actually a wireline network except for the “last mile” between the customer’s phone and the carrier’s cell tower.¹³⁴

¹³⁰ California Public Utilities Code § 5840(q) (1).

¹³¹ To the extent that a telecommunications service provider owns the utility pole on which the attachment is made, the provider would still pay the charge.

¹³² In the Midwest and High Plains, especially in the unglaciated areas, direct cable burial is preferred.

¹³³ Metallic wires can be of the “twisted pair” type with separate individual wires running together inside an insulating sheath. Or they may be “coaxial” with one conductor arranged in a ring around a central wire. Coaxial cable is less susceptible to magnetic interference and therefore has much higher data capacity.

¹³⁴ Cellular companies also sometimes use microwave links between towers.

- Cable television companies typically own distribution cables placed just above the telephone company's cables. These cables usually have a single attachment, but they can consist of multiple individual cables, using various transmission media.

Many kinds of companies own long-haul fiber cables and use them in a variety of ways. The increased capacity of modern switching equipment, for example, has allowed telephone service providers to operate whole states from a single switch. This design decreases overall cost, but it increases the use of long distance transport. Some companies operate in this new market and simply offer wholesale fiber-based transport to other telecommunications providers.¹³⁵

Because nearly all delivery media use transport on utility poles, this mechanism would be competitively neutral. The amount of the charge would depend on the length of telecommunications cable that a provider uses.

a. Off-Road Poles

A pole attachment charge might also apply to attachments on poles sitting on private land. Especially in rural areas, in order to shorten cable runs many poles run across fields and through woods. If the principal purpose is to provide telecommunications-related public benefits from a broad base of telecommunications services, the pole attachment charge would also apply to such "off-road" poles. Conversely, off-road poles could be made exempt if the charge's principal purpose is merely to compensate the public for the use by private companies of the public rights-of-way.

If a new pole attachment charge were to apply solely to public right-of-way poles, tax administration would likely be substantially more complex. Frequent disputes would be likely about the width of public rights-of-way, actual road centerlines, and actual pole locations. To avoid this problem, we suggest applying any pole attachment charge more broadly to:

Any communications attachment on a utility pole where the attachment is on or interconnected with communications facilities that pass through a public right-of-way in this state, without regard to the actual location of the pole.

If a pole attachment option is pursued, we suggest an exception. In rural areas, many retail customers have installed poles on their own land at great expense in order to bring power and communications to their homes. We suggest these attachment be exempt as follows:

¹³⁵ The Vermont Telecommunications Authority built such a fiber network in one part of Vermont.

Any attachment on a supporting pole where (1) the service is distributed to only one parcel of land; (2) that parcel contains a single residential or business retail customer; and (3) the customer owns the pole.

b. Other Considerations

This proposal raises three additional variables that must be considered if the option is seriously explored. First, companies that use buried cable and underground conduits might be required to pay a parallel and calibrated equivalent charge. We view the risk of bypass here as small, however. The cost of burying cable in stony Vermont soils, however, is a multiple of the cost of attaching a cable to a utility pole and is in itself a strong economic deterrent in most of Vermont. A possible exception is urban areas which, for other reasons, sometimes place cables in underground conduits.

Second, satellite companies are likely not to have any attachments in the state. If this is a legislative concern, a parallel and calibrated satellite service charge might be considered.

Third, federal law creates limitations on the uses of funds derived from charges on “federal-aid highways.” These are highways where the land was acquired using Federal-aid participation. Vermont has 3,928 miles of federal-aid highway, or 27 percent of the state’s total network. Whenever the land on which these highways sit is sold or leased, the price must be at least fair market value, and the proceeds may be used only for highway projects.¹³⁶ There is a possibility that a new pole attachment charge in Vermont might come under this restriction, thereby requiring the state to segregate some of the proceeds for the state Transportation Fund. If the statute does apply to a pole attachment charge, the United States Secretary of Transportation can grant a waiver of this requirement for a “social, environmental, or economic purpose.”¹³⁷

c. Advantages and Disadvantages

A pole attachment charge would improve the competitive neutrality of the financing for Vermont’s telecommunications-related public benefits. While not perfectly neutral, a pole connection charge would nevertheless improve on the state’s existing tax structure which imposes different silo-based taxes on specific industries and specific kinds of assets or transactions. Since the task of the modern network is really to push the most data through at the

¹³⁶ 23 U.S.C. § 156.

¹³⁷ 23 U.S.C. § 156(b).

lowest price, companies could no longer expect the tax system to disadvantage their competitors. Instead they would each face the same charge based on the amount of infrastructure they use.

A pole attachment charge might alter the economics of providing broadband in the state's rural areas. Pole attachment rental fees currently average about \$15 per attachment per year. Especially where customers are widely spaced (and many poles are in use), a new charge of, say, \$10 per attachment per year, could alter the economics of extending broadband into unserved areas.

A pole attachment charge would increase the financial incentive for telecommunications providers to use pole resources efficiently. Multiple fiber attachments on a single pole are increasingly common in Vermont, especially along highways. Many of these concurrent fiber runs have different owners, and it is likely that many are used at a small percentage of capacity. Moreover, most or all of the owners of these fiber runs claim confidential treatment for their fiber locations,¹³⁸ and many offer limited or no interconnection with other communications providers. Increasing the carrying cost of pole attachments would create an incentive to reduce inefficient and duplicative facilities. Over time, there should also be less crowding on utility poles, and less need for pole owners to purchase the very costly extra-length poles required for multiple pole attachments. Providers would be left to seek business advantage from more traditional means such as higher efficiencies and more valuable products and services.

A pole attachment charge would be administratively workable for both the attachment owners who pay the charge and for the Department of Taxes. Most utility poles in Vermont are owned by electric utilities. Communications providers therefore already pay annual attachment fees for most or all of their pole attachments,¹³⁹ and they presumably already have a list of their attachments and locations. Moreover, utility pole attachments are visible to the public, which allows for auditing and verification of taxpayer filings.

Finally, federal law may preempt charging for attachments on federal rights-of-way. The great majority of utility poles exist on state, town, city or private rights-of-way.

¹³⁸ Many Vermont telecommunications service providers claim that the location of their fiber is a trade secret entitled to confidential protection, notwithstanding the fact that the presence of a fiber cable is often evident by casual inspection from the adjacent roadway.

¹³⁹ The average pole attachment rental fee in Vermont is approximately \$15 per year.

d. Adjustments

To be fair and promote competitive neutrality, the Legislature should also consider reducing or eliminating two existing taxes or charges that currently apply only to specific “silos” of industry types. Specifically:

- Cable companies already pay a franchise fee that is often viewed as compensation for access to public rights-of-way. Therefore, cable companies should be granted a deduction in their PEG access payments to approved AMOs in the same amount as they pay the new pole attachment charge. The net franchise fee payments of the cable companies would not increase.
- Because telephone companies would pay a large portion of any pole attachment tax, abolition of the TPPT and the Alternative Gross Receipts Tax for telephone companies would be an adjustment that would modernize the state’s tax structure, making it more competitively neutral.

Option #5 below discusses these adjustments in more detail.

e. Preemption Analysis

We think it highly likely that the FCC would consider a pole attachment charge to be a “franchise fee” under the Cable Act. Therefore, to remain compatible with the Cable Act and related FCC decisions, cable companies must be permitted to make dollar-for-dollar reduction in their AMO payments for PEG. This would advantage AMOs only if the Legislature holds that AMOs harmless with a direct appropriation from the pole attachment charge proceeds.

This option appears to pose a low risk of other kinds of federal preemption.

- A pole attachment charge does not violate the Internet Tax Freedom Act. The ITFA applies only to taxes on “internet access.” Like many taxes, a charge or tax on pole attachments may affect the profitability of internet access providers, but it is not a charge on internet access.
- A pole attachment charge would be unlikely to violate the “barriers to entry” prohibition in section 253 of the Communications Act of 1934 because it meets the two requirements of the right-of-way management exception in subsection 253(c). Specifically, the charge would be competitively neutral because it applies equally to all telecommunications competitors and facilities, regardless of the regulatory silo and regardless of whether the attachment owner is classified as an incumbent or a new entrant. Second, the pole attachment charge would likely be held to be fair and reasonable because it imposes costs in approximately the same amount as the existing attachment fees currently paid to pole

owners and would be unlikely to effect a prohibition of new telecommunications services. The chances of success would also improve if the pole attachment charge were enacted with legislative findings stating that it is state policy to require those using the public rights-of-way for telecommunications purposes to make a contribution to telecommunications-related public benefits.

- A pole attachment charge does not violate the universal service provisions of the Communications Act of 1934. The charge would be imposed under the state’s sovereign taxing power, and not under authority delegated by section 254(f). While the charge would produce funds to finance public benefits, those benefits would not be a “universal service mechanism” under federal statute, nor would the charge be involved with any named universal service fund.¹⁴⁰
- A pole attachment charge would be unlikely to be preempted by the FCC. While the FCC has made several statements to the effect that it would preempt charges on internet providers or internet access service, the FCC has no generalized authority to preempt state taxes and charges that it dislikes for policy reasons.

2. Telecommunications Cable-Mile Charge

A variation on a pole attachment charge would be a telecommunications cable-mile charge. A pole user would pay a fixed amount per year for each mile of telecommunications cable which it controls and which is attached to a utility pole in the state. As before, the charge would not apply to electric lines or connections.

This variation amounts to a “weighted” pole attachment charge, with the weight of each attachment equal to the average distance between poles.¹⁴¹ In areas where poles are widely separated, on average, the cable-mile charge would impose a heavier burden. Poles are generally farther apart in rural areas, so the cable-mile charge would, in general, impose greater fees for cables strung in rural areas.

a. Defining “Cable”

A cable-mile charge raises the question of how to define “cable.” The simplest choice is to count whatever is attached to the pole. In many cases this will be a single fiber or metallic

¹⁴⁰ In Funding Option #5 below, we suggest placing the proceeds into a special fund called the Telecommunications Public Benefit Fund.

¹⁴¹ A third possibility might be a “strand-mile” fee, a lower unit charge that applies to the number of communication strands inside all the cables carrying communications. We do not consider this option further because we think it would be too complex to administer reliably.

conductor (including coaxial) cable. In other cases, it will be two or more “over-lashed” cables supported by a single pole attachment and bound together by a metal or plastic wrapping that keeps them together, thereby requiring only a single pole attachment for the set.

A different option is to impose a multiple fee on each cable in an over-lashed set or even to impose the fee on each strand of fiber within a multi-strand cable. We use the term “strand-mile” below for both sub-options.

b. Advantages and Disadvantages

A cable mile fee or a strand-mile fee would track more closely the transmission capacity of the network at each point.¹⁴² Therefore it would be more competitively neutral than the attachment charge and would thus create an even stronger incentive for voluntary interconnection and optimal use of utility pole space.

We do not think, however, that any strand-mile option is administratively workable at this time. To adopt such a system would require telecommunications providers to record and report separate cables or even to report the strand content within its cables. The heavier reporting burden would not be worth the added value. Likewise, this option would be more difficult for the state to administer. The number of attachments on a pole is obvious to a passing motorist, but not the strand count or the number of cables over-lashed together.

3. Revenue Potential of Rights-of-Way Fees

Because of the novelty of the idea of ROW fees, BTC has undertaken a field study to evaluate the potential revenue from such a new charge.

Our work combined a field survey with geographic information system (GIS) data.¹⁴³ We imported GIS pole location data from several sources. We also had a subcontractor drive short segments on five different classes of roads and highways in Vermont. The driver covered some roads in Franklin County, Rutland County, and Windham County. The driver counted the number of telecommunications pole attachments¹⁴⁴ on each pole, recording how many poles had one attachment, two attachments, and so on. We augmented this field data with additional detailed GIS data obtained from a recent pole/attachment inventory conducted by DVFiber, a

¹⁴² Two over-lashed cables with 24 fibers would generate twice the charge of one cable with 48 fibers, although the capacity is the same.

¹⁴³ Mr. David Healy of Calais, Vermont performed the GIS work for these tables.

¹⁴⁴ Electric power attachments were disregarded.

Vermont communication Union District, which has also measured the number of attachments on all poles in the towns of Stamford and Halifax.

After processing all of the above data, we arrived at an average number of telecommunications attachments per pole, for each type of road. The numbers of poles per mile for each type of road were obtained from GIS data. The resulting estimate of pole attachments is shown in Table 7 below.

Estimate of Pole Attachments in Vermont					
Road Type	Vermont Highway Miles	Estimated			
		Poles per Mile	Poles	Average Attachments per Pole	Attachments
U.S. Highway	583	24	9,439	3.4	32,283
State Highway	1,719	23	39,226	2.3	90,219
Town Class 1 Highway	135	41	5,585	4.1	23,124
Town Class 2 Highway	2,547	16	41,632	2.8	117,820
Town Class 3 Highway	8,482	15	124,198	1.4	177,603
Total	13,466		220,080		441,049

Table 7. Estimate of Pole Attachments in Vermont

Based on Table 7, we estimate that a new pole attachment charge in Vermont of \$10.00 per attachment per year would raise \$4.4 million of revenue per year.

BTC also has produced a basis estimate for a cable-mile surcharge. Here the resulting attachment count from Table 7 above is weighted by the average distance between poles. To estimate this average, we did a detailed analysis of pole data from Rutland County. We calculated an average inter-pole distance for road segments where there are poles within a row-

of-way (ROW) distance from the road centerline based on the road type.¹⁴⁵ The results are shown below in Table 8 below.

Estimate of Cable-Miles in Vermont			
Road Type	Attachments (from Table 7)	Distance Between Poles (feet)	Estimated Cable-Miles
U.S. Highway	32,283	220	1,346
State Highway	90,219	231	3,758
Town Class 1 Highway	23,124	128	437
Town Class 2 Highway	117,820	323	6,628
Town Class 3 Highway	177,603	361	10,466
Total	441,049		22,635

Table 8. Estimate of Cable-Miles in Vermont

Based on Table 8, we estimate that a new cable-mile fee in Vermont of \$100.00 per cable-mile per year would raise approximately \$2.3 million of additional revenue. The revenue would increase if the fee were imposed on each cable in an over-lashed multiple cable attachment.

E. Option # 5 – A Multipart Option

1. Four Elements

The COVID pandemic has reduced economic activity and tax revenues. Simultaneously, it has increased the urgency of closing gaps in broadband coverage. For this and other reasons, the Vermont Legislature may be interested in looking comprehensively at the funding sources for other telecommunications-related programs.

¹⁴⁵ In some cases telecommunications utilities hang two “over-lashed” cables from a single attachment. We counted that case as a single cable and a single attachment. Therefore this estimate may underestimate the actual base of cable-miles if such a fee were implemented.

This section combines several of the funding options discussed in the preceding sections. It has four major elements:

1. Create a new Vermont Telecommunications Public Benefits Fund (TPBF), funded by a new pole attachment charge. The primary purpose would be to finance PEG access above and beyond what the cable companies are required to pay as franchise fee and also to change the financing of several existing programs. Over the longer term, the TPBF could support other telecommunications-related public benefits, such as services to hearing impaired telephone customers and providing broadband in unserved areas.
2. Retitle and repurpose the Vermont Universal Service Fund to become the “Vermont E-911 Fund.” The existing funding mechanism would apply to all retail telecommunications, but with the addition of broadband Internet access sold to Vermont customers. The E-911 fund would finance only E-911. The funding level would be set by the Legislature.
3. Eliminate the current capital payments from cable companies to AMOs, and replace the loss with funds appropriated from the TPBF. Enact a new PEG capital fee of one percent on the cable revenues of cable companies. The capital fee would be distributed to AMOs through the appropriations process.
4. Repeal the Telephone Personal Property Tax, subject telephone companies to the usual corporate income taxes, and hold the General Fund harmless by a transfer from the TPBF.

Taken together, these elements can be thought of as a comprehensive approach to franchising telecommunications providers that use public rights-of-way.¹⁴⁶ It would define the extent to which all such providers are responsible for supporting public benefits related to the state’s telecommunications network.

This plan is somewhat modular in that any of the last three elements above can be eliminated without creating fatal harm. Keeping all four elements, however, would create a balance among several stakeholder groups that may not be achievable otherwise.

a. A Vermont Telecommunications Public Benefits Fund

The first element of the plan is to create a Vermont Telecommunications Public Benefits Fund (TPBF) as a special fund. The purpose would be to finance most of the public benefits that are provided to Vermont residents and associated with the telecommunications network, notably

¹⁴⁶ Cable companies are already “franchised,” and, as explained below, require special consideration so that cable companies do not wind up with impermissibly large obligations.

including PEG access. The TPBF would also finance several other programs, as discussed in the next sections.

Revenue for the TPBF would come from a newly enacted pole attachment charge. This charge would be more competitively neutral than most of the existing taxing and charging structure affecting telecommunications. The charge would be paid by every telecommunications provider who uses utility poles in Vermont for telecommunications purposes (not electric lines). Thus the charge would apply to landline telephone companies, wireless companies (which use cables to feed their antennas), fiber transport companies, and Internet service providers that control cables on utility poles.

Each attachment to a utility pole would generate one unit of charge. Therefore, a wireless company that has a cable on a pole and also a “5-G” antenna, located at a different height, would have two attachments.

Adding this new charge to cable companies would likely be considered by the FCC to be an increase in cable franchise fees. Therefore, the cable companies must be expected to reduce their operating revenue payments to AMOs. The offset would be equal to all of the company’s pole attachment payments. For the AMOs, this loss would be replaced by an appropriation from the TPBF.

b. Converting the VUSF to an E-911 Fund

The second element in this plan would repurpose the Vermont Universal Service Fund (VUSF) to become the Vermont E-911 Fund. The title change would actually approximate the existing reality, which is that E-911 currently expends 90 percent of the revenue raised by the VUSF. Eliminating the title “universal service” is also appropriate since, the original purpose of the VUSF is no longer funded.¹⁴⁷

The principal goal here is to broaden the base of telecommunications that supports the E-911 program. Just like the VUSF today, the new E-911 Fund would be funded by a retail charge on telecommunications services provided in Vermont. But the E-911 charge would also apply to

¹⁴⁷ Moreover, the VUSF is currently unable to pay the full amount appropriated for E-911. The 2.4% overall VUSF rate is sufficient to meet all VUSF obligations, but the fund receipts are effectively segregated into two sub-funds. Receipts from the newer 0.4% portion of the VUSF rate cannot be used for anything but the “Connectivity Initiative.” The receipts from the remaining 2.0% of the VUSF rate are not sufficient to pay all remaining VUSF obligations. The VUSF statute provides that during any such shortfall E-911 payments are reduced on a first priority basis.

broadband Internet access services provided in Vermont.¹⁴⁸ The final charge rate for the new E-911 fund would be lower than the current 2.4% VUSF rate because of the broader base that includes broadband.

The E-911 service in Vermont is provided to traditional wireline telephone customers, to wireless telephone customers, and to “VoIP” telephone customers. By broadening the base, Vermont would be requiring a contribution to the E-911 program from all the telecommunications providers whose customers benefit from the service, and the charge would be competitively neutral.

This proposal meets the requirements of the 911 exception to the Internet Tax Freedom Act (ITFA), which has an exception for 911 programs. E-911 service is provided to everyone in Vermont who uses telephone service, regardless of provider. That includes “VoIP” telephone service provided “over the top” on a broadband line. If Vermont 1) imposes a charge on Internet access, 2) places the proceeds in a special fund, and 3) appropriates that fund solely to the E-911 program, then that charge would fall within the 911 exception of the ITFA.

A secondary effect of this element is that several minor VUSF programs will need a new home and funding source. We propose that the TPBF finance the approximately \$0.6 million that is currently supporting these programs.

c. Enact a PEG Capital Fee

The third element in this proposal is a new 1.0 percent fee on cable company revenues. Most AMOs in Vermont receive annual capital subsidies from the cable companies of 0.5 percent of the cable revenues of those companies. This new fee would replace those existing payments, increasing the AMO capital payment in nearly all cases. The proceeds would be deposited in the TPBF and appropriated to the AMOs by the Legislature.

This element increases the financial burden on cable companies, but still within the limits permitted by federal law. The net effect would be that cable companies pay 6 percent of their cable revenues to support PEG access. This is the same total rate charged in California and some other jurisdictions.

The cable companies would continue, as now, to pay 5 percent of cable revenues directly to AMOs for operating costs. The new 1 percent of cable revenues capital charge would be paid to the state, deposited into the TPBF and then appropriated to the AMOs. The AMOs would have

¹⁴⁸ Extending the charge to broadband relies on an explicit exemption in the Internet Tax Freedom Act for 911 and E-911 programs.

to comply with the requirements of federal and state law regarding accounting for the uses of these funds as allowable capital expense.

d. Repeal the Telephone Personal Property Tax

The fourth element in this proposal is to repeal the Telephone Personal Property Tax (TPPT). The problems with this tax were discussed in detail in preceding sections. The repeal would occur at the same time that telephone companies first become subject to the new pole attachment charge described under element #1. Thus the net effect on telephone companies would be to replace one industry-specific tax with a similar charge, but one which applies equally to all its telecommunications competitors.

Because the pole attachment charge essentially supplants General Fund revenue from the Telephone Personal Property Tax, we propose that the TPBF replace the lost revenue in the General Fund by appropriation from the TPBF to the General Fund.

1. Net Financial Effect

Table 9 below estimates how this proposal would affect the state budget and AMO revenues in the first year, assuming a pole attachment charge of \$10 per attachment per year.¹⁴⁹

¹⁴⁹ Other assumptions made in producing this table are: 1) 441,000 attachments in Vermont; 2) 30% of attachments are owned or controlled by cable companies; 3) attachment charges paid by cable companies must be 100% offset by AMO operating fee payment reductions; 4) cable company revenue in 2019 was \$120 million; 5) cable company payments in 2019 to AMOs for operations were \$6.89 million and for capital were \$0.86 million; and 6) the General Fund must be held harmless. The estimates here assume that the state will not need to allocate any portion of the Pole Attachment Charge proceeds for purposes of constructing and maintaining federal-aid highways. Also, no deduction has been made for the marginal administrative costs to the Department of Taxes associated with administering this new pole attachment charge.

Program Element	Policy Change	TPBF	AMO Revenues	General Fund
		(millions)	(millions)	(millions)
1	New Pole Attachment Charge	\$ 4.41		
	Offsetting Reduction in Cable Company Operating Payments to AMOs		\$ (1.32)	
	Appropriation to AMOs	\$ (1.32)	\$ 1.32	
2	Miscellaneous Programs (Lifeline, TRS) Shifted to TPBF	\$ (0.57)		
3	New PEG Capital Fee	\$ 1.20		
	Eliminate PEG Capital Payments		\$ (0.86)	
	Appropriation to AMOs	\$ (1.20)	\$ 1.20	
4	Repeal Telephone Personal Property Tax			\$ (2.40)
	Fund Transfer from TPBF to Gen.Fund	\$ (2.40)		\$ 2.40
Total		\$ 0.12	\$ 0.34	\$ -

Table 9. Fund Effects of Comprehensive Proposal

Not shown in Table 3 is the reduction in the burden on telephone retail customers. Rather than paying the current 2.4 percent VUSF rate, customers with only telephone service would pay a lower rate and a lower total contribution. Customers who purchase both broadband and telephone would continue to pay on a gross revenue basis, but although the rate would be lower, their total bills would be larger.

2. Modularity and Growth

This proposal has four elements, but it is also flexible. Some parts can be omitted or adjusted downward, without unbalancing the system. Element 3, the new PEG Capital Fee, is perhaps the most modular. Deleting this element would require only modest changes to the remaining elements. Similarly, elimination of the TPPT could be accomplished in stages, such as to reduce the current 2.37 percent rate gradually over time or make a one-time change to a lower rate such as 1 percent.

Conversely, the proposal can also be scaled up over time, if no unexpected problems arise. The pole attachment charge rate could be increased. There would be consequential shifts AMO revenues away from direct cable company payments and toward dependence on appropriated funds. A larger pole attachment charge would be likely to further promote competitive neutrality among telecommunications providers.

To illustrate the potential for scaling up the proposal, we provide here an estimate of how the proposal would work in 2026, when our forecast showed a funding deficit of \$1.39 million. Table 10 shows how Option #5 might fill that gap in 2026.

Program Element	Policy Change	TPBF	AMO Revenues	General Fund
		(millions)	(millions)	(millions)
1	New Pole Attachment Charge	\$ 6.17		
	Offsetting Reduction in Cable Company Operating Payments to AMOs		\$ (1.85)	
	Appropriation to AMOs	\$ (2.90)	\$ 2.90	
2	Miscellaneous Programs (Lifeline, TRS) Shifted to TPBF	\$ (0.57)		
3	New PEG Capital Fee	\$ 1.20		
	Eliminate PEG Capital Payments		\$ (0.86)	
	Appropriation to AMOs	\$ (1.20)	\$ 1.20	
4	Repeal Telephone Personal Property Tax			\$ (2.40)
	Fund Transfer from TPBF to Gen.Fund	\$ (2.40)		\$ 2.40
Total		\$ 0.30	\$ 1.39	\$ -

Table 10. Fund Effects of Comprehensive Proposal in FY 2026

Table 10 is similar to Table 9, except that it raises the attachment charge from \$10 to \$14 per attachment per year. The changes in the middle cells of the table are a larger offsetting reduction of direct cable company payments to AMOs and a larger appropriation to AMOs. Elements 2, 3, and 4 are unchanged from Table 9.

Table 10 shows that Option #5 can be scaled up in the future to meet the foreseeable revenue needs of the AMOs, if the Legislature should decide to fund those needs.

X. Recommendations

We examined the efficiencies available to AMOs in Vermont. We found that the existing AMOs in general provide well for the needs of their local member communities and their service is valued by a majority of residents.

The video revenues of Vermont’s cable companies have remained relatively static for the last three years. However, our opinion is that these cable revenues will begin to decline because customers will continue switching to Internet streaming and away from cable video services. The loss rate will likely exceed the ability of the cable companies to increase their ARPU. The ability

of AMOs to maintain or to enhance service provision would likely be constrained due the combination of a decrease in revenue received from cable companies and an inflationary increase in expenses.

A low-normal scenario for future cable company video revenues, combined with a one percent inflation for costs, by 2026 would likely leave the Vermont AMOs with a budget deficit of approximately \$1.37 million, which is approximately 17 percent of current expenses. This scenario also optimistically ignores the risk of additional revenue losses due to implementation of the in-kind rules in the FCC's *Third Order*, the risk of increased "cable cord cutting" over time and the risk that one or more cable companies may strategically decide to close or weaken its cable business.

As a starting point, we encourage AMO's to continue their efforts to improve cost efficiencies and seek additional sources of funds as described above in Sections VI and VII. In addition, we recommend that it is prudent today to investigate alternative mechanisms to support the AMO provision of PEG services. Assuming that the Legislature does want to provide more funding, we provide five options.

1. Increase capital payments from cable companies to AMOs.
2. Impose a new charge on streaming video, and possibly satellite services as well.
3. Increase the Vermont Universal Service Fund rate and broaden the scope of its supported programs to include PEG.
4. Impose a new charge on utility pole connections.
5. Adopt a four-element bundle that would make substantial adjustments to the relative burdens of taxes and charges among different kinds of telecommunications providers.

All five of these new funding options would, in different ways, change the competitive neutrality of taxes in the telecommunications space. We summarize in Table 11 the competitive effects of the current tax system, and below that contrast the status quo with the five options.¹⁵⁰

¹⁵⁰ Gross receipts taxes used to finance Vermont's utility regulation system are omitted.

Type of Provider	Telephone Company (landline and mobile)			Cable Co.			Satellite Co.			Internet Service Provider	SVP
	Telephone	Video	Internet	Telephone	Video	Internet	Telephone	Video	Internet	Broadband Internet	Streaming Video
Existing Charge											
Cable franchise Fee					Y						
Telephone Pers. Prop.	Y										
VUSF charge	Y			Y			Y				
Sales Tax	Y	Y		Y	Y		Y	Y			Y
New Option #											
1. Add'l Gross Receipts Fee on Cable Revenues					Y						
2. New VUSF Fee on Streaming Video								Y			Y
3. Raise VUSF Rate	Y			Y			Y				
4. Pole Attachment Fee	Y	Y	Y	Y	Y	Y				Y	
5. Multipart Plan	Y	Y	Y	Y	Y	Y				Y	

Table 11. Competitive Neutrality Analysis of Existing and Proposed Vermont Charges

Table 11 shows that Vermont currently applies some telecommunications charges across very narrow domains. Cable franchise fees apply to a single line of products sold by a single type of company. Similarly, the TPPT applies only to one type of company, and then only to property used to deliver a single line of products. The VUSF charge is somewhat broader, and the sales tax is broader still, but both still exclude Internet service, as required by federal law.

Of the five options, we recommend the combined option (#5) as deserving the most serious consideration. It would broaden the base of AMO payments in a way that reflects the increasing use of the Internet as a medium for PEG video programming. It can give the AMOs a broader financial base and it can create an incentive to expand their program benefits into surrounding towns that have broadband but lack cable television service.

The combined option also modernizes the state’s telecommunications tax structure. It spreads the burden of telecommunications public benefit programs more broadly over as wide a base as is legally permissible under the many restrictions in federal law. Option #5 has the added advantage of being expandable. If it proves successful, it can be gradually expanded by raising

the pole attachment charge and reducing other telecommunications-related charges, thereby still further improving competitive neutrality of the state's taxes in support of telecommunications-related public benefits

A. Appendix – List of Vermont AMOs and Service Areas

AMO	Communities Served
BCTV Brattleboro Community Television	Brattleboro, Dummerston, Guilford, Jamaica, Newfane, Putney, Townshend, Vernon
CAT-TV Catamount Access Television	Bennington, Pownal, Shaftsbury, Woodford
CVTV Central Vermont Television	Barre, Barre Town, Cabot, Chelsea, Marshfield, Orange, Plainfield, Royalton, Tunbridge, Washington, Williamstown
Ch17 Channel 17 Town Meeting Television	Burlington, Colchester, Essex, South Burlington, St. George, Williston, Winooski
CATV8 Community Access Television	Hartford, Hartland, Norwich
FACT-TV Falls Area Community Television	Athens, Brookline, Grafton, Rockingham, Westminster
GNAT-TV Greater Northshire Access Television	Arlington, Dorset, Londonderry, Manchester, Peru, Rupert, Sandgate, Stratton, Sunderland, Weston, Winhall
GMATV Green Mountain Access Television	Hyde Park, Johnson, Morristown
HCTV Hardwick Community Television	Greensboro, Hardwick, Woodbury
KATV Kingdom Access TV	Barnet, Bradford, Burke, Concord, Danville, Groton, Kirby, Lyndon, Newbury, Peacham, Ryegate, Sheffield, St. Johnsbury, Sutton, Waterford, Wheelock
LCATV Lake Champlain Access Television	Colchester, Fairfax, Georgia, Grand Isle, Milton, North Hero, South Hero, Westford
MRVTV Mad River Valley Television	Buells Gore, Duxbury, Fayston, Moretown, Waitsfield, Warren
MCTV Middlebury Community Television	Middlebury, Weybridge
MMCTV Mt. Mansfield Community Television	Jericho, Richmond, Underhill
NEAT North East Addison Television	Bristol, Huntington, Lincoln, Monkton, New Haven, Starksboro
NEK-TV Northeast Kingdom Television	Barton, Brighton, Brownington, Charleston, Coventry, Derby, Glover, Irasburg, Jay, Morgan, Newport, Newport Town, Troy, Westfield
NWA-TV Northwest Access Television	Bakersfield, Berkshire, Enosburg, Fairfield, Highgate, Montgomery, Richford, Sheldon, St. Albans, St. Albans Town, Swanton
OVTV Okemo Valley TV	Cavendish, Ludlow, Mount Holly, Plymouth
ORCA Onion River Community Access Media	Berlin, Bethel, Braintree, Calais, Duxbury, East Montpelier, Middlesex, Montpelier, Moretown, Randolph, Rochester, Waterbury, Worcester
RETN Regional Educational Television Network	Burlington, Charlotte, Colchester, Essex, Ferrisburg, Hinesburg, Shelburne, South Burlington, St. George, Vergennes, Waltham, Williston, Winooski

Appendix A – Vermont AMOs and Communities Served

AMO	Communities Served
PEG-TV Rutland Region Community Television	Brandon, Castleton, Chittenden, Clarendon, Danby, Fair Haven, Ira, Killington, Leicester, Mendon, Pawlet, Pittsford, Poultney, Proctor, Rutland, Rutland Town, Wallingford, West Rutland
SAPA-TV Springfield Area Public Access Television	Chester, Springfield, Weathersfield
Ch37 Stowe-Cambridge Access Channel	Cambridge, Stowe
VCAM Vermont Community Access Media	Burlington, Charlotte, Colchester, Essex, Ferrisburg, Hinesburg, Shelburne, South Burlington, St. George, Vergennes, Williston, Winooski
WOA8TV Windsor On-Air	West Windsor, Windsor
WCTV Woodstock Community TV	Bridgewater, Hartland, Woodstock

Source: Vermont Access Network; <https://vermontaccess.net/amo/>

B. Appendix – Federal Preemption

This Appendix is part of the report prepared by Berkshire Telecommunications Consulting (BTC) under contract to the Vermont Agency of Commerce and Community Development. It discusses several issues of federal preemption in more detail than the summaries in the main report.

A. Sovereign Power and Federal Preemption

Like other states, Vermont has sovereign legislative powers historically derived from the English Parliament. But each state’s power must yield where it is in conflict with federal law, which is supreme. Preemption in the taxation or regulation of telecommunications is a complex area of law, and there are multiple forms. Some apply only to certain industry “silos” where separate industry subtypes are subject to much different rules.

The following pages outline what Berkshire Telecommunications Consulting (BTC) believes are the major possible preemption constraints on this project. At its narrowest, this project involves PEG access funding; but it also involves evaluating other kinds of revenue sources for PEG. This necessarily implicates other nearby programs in the telecommunications space. In many cases it is not possible to forecast the outcome of a preemption challenge, and our predictions rely heavily on judgment.

Federal law recognizes four major categories of telecommunications industries: cable television providers; landline telephone companies; cellular telephone companies; and internet service providers. In addition, federal “universal service” fund (USF) laws and policies apply across most of the silos, and they present further possibilities for federal preemption.

B. “Intrastate” and “Interstate” Telecommunications

Before delving into specific federal preemption risks, we offer first a background tale regarding the culture and history of telecommunications regulation. The subject is “dual jurisdiction.” We discuss it here at the beginning because it underlies so much of federal preemption law on telecommunications.

1. Historical Roots

In the history of telephones and government regulation, the concept arose early that there was a difference between calls that crossed state lines (“interstate”) and those that did not (“intrastate”). Local or “exchange” calls were almost always intrastate. This difference became foundational to how telecommunications services were regulated. Under the system of “dual

jurisdiction” that evolved, the federal government, and eventually the Federal Communications Commission (FCC), had sole jurisdiction over the rates of interstate calls.¹⁵¹ The states had sole jurisdiction over the rates for intrastate calls, including “local” calls.

The dual jurisdiction concept arose at a time when human telephone operators connected calls manually at switchboards. Long-distance calling required many telephone operators and was extraordinarily expensive.¹⁵² In order to send bills properly, those telephone operators routinely recorded the “originating location” and the “terminating location” of each “toll” or interexchange telephone call. Customarily, the calling party was charged for the call on a per-minute basis.¹⁵³ In this environment, it was a small matter to also record whether a call crossed state lines.

In the 1920s and 1930s, American courts and legislatures were evolving new concepts of interstate commerce and new limits for economic regulation. The federal Commerce Clause was being litigated frequently, and its scope was expanding. States were sensitive about losing major parts of their traditional powers to new and more intrusive federal regulations. In 1930, the Supreme Court issued a major decision that states could not set rates based on the costs of interstate traffic. The due process clause, said the court, requires a separation of the costs into two jurisdictions.¹⁵⁴ And so the “end-to-end” analysis, already used for billing purposes, was hitched up to pull the new dual jurisdiction wagon.

The 1930 decision set the stage for the major New Deal legislation on communications, the Communications Act of 1934. The newly created federal agency, the FCC, would have nothing to say about rates and terms of service for “intrastate communications.” Likewise, state utility commissions would have nothing to say about “interstate communications.” And so the

¹⁵¹ The FCC was established in 1934. It replaced the Federal Radio Commission. The mandate of the FCC is to regulate interstate and foreign commerce by wire and radio. The FCC regulatory authority includes the regulation of broadcast and cable television service.

¹⁵² Originally, the Bell system required human operators for every call. Later, operators were needed only for calls across “exchange” boundaries. Human operators generally were eliminated by more advanced switches and “touch tone” dialing by about 1980.

¹⁵³ Older readers may recall that “collect” calls were possible, with the callee’s consent, and the effect was to “reverse the charges” and require the callee to pay.

¹⁵⁴ *Smith v. Illinois Bell Tel. Co.*, 282 U.S. 133 (1930) (interstate toll revenues cannot be considered in determining the rates for intrastate telephone service).

“end-to-end” jurisdictional analysis, based on 1934 technology, was built into the foundations of federal law, where it remains today. Section 152(b) of the act states, in relevant part:

“(b) ... nothing in this Act shall be construed to apply or to give the Commission jurisdiction with respect to (1) charges, classifications, practices, services, facilities, or regulations for or in connection with *intrastate communication* service by wire or radio of any carrier”¹⁵⁵

To make this system of dual jurisdiction actually workable for ratemaking, regulators needed a fair and uniform way to divide each telephone company into the two fictional companies, one of which did only interstate work and one of which did only intrastate work. The investments and expenses of the two jurisdictions were then “separated” – at least on the regulatory books – and rates were set accordingly for services purchased in each of the two “jurisdictions.” The FCC, with advice from the states, developed a complex set of “separations” regulations, which still exist.¹⁵⁶

The separations rules were ungainly and sometimes arbitrary. Many telecommunications costs were common to both jurisdictions, and there was no obvious traffic-based method to separate those costs. So simplifying assumptions proliferated over time, and arbitrary rules were adopted to allow the square pegs of facilities and services with unmeasurable usage into the round hole of dual jurisdiction theory.¹⁵⁷ Dual jurisdiction also produced, for a time, some surprising results for consumers, such as disparate retail toll calling rates for intrastate and interstate calls.¹⁵⁸

¹⁵⁵ 47 U.S.C. § 152(b).

¹⁵⁶ Separations rules are found at 47 C.F.R. Chapter 36.

¹⁵⁷ For example “special access” circuits are point-to-point circuits that were widely used by business customers. Special access usage is not measured, and the circuits do not carry switched calls. They can cross state lines, but don’t always do so. The FCC adopted a rule that a special access circuit is recorded as interstate property whenever more than 10 percent of the traffic on that special access line is interstate. 47 C.F.R. § 36.154(a) (subcategory 1.1 and 1.2). Since there is no way for any regulator to check the actual usage, this provision allows customers to declare for either jurisdiction, and many declare for the jurisdiction with lower rates.

¹⁵⁸ After the FCC reduced interstate toll rates in the 1970s, customers often found that a toll call from Montpelier to Burlington (intrastate) might cost more per minute than a call from Montpelier to Los Angeles (interstate).

2. Modern Networks

Most 1934 lawmakers probably did not imagine that telephone calls eventually would become too cheap to meter and that concepts like the location of a “calling party” would become economically irrelevant. Yet the modern network is different in almost every way from the early 20th century network that gave birth to the dual jurisdiction concept.

- The widespread use of cheap switches and fiber optic cables has reduced the per-minute marginal cost of interexchange or “toll” traffic to *de minimis* levels. Carriers no longer have economic reasons to care how long their customer talk or whether the other party is across the country.
- Most telephone customers today give little or no thought to whether a telephone call crosses state lines. The reason is that telephone calling plans with per minute “toll” charges are largely obsolete. Instead, customers increasingly subscribe to monthly calling packages which offer unlimited calling throughout the U.S. and Canada, without regard to political boundaries.
- Data, not voice, is by far the majority of long-haul traffic on modern networks. A regulatory system designed to account for toll is likely to create market distortions. For many computer-based communications, it is nearly impossible to determine where they “originate” or “terminate.”
- Wireless networks carry major portions of today’s traffic. Ratemaking jurisdiction for these carriers is not based on the dual jurisdiction theory. The FCC has sole jurisdiction over rates and terms of service for all wireless calls.¹⁵⁹
- Various FCC decisions have shifted services preemptively to federal regulatory jurisdiction, often thereby reducing the revenue allocated to the intrastate jurisdiction.¹⁶⁰
- Recognizing the declining importance of jurisdictional separations, the FCC has repeatedly reduced the data reporting obligations on carriers and has “frozen” separations measurements. While older separations numbers actually are used in a few instances to set rates, those numbers generally reflect conditions a decade or more in the past.

¹⁵⁹ 47 U.S.C. § 332(c)(3)(A).

¹⁶⁰ For example, the FCC has held that nomadic voice over internet protocol (“VOIP”) calls must be treated as intrastate, largely because in a modern packet network it is impossible to determine where calls begin and end. 19 FCC Rcd 22404 (Nov. 12, 2004), *aff’d sub nom., Minn. Pub. Utils. Comm’n v. FCC*, 483 F.3d 570 (8th Cir.2007) (Vonage Preemption Order).

Notwithstanding these many problems, the dual jurisdiction theory still survives in federal section 152(b) as the basis for regulatory jurisdiction and, as discussed next, as a basis limiting the ability of states to raise funds for telecommunications–related programs.

C. Universal Service

Universal service programs exist at both the federal and state levels. These programs have served a variety of purposes. The original idea was to provide support to telephone companies that have high cost service areas, so that local or “basic” rates can be kept low. The programs typically came to also include “affordability” components that make telecommunications services more affordable for individual customers with low incomes. Still other programs have supported telecommunications services in school, libraries, made payments to medical institutions, and funded specialized telephone services for the hearing impaired, all under the rubric of “universal service.”

PEG is a public benefit program funded by charges imposed on cable television companies. It currently is distinct from universal service programs, both in its statutory basis and its funding source. Nevertheless, universal service is policy-adjacent to PEG programs. Both systems involve the telecommunications network and both produce public benefits derived from an exaction on different kinds of telecommunications companies.

Universal service history is considered here for two reasons. First, a new funding source for PEG might trigger some universal service issues, creating a preemption risk. Second, the Legislature might affirmatively decide to consider adjustments to the Vermont Universal Service Fund as part of a larger discussion that is triggered by the PEG issue.

1. Universal Service in Vermont

a. The Vermont USF

Vermont set up a universal service fund in 1994, two years before Congress acted along similar lines.¹⁶¹ Somewhat boldly, the Vermont Legislature decided that the Universal Service Fund (VUSF) should disregard the dual jurisdiction claim and impose the VUSF surcharge on the amount of retail telecommunications charges in *both* the intrastate and interstate jurisdictions. The decision to use a broader base had several practical advantages.

¹⁶¹ Vermont Acts of 1993 (Adjourned Session), No. 197.

- The program aimed to improve the availability and utility of basic telephone service. The title “universal service” expressed the expectation of a need for “high cost” funding if telephone networks were to be made competitive but not abandon rural homes and businesses. The largest portion of the VUSF funds was actually used for Enhanced-911. Still other programs aimed to make telephones more accessible to poor Vermonters and more functional for hearing impaired Vermonters. All these programs were expected to benefit telephone customers by giving them access to basic, toll, and emergency services. The benefits were not limited merely to the “intrastate” portion of that service.
- A broader base generates more revenue at a given surcharge rate. A program with a base of only intrastate services may not be able to generate sufficient revenue to address universal service issues comprehensively, a particularly acute problem in a rural state.
- A broader base reduces the risk of market distortions. If the state’s surcharge rate had applied only to intrastate services, the rate would have been high, and customers might have had an incentive to avoid consuming intrastate services, possibly by constructing otherwise uneconomic work-arounds.¹⁶² As to providers, those whose customers made a high proportion of intrastate calls would be competitively disadvantaged. Also, in some cases customers have a choice of jurisdiction (e.g.: when buying special access circuits), and they would have had an incentive to declare for the jurisdiction with lower surcharges.
- As a revenue base, intrastate revenue was unreliable and shrinking. The amount of “intrastate” telephone revenue was decreasing as consumers made ever more interstate calls. Also, preemption decisions of the FCC often tended to shift revenue to interstate, thereby raising intrastate rates. There was little reason to think this trend would reverse in the future.¹⁶³
- Aligning USF surcharges with state sales tax rules (like those in Illinois) simplified administration for carriers who collected the payments, and it simplified bills for

¹⁶² For example, a call between two points in Vermont could be completed by making the first portion using a dedicated circuit to New Hampshire and the second portion using a switched circuit back to Vermont.

¹⁶³ The FCC continued to favor the interstate jurisdiction after 1996. Perhaps one motive was that the base for FCC’s own universal service programs was limited to interstate revenue. For example, the FCC established a “safe harbor” percentage for VoIP services that allocated 64.9% of VoIP revenues to the interstate jurisdiction. See <http://www.fcc.gov/Forms/Form499-A/499a-2008.pdf> at 14, viewed 12/1/20.

customers who generally had no idea why anyone would care about the “intrastate” portion of their telephone bills.

- Relying on an intrastate-only surcharge would have perpetuated distinctions that the Vermont legislature recognized as antiquated. The evolution of technology made the distinctions ever more difficult to maintain, and the system for separating carrier costs and revenues was increasingly patched with arbitrary rules.

b. Constitutional Limits on State Telecommunications Taxation

Beyond the practical reasons, the 1994 Vermont Legislature had a good legal basis to levy the VUSF surcharge on both kinds of telecommunications services. As a sovereign power, Vermont has broad authority to impose taxes and fees to fund programs that benefit the public health and welfare. This power is limited by the Commerce Clause of the United States Constitution, insofar as those taxes affect interstate commerce. A key issue in 1994 therefore was whether the distinction between “intrastate” and “interstate” telecommunications, cherished as it was by regulators, had any place in the Vermont’s tax policy. Based on Supreme Court precedent, the Vermont Legislature decided to opt for the broader base.

In 1989, in *Goldberg v. Sweet*, the U.S. Supreme Court set out constitutional standards for state taxation of telephone company revenues.¹⁶⁴ Five years earlier, Illinois had enacted a 5% excise tax on the gross charge for interstate and intrastate telecommunications originated or terminated in that state. The tax applied only to calls charged to an Illinois service address, regardless of where the monthly bill was sent to or paid from. Taxpayers and a telecommunications carrier challenged the statute as violating the Commerce Clause, and the Supreme Court granted review.

Even before 1989, the Supreme Court had decided many cases involving the Commerce Clause and state taxes. The decisions had recognized a tension between the needs of interstate commerce for “free trade” immunity and the needs of state and local governments to require the businesses in each state to pay their own way. The Supreme Court had developed a four-part test to evaluate such Commerce Clause challenges.¹⁶⁵ The court’s 1989 decision in the Illinois case reviewed these tests and ultimately affirmed the Illinois tax.

¹⁶⁴ *Goldberg v. Sweet*, 488 U.S. 252 (1989).

¹⁶⁵ *Complete Auto Transit, Inc. v. Brady*, 430 U.S. 274, 278-79 (1977).

The first element of the *Goldberg* test is whether the tax has a substantial nexus with the state. For telecommunications, there were only two ways to satisfy that test. The first was to tax an originating or terminating interstate telephone call *charged to a service address* within that State. The second was to tax the origination or termination of an interstate telephone call *billed to or paid from* within that State.¹⁶⁶ The nexus issue was not in dispute in the Illinois case because its tax was of the first type.¹⁶⁷ The Vermont Universal Service Fund likewise satisfies the first part of this first test. It imposes the VUSF tax on “retail telecommunications service provided to a Vermont address.”¹⁶⁸

The second element of the constitutional test is whether the tax is “fairly apportioned.” The aim here is to ensure that each state’s tax applies to only a “fair share” of an interstate transaction. The court did not mandate a single method of apportionment, a task that it considers more appropriate for a legislature than a court. Instead, the court examined whether the tax is internally and externally consistent.¹⁶⁹

A tax is internally consistent if it is structured in such a way that no multiple taxation would occur even if every state were to impose an identical tax. The Illinois tax met this test because if every State taxed interstate phone calls charged to an in-state service address, only one State would tax each interstate telephone call, the state with the service address.

A tax is externally consistent if the State taxes only that portion of the revenues from the interstate activity which reasonably reflects the in-state component of the activity being taxed. The Illinois tax applied the full rate to interstate calls with an Illinois service address, even though such a call triggers simultaneous activity in several States. The Court upheld the Illinois law on the ground that, like a sales tax, this telecommunications tax reasonably reflected the way that consumers purchased interstate telephone calls.¹⁷⁰

The Court did note the possibility of double taxation if a customer had a service address in Illinois and a billing address in another state. However, it concluded that the Illinois statute

¹⁶⁶ *Goldberg v. Sweet* at 263.

¹⁶⁷ *Id.* at 260.

¹⁶⁸ 30 V.S.A. § 7521(a).

¹⁶⁹ *Goldberg v. Sweet* at 261.

¹⁷⁰ *Id.* at 261-63. By contrast, a state through which a call passes but which has no other contacts with a call probably would not satisfy the nexus requirement and could not tax the call.

was a “realistic legislative solution” to the difficulties of apportioning telephone mileage.¹⁷¹ Moreover, Illinois allowed such customers to seek a refund of taxes paid in other states and thus avoided any risk of “actual multiple taxation.” The Court held the Illinois tax was fairly apportioned because the risk of multiple taxation was low and any multiple taxation problems could be solved by the statutory credit provision.¹⁷²

The Vermont Universal Service Fund also satisfies this second test. It is internally consistent because if every state taxed interstate phone calls charged to an in-state service address, only Vermont would tax interstate telephone calls provided to a Vermont address. Like a sales tax, this VUSF tax reasonably reflected the way that consumers purchased interstate telephone calls.¹⁷³ Moreover, the VUSF law includes a rebate for any double taxation caused by payments to another state under a similar law.¹⁷⁴

The third constitutional test is whether the tax discriminates against interstate commerce. Discrimination may be explicit or through its economic effect. For example, a flat per-truck tax on trucks passing through a state can discriminate against interstate truckers who might travel relatively few miles in the state.¹⁷⁵ In contrast, the economic burden of the Illinois tax fell on Illinois telecommunications consumers, whom the Court thought were “able to complain about and change the tax through the Illinois political process.” In addition, the Court held that in a modern telecommunications network it is impossible to trace and record the exact path of the signals. A more precise approach was impossible.¹⁷⁶

The Vermont Universal Service Fund satisfies this third test. Unlike an interstate truck, an interstate telephone call that merely passes through Vermont on the way between two out-of-state points pays no tax at all.

The fourth and final constitutional test is whether the tax is fairly related to services which the state provides to taxpayers. This test aims to ensure that a state's tax burden does not fall on persons who do not benefit from the state's services. A wide range of possible benefits

¹⁷¹ *Goldberg v. Sweet* at 265.

¹⁷² *Id.* at 264.

¹⁷³ 30 V.S.A. § 7521(a).

¹⁷⁴ 30 V.S.A. § 7522 (where telecommunications service is subject to both the Vermont VUSF charge and a charge imposed for similar purposes in another state, customer is liable only for the difference).

¹⁷⁵ *American Trucking Ass'n., Inc. v. Scheiner*, 483 U.S. 266 (1987).

¹⁷⁶ *Goldberg v. Sweet* at 266.

can be considered, not merely the precise activity connected to interstate activity taxed. The Court concluded that the Illinois tax complied with this test because the revenues helped pay for benefits to Illinois subscribers who received general government services, including fire and police protection.¹⁷⁷

The Vermont Universal Service Fund also satisfies this fourth test. Not only are the VUSF expenditures for the benefit of the residents who pay it, but the proceeds are used more precisely to support public benefits relating to telecommunications. These include Enhanced-911 service, lifeline service for low income customers, benefits for the hearing impaired, and support for service in high-cost areas.

In short, the *Goldberg* decision gave states, including Vermont, room within the constitution to enact and finance programs – including universal service programs – that promote the general welfare, and to finance those programs with charges structured to operate in the same manner as the Illinois Excise Tax.

A few other states made the same decision and were challenged in court. Before explaining the results, it is first necessary to understand the federal Telecommunications Act of 1996 and its effect on state universal service programs.

2. Federal Universal Service History and Limitations

a. Pre-1996 History

Congress passed a major telecommunications restructuring law in 1996. The Telecommunications Act of 1996 codified and extended many existing policies of the FCC, including universal service. The term “universal service” was apparently first used by AT&T President Theodore Vail in the early 20th century. By 1996, the term had come to mean the public policy of providing affordable basic (not necessarily toll) telephone service in all residence and business locations in the country.

Before 1996, the FCC had enacted several universal service support programs. The original mechanism was implicit in how rates were designed. The FCC had set high interstate toll rates for all customers. Moreover, it had set high wholesale “access rates,”¹⁷⁸ causing high retail

¹⁷⁷ *Goldberg v. Sweet* at 267.

¹⁷⁸ “Access” was the regulated system under which long-distance carriers (such as AT&T) made per-minute payments to local telephone companies (such as New England Telephone) in order to compensate the latter for the cost of originating and terminating long distance calls.

rates for “long distance” calling. All of these programs aimed to reduce the needs of rural telephone companies to raise rates on “basic” local service.

In the 1970s and 1980s, the FCC changed this policy and reduced access charges. To reduce the harm and keep rural basic rates low, the FCC simultaneously created a variety of new support programs. By 1996, the FCC already had in place two separate financial aid programs that subsidized high costs in rural areas and areas served by small telephone companies.¹⁷⁹

To modern eyes, all of these pre-1996 financial arrangement seemed to be “implicit subsidies.” While the details differed, the primary effect was to shift the burden of supporting the network from high-cost rural residential customers to others, usually the business and urban residential customers. According to common wisdom before 1996, toll customers “subsidized” local customers, and urban customers “subsidized” rural customers. As local exchange competition approached in the 1990s, many observers felt these implicit subsidies were likely to become economically untenable. New competitors, it was thought, would build new networks in areas currently paying the subsidy, especially areas with many business customers and high density residential customers. The implicit subsidies would evaporate as customers sensibly migrated to the new providers that offered lower cost services.

b. TA-96

The fundamental purpose of the Telecommunications Act of 1996 (TA-96) was to terminate the monopoly on providing local exchange telephone service. The economic notion was that the country was better served by reducing regulation and promoting competition.

Not everyone in Congress was convinced that competition would spread its benefits uniformly. Some legislators, particularly in the Senate, were concerned that while competition would likely drive prices down in urban areas, it would also likely harm rural areas. The implicit subsidy system generally ensured that the costs of providing service in rural areas was greater than the rates collected from customers in those areas. Competition was expected to drive those business and toll rates downward, jeopardizing investment and even continued service in higher cost rural areas.

¹⁷⁹ The “High Cost Loop” program provided explicit support for those rural companies which had very high unit costs for their investment in distribution poles and wires. The “DEM Weighting” program provided implicit support for the switching costs of small rural telephone companies. Several of Vermont’s independent telephone companies benefitted greatly from these two programs.

To anticipate this new problem, TA-96 included a “universal service” provision, section 254. This was the first time Congress had explicitly authorized federal universal service programs. The new statute articulated diverse goals and authorized several programs, including funding for services in high-cost areas, aid for low-income households, and checks to help schools, libraries, and rural health providers purchase telecommunications and advanced services.

To fund the federal universal service programs, the FCC must require a contribution from “every telecommunications carrier that provides interstate telecommunications services.” The statute does not say how those contributions must be calculated, other than the general standard that the contribution rules must be “on an equitable and nondiscriminatory basis” and that the “mechanism” chosen by the FCC must be “specific, predictable and sufficient.”¹⁸⁰

The FCC’s current methodology assesses carriers on the basis of their retail interstate and international revenue. The sum is the “contribution base.” The sum of the program expenditures divided by the contribution base determines the “contribution factor.” Each carrier is required to contribute an amount equal to their interstate and international revenue multiplied by the contribution factor.

(1) Authorizing State Universal Service Programs

Section 254 also authorized state universal service programs, by the following language (italics added):

“(f) State authority. A State may adopt regulations *not inconsistent with the Commission's rules* to preserve and advance universal service. Every telecommunications carrier that *provides intrastate telecommunications services* shall contribute, on an *equitable and nondiscriminatory basis*, in a manner determined by the State to the preservation and advancement of universal service in that State. A State may adopt regulations to provide for additional definitions and standards to preserve and advance universal service within that State only to the extent that such regulations adopt additional *specific, predictable, and sufficient mechanisms* to support such

¹⁸⁰ 47 U.S.C. 254 (d). The Commission also has the option to require other providers of interstate telecommunications to contribute to the fund.

definitions or standards that *do not rely on or burden Federal universal service support mechanisms.*”¹⁸¹

(2) Problems for the States

Subsection 254(f) created three kinds of legal problems for the states. First, it purported to authorize programs that were already in place in several states. For Congress to say that a state “may” do something might imply that the states could not do that thing previously. This error might be harmless except for the fact that the new authorization came with many limitations on the operation and effect of those state programs. It is possible to read subsection 254(f) as prohibiting state universal service programs, of any vintage or form, except as they comply with the standards in the new subsection 254(f).

The second legal problem was that Subsection 254(f) imported a version of dual jurisdiction theory. Federal program must collect funds from telecommunications providers who engage in “*interstate* telecommunications services.”¹⁸² Similarly, state universal service funds must collect funds from every “telecommunications carrier who provides *intrastate* telecommunications services”¹⁸³ Adopting a variant of the dual jurisdiction theory, the statute thus spoke to *who* must contribute, but not to the question of *how much* those contributions should be.

The third problem with Subsection 254(f) was the vague language it used to limit state actions. Each of the three sentences in subsection 254(f) contains a potential restriction on state universal service programs or “mechanisms:” In summary:

1. A state rule cannot be inconsistent with the Commission's rules.
2. Contributions must be “equitable and nondiscriminatory.”

¹⁸¹ 47 U.S.C. § 254(f) (italics added).

¹⁸² 47 U.S.C. § 254)(d) (italics added).

¹⁸³ 47 U.S.C. § 254(f) (italics added). The FCC has drawn a critical distinction between two statutory terms, “telecommunications” and “telecommunications services.” Traditional telephone service is both. Broadband based Internet service (cable-based or otherwise), is now an “information service,” which means it is “telecommunications,” but not a “telecommunications service.” VoIP telephone service is “telecommunications,” but the FCC has never announced a view on whether VoIP is a “telecommunications service” or an “information service.”

3. Support mechanisms must be “specific, predictable, and sufficient.”
4. Mechanisms cannot rely on or “burden” federal universal service support mechanisms.

These four limitations create numerous pitfalls for unwary states.¹⁸⁴ Several of the terms are broad and invite judicial interpretation. Perhaps the most hazardous are the “equitable and nondiscriminatory” requirement (#3) and the prohibition against “burdening” federal mechanisms (#5).

(3) Court Decisions Affecting the Contribution Bases of Federal and State Programs

Soon after the act passed in 1996, the Fifth Circuit Court of Appeals in Texas heard a broad appeal from the FCC’s first interpretive order. One issue in the case related to the basis for federal universal service contributions.¹⁸⁵ The FCC had claimed the right, only for some of its universal service programs, to impose a charge on the intrastate revenues of interstate carriers. The court’s decision invalidated this rule, holding that intrastate revenues could not be charged for any federal universal service program. The federal programs, the court said, had “interstate costs, “and those costs must be funded solely from surcharges on interstate revenues.¹⁸⁶ The court’s legal basis was the provision of the 1934 Communications Act that expressed the dual jurisdiction theory for rate regulation. Allowing the FCC to surcharge intrastate revenue, the Court reasoned, would violate that jurisdictional divide.¹⁸⁷ In short, the Fifth Circuit converted a statute that specified “*who must pay*” into a statement about “*how much must be paid*.”

¹⁸⁴ The burden restriction applies to “federal support mechanisms,” a term which has been applied not merely to support distribution algorithms, but also to the rules that define contributions.

¹⁸⁵ *Texas Office of Public Utility Counsel v. FCC*, 183 F.3d 393 (1999).

¹⁸⁶ The court invalidated an FCC rule requiring companies to recover their federal USF payments in high wholesale or “access” charges. In the court’s view, that policy would have violated the “explicit” support requirement in the statute and would have shifted “the costs of intrastate universal service to the interstate jurisdiction.” *Id.* at 425.

¹⁸⁷ *Id.* at 447. That statute prohibits the FCC from making a “charge ... in connection with intrastate communications service.” 47 U.S.C. § 152(b).

In the same decision the Fifth Circuit interpreted the “equitable and nondiscriminatory” language of 254(f).¹⁸⁸ The complaining party here was a satellite company that had a large international telephone business but very little domestic interstate revenue. If the federal USF charge were applied to both revenue streams as the FCC proposed, the USF surcharge would have exceeded the company’s total interstate domestic revenue. In this unusual circumstance the court held the FCC rule violated the “equitable and nondiscriminatory” requirement.¹⁸⁹

Largely as a result of this 1999 court decision, the federal contribution base has become problematic, with an ever shrinking base even as program expenditures increased.¹⁹⁰ Only 17 percent of the revenue reported to the FCC in 2018 by telecommunications carriers (wireline, wireless, satellite, and VoIP) was reported as “interstate and international revenues.” The contribution rate has increased from 6.7 percent in 2001 to 31.8 percent in the first quarter in 2020.¹⁹¹

The Fifth Circuit came back to these issues again in 2004 when it essentially created a matching bookend to the 1999 decision. In accord with the terms of subsection 254(f), the state of Texas had created a USF program and required contributions only from carriers providing intrastate services. But, like Vermont, Texas also decided that the amount of the contribution should be a fixed percentage of both intrastate *and interstate* revenues. Once again the Fifth Circuit reversed. The court held the Texas law would put “multijurisdictional carriers at a distinct competitive disadvantage compared with the pure interstate carriers” and therefore violated the “equitable and nondiscriminatory” requirement of subsection 254(f), item #3 on the above list.¹⁹²

¹⁸⁸ The same “equitable and nondiscriminatory” requirement that applies under subsection 254(f) to state programs also applies under subsection 254(d) to federal programs.

¹⁸⁹ *Texas Office of Public Utility Counsel v. FCC*, 183 F.3d 393, 433-35 (1999). The court’s analysis compared to two carriers, one of which hypothetically provided only interstate services and would have been paying a lower overall combined state and federal rate.

¹⁹⁰ The revenue contribution base declined from \$72 billion in 2005 to \$51 billion in 2018. FCC, *Universal Service 2016 Monitoring Report and 2019 Monitoring Report*, Table 1.5. Expenditures increased from \$1.5 billion in 2001 to \$8.5 billion in 2018. *Id.*, Table 1.10.

¹⁹¹ *Federal State Joint Board on Universal Service*, CC Docket No. 96-45, Public Notice, Proposed First Quarter 2021 Universal Service Contribution Factor, DA 20-1480, released: December 14, 2020.

¹⁹² *AT&T v. Public Utility Comm’n of Texas*, 373 F.3d 641, 647 (2004). The court considered that the USF contribution paid by a carrier who provided only interstate services would be lower than the rate

An earlier federal district court case from Oregon had reached a similar result, but for a different reason. Oregon had imposed a surcharge on intrastate and interstate telecommunications services provided to an Oregon service address. The Oregon court found that this charge “relied on” federal mechanisms and improperly “burdened” the federal collection mechanism that assesses interstate revenue, each in violation of the third sentence of 254(f). The court explained that because the Oregon surcharge relied “on interstate revenues also assessed to contribute to the federal universal support fund,” that in itself burdened the federal universal support mechanisms,” violating item #5 in the above list.¹⁹³ Interestingly, the Oregon court also held that the Oregon surcharge was not inequitable or discriminatory, thereby disagreeing with the opinion later expressed in the Fifth Circuit’s 2004 decision.

The South Carolina Supreme Court reached the opposite result, affirming a universal service surcharge on both interstate and intrastate telecommunications revenues.¹⁹⁴ The court acknowledged that the state’s surcharge on interstate service did burden interstate carriers, but the court drew a distinction between a burden on carriers and a burden on federal support mechanisms, noting that they were “not necessarily synonymous.”¹⁹⁵

To summarize, the law remains somewhat unclear regarding USF provisions, like Vermont’s, that require contributions based on total retail revenues. One state court has sustained such a state law. Two federal courts have invalidated such laws, but for disparate reasons. In short, there is no clear consensus about the relevant legal standards.

Unlike the laws in Texas, Oregon and South Carolina, Vermont’s USF law was never challenged. The likely reason was that the VUSF was enacted under the state’s sovereign taxing authority rather than delegated authority under 47 U.S.C. § 254(f). In addition, the Vermont statute followed the constitutional prescriptions stated in the *Goldberg* decision.

Vermont’s current universal service program will probably remain free from preemption challenges, as it has been since 1996. Nevertheless, in this ambiguous legal environment, if

paid by a similar carrier who also provided intrastate services. The court did not reach other possible objections to the Texas surcharge, such as whether it would be rely on or burden federal mechanisms.

¹⁹³ *AT&T Commun. Inc. v. Eachus*, 174 F.Supp. 1119, 1124-25 (D. Oregon, 2001). The court’s analysis explained that the ordinary meaning of “rely on” encompasses “depends on.” Thus, where the Commission’s regulations ‘depend on’ the same interstate revenues utilized by the federal universal service fund program, it improperly “relies on” federal universal service support mechanisms. *Id.* at 1124.

¹⁹⁴ *Office of Regulatory Staff v. Public Service Comm’n.*, 647 SE.2d 223 (S.C. 2007).

¹⁹⁵ *Id.* at 231.

Vermont makes substantial changes to its universal service program, there is some risk that one or more provisions of subsection 254(f) might be applied to invalidate some or all of the VUSF support mechanism.

c. Connection Fees and the Universal Service Joint Board 2019 Recommendation

The Federal-State “Joint Board” for universal service consists of three FCC commissioners, four state commissioners and a state public advocate. The purpose of a joint board is to provide guidance to the FCC on matters of interest to both state and federal regulators. The FCC requests guidance from a joint board by making a “referral order.”

In 2014, the FCC referred to the Universal Service Joint Board the issue of whether to modify the universal contribution methodology.¹⁹⁶ The FCC noted that the current method had become increasingly difficult to administer and requested “that the Joint Board consider, in making its recommendations, how to further the goals of improving the efficiency, fairness and sustainability of the contribution system.”¹⁹⁷ In October of 2019, the state members of the Joint Board (State Members) filed a “recommended decision” with the FCC that responded to the referral.¹⁹⁸

The State Members found that best way to enhance the sustainability of the fund was to expand the federal contribution base to include broadband services. The main reason was that the universal service fund is now supporting broadband networks, and consumers are migrating away from voice grade services and towards broadband services.¹⁹⁹

The State Members also noted that the current system is unduly complex. Bundled service packages (such as telephone, cable and Internet) typically include services subject to the federal universal service charge and other services not subject to the charge. The current system thus requires rules for separating the bundled revenues for universal service reporting.²⁰⁰ The

¹⁹⁶ *Federal State Joint Board on Universal Service*, WC Docket No. 96-45, *Order*, FCC 14-116, released: August 7, 2014, (“*Referral Order*”).

¹⁹⁷ *Referral Order* ¶ 3.

¹⁹⁸ *Federal State Joint Board on Universal Service*, WC Docket No. 96-45, *Recommended Decision*, released October 15, 2019, (*Recommended Decision*).

¹⁹⁹ *Id.* ¶ 14.

²⁰⁰ *Universal Service Contribution Methodology*, WC Docket No. 06-122, *Further Notice of Proposed Rulemaking*, FCC 12-46, released: April 30, 2012, ¶ 23.

FCC rules on this topic are complex and difficult to enforce. The State Members observed that expanding the types of services included in the contribution base would simplify those rules.²⁰¹

The State Members also said that expanding the base would improve fairness. Commenters had suggested that all carriers that rely on a broadband network should contribute to the cost of maintaining those networks. The current regime allows broadband carriers to avoid or minimize their support for broadband networks. If all of the services a carrier provides were part of the contribution base, the ability to avoid contribution would be significantly reduced.²⁰²

The State Members also investigated alternatives. One option was to base contributions on the number of connections to the network and the number of telephone numbers in use. The State Members recommended:

- Residential customer contributions shift from revenues to connections.²⁰³ A wireless phone would have two connections, one for the voice service and another for the Internet connection. Measuring contributions by connection is administratively easy to use and enhances the sustainability of the fund because the number of connections is increasing as the population grows and as more customers use advanced technologies.
- Business services continue to contribute on the existing base, retail interstate revenue. The State Members did suggest expanding the revenue base, however, to include virtual private networks, video and web conferencing, and other broadband services revenues.²⁰⁴

If the FCC had accepted the State Members' recommendation, broadband internet service would today be contributing to federal universal service programs. To date, the FCC has neither accepted the state member recommendation nor has it asked for comments on the recommendation.

Not only did the FCC ignore the State Members' recommendation from 2019, it has repeatedly warned the states against using broadband connections as a basis for funding their own universal service programs. In a 2015 order the FCC explicitly warned:

²⁰¹ *Recommended Decision*, ¶ 16.

²⁰² *Id.*, ¶ 15.

²⁰³ *Id.*, ¶¶ 22-23.

²⁰⁴ *Id.*, ¶ 24.

“With respect to universal service, we conclude that the imposition of state-level contributions on broadband providers that do not presently contribute would inconsistent with our decision at the present time to forbear from mandatory federal USF contributions, and therefore we preempt any state from imposing any new state USF contribution on broadband.”²⁰⁵

Three years later, when a different political party was in control, the FCC said essentially the same thing. In the *Restoring Internet Freedom* order issued in 2018, the FCC concluded that the Internet access service should be ruled by only federal regulations, and therefore the FCC would preempt any state action that was inconsistent with current federal regulations.²⁰⁶

Vermont should take this FCC warning seriously. Federal law gives the FCC several possible grounds to invalidate almost any novel state universal service structure. If Vermont were to enact a connection charge on Internet connections, litigation before the FCC, and possibly a federal appeals court is likely.

d. Recent TRS Developments

Telecommunication relay service (“TRS”) is a communication service that allows a person with a hearing or speech impairment to communicate with another person without such an impairment.²⁰⁷ Recent FCC decisions on the funding of these TRS programs suggest that the FCC’s commitment to traditional dual-jurisdiction theory may be weakening, at least insofar as it applies to financing public benefit programs.

The Communications Act of 1934, as amended by the Americans with Disabilities Act of 1990, requires the FCC to ensure that interstate and intrastate TRS services are available.²⁰⁸ Unlike other kinds of communications, the FCC has the authority to regulate intrastate TRS service by communications providers and to supervise state actions regarding the provision of

²⁰⁵ *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, *Report and Order on Remand*, Declaratory Ruling, and Order, FCC 15-24, released: March 12, 2015, ¶ 432.

²⁰⁶ *Restoring Internet Freedom*, WC Docket No. 17-108, *Declaratory Ruling, Report and Order, and Order*, FCC 17-166, released: January 4, 2018, ¶¶ 194-195.

²⁰⁷ The person with the impairment communicates with an operator using specialized equipment. The operator then relays the message to the non-impaired person. The operator also relays messages in the other direction.

²⁰⁸ 47 U.S.C. § 225(b)(1)

TRS services.²⁰⁹ States with TRS programs have to provide the FCC with documentation that describes the type of services they provide, the rules associated with the services and the funding mechanism that supports the services.²¹⁰ The FCC reviews the documentation and certifies that the program meets the requirements of the Act.²¹¹

Historically, TRS was first provided through the public switched telephone network using text telephones (TTYs).²¹² A second service, Speech to Speech (STS), is designed for persons with a speech disability and uses specialized speech interpreters. A third service, Captioned Telephone (CTS) service displays the words of the non-impaired person on a screen so that the impaired person can read the conversation. All state TRS programs provide TTY and STS services – and most states provide CTS – but only when the originating and terminating locations are in the same state.

The FCC also operates parallel interstate TTY, STS and CTS programs for calls that do cross state lines. The FCC finances this by requiring interstate carriers to pay a fee based on their interstate and international revenue.²¹³

Beginning in 2000, the FCC began using the interstate TRS fund to provide still more services. It provided a new kind of video option that has no state analogue. Likewise, it provided a new IP-CTS service, a captioned telephone service for customers using the internet. When it created these new services, the FCC asserted that its funding mechanism was interim.²¹⁴ Indeed, in 2019 the FCC did change that funding mechanism. It divided its various programs into two separate contribution bases.

²⁰⁹ 47 U.S.C. § 225(b)(2)

²¹⁰ 47 U.S.C. § 225(f)(1)

²¹¹ 47 U.S.C. §225(f)(2). The FCC cannot withhold a certification because it disagrees with the method the state uses to fund the program. 47 U.S.C. §225(f)(3).

²¹² A TTY uses a keyboard for typing messages and a screen for displaying the message. An operator reads the message to the non-impaired person and types the messages from the non-impaired person to the impaired person.

²¹³ *Telecommunications Relay Services, and The Americans with Disabilities Act of 1990, Third Report and Order*, MM Docket No. 90-571, FCC 93-357, rel. July 20, 1993.

²¹⁴ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Report and Order and Further Notice of Proposed Rulemaking*, CC Docket No. 98-67, FCC 00-56, rel. March 6, 2020.

- The traditional public switched telephone network services and video and Internet Relay services are supported in the traditional way, by surcharging only interstate and international revenue.²¹⁵
- To support IP-CTS, the FCC decided to use an expanded contribution base which also includes intrastate revenue. The FCC also proposed in the future to transfer other new video and other Internet Protocol services to this expanded contribution base.²¹⁶

The FCC acknowledged that the federal TRS statute specifically constrains it to use only interstate and international revenue, and likewise allows the states to use intrastate revenues to support intrastate services. But in cases where there are only federal programs, with no state analogue, the FCC also found that statute is inapplicable. Instead, for programs where there are only federal versions, such as TRS video and Internet services, the FCC found that it has discretion to use a broader base that includes intrastate revenues.²¹⁷

The FCC's rationale seems to be a crack in the foundation of dual jurisdiction theory. Particularly if the FCC now goes forward as planned with expanding this new TRS revenue base, it will demonstrate that the dual jurisdiction theory that underlay telephone regulation in the 20th century has now become outmoded and is far less compelling for limiting public benefit programs. Nevertheless, the dual jurisdiction concept, codified in section 152(b) and elsewhere, remains deeply embedded in American law.

D. Barriers to Telecommunications Entry

Section 253 of the TA-96 prohibits states and local governments from taking any action that would bar entry into interstate or intrastate telecommunications markets. This is known as the “barriers to entry” prohibition.²¹⁸ The statute also contains a notable “safe harbor” exception for right-of-way management:

²¹⁵ *Misuse of Internet Protocol (IP) Captioned Telephone Service, Report and Order*, CG Docket No. 13-24, FCC 19-188, rel. November 25, 2019.

²¹⁶ *Telecommunications Relay Services and Speech-to-Speech services for Individual with Hearing and Speech Disabilities, Notice of Proposed Rulemaking*, CG Docket No. 03-123, FCC 20-161, rel. November 20, 2020.

²¹⁷ *Id.*, ¶ 14.

²¹⁸ Vermont is in the second federal judicial circuit. In that circuit, a telecommunications provider can bring a private right of action claiming injury under section 253. *TCG New York, Inc. v. City of White Plains*, 305 F.3d 67 (2d Cir. 2002).

“(c) State and local government authority. Nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.”²¹⁹

If a telecommunications provider were to challenge a Vermont enactment (such as a pole attachment charge) on the ground that it is a barrier to entry, subsection (c) can provide a basis for defense. First, the state would have to show that its charge is competitively neutral.

Second, the state would have to show that the pole attachment charge is “fair and reasonable compensation” for use of the public rights-of-way. In evaluating this question, the courts look at the “totality of the circumstances,” including the extent to which the telecommunications provider occupies a public right-of-way and whether the charge imposed is so excessive that it is likely to render doing business unprofitable. The courts also recognize that the reasonable compensation requirement was intended by Congress “essentially to prevent monopolistic pricing by towns” that otherwise could use franchising fees to bar competitive entry by new telecommunications providers, thus frustrating the purpose of the 1996 Act.²²⁰

At least one federal court has upheld a sizeable local gross revenue charge as fair and reasonable.²²¹ Other federal courts have struck down local right-of-way based charges, but commonly on other grounds, such as that local officials had claimed wide discretion to entirely reject an application to use the public rights-of-way or they had applied stringent franchising requirements selectively.²²²

²¹⁹ 47 U.S.C. § 253(c).

²²⁰ *TCG New York, Inc. v. City of White Plains*, 305 F.3d 67, 79 (2d Cir. 2002).

²²¹ *TCG Detroit v. City of Dearborn*, 977 F. Supp. 836 (E.D. Mich. 1997), *aff'd*, 206 F.3d 618 (6th Cir. 2000) (upheld city ordinance requiring proposed telecommunications provider to pay franchise fee of 4 percent of gross revenue for the privilege of laying 27 miles of fiber optic cable within city limits).

²²² *TCG New York, Inc. v. City of White Plains*, 305 F.3d 67 (2d Cir. 2002) (court declined to decide whether local franchise fee of 5 percent of gross revenues was fair and reasonable); *TC Systems, Inc. v. Town of Colonie*, 263 F.Supp.2d 471 (N.D.N.Y. 2003) (town ordinance was selectively applied to new entrant).

E. Cable Television

The Cable Communications Policy Act of 1984 (Cable Act) established a variety of policies for cable companies and for how they would be regulated at the state and federal levels. The topics included ownership, channel usage, franchise provisions and renewals, subscriber rates and privacy, obscenity and lockboxes, unauthorized reception of services, equal employment opportunity, and pole attachments. The Cable Act also defined the jurisdictional boundaries among federal, state and local authorities for regulating cable television systems. The 1984 act has been amended several times. Today, cable television rates are largely deregulated, except for the “basic service tier. The federal statutes are found in “Title VI” of the Communications Act.²²³

Title VI requires a new cable operator to obtain a local or state franchise.²²⁴ In Vermont, the Legislature has assigned cable television and franchise regulation to the Vermont Public Utility Commission.²²⁵ This makes the Vermont PUC, in the federal jargon, the “franchising authority” (FA).²²⁶ Under federal law, FAs may, within limits, select one franchisee or multiple franchisees for each area.²²⁷ The FA can also impose other requirements, including public access requirements and franchise renewal standards, but once again these are subject to federally set limits. Where a cable company also operates a telecommunications service, the FA is limited in the regulations it may impose on that operation.²²⁸

Federal statute allows FAs to charge a “franchise fee” for the right to operate a cable system in a franchise area, and the cable company can list any such fee separately on the consumer’s bill.²²⁹ Today, a major financial burden of Vermont cable company franchises is to

²²³ 47 U.S.C. §§ 521-573.

²²⁴ 47 U.S.C. § 541(b)(1).

²²⁵ 30 V.S.A. § 502(b). In many other states, this authority is held by county or municipal governments.

²²⁶ The FCC also frequently refers to Local Franchising Agents (LFAs), which exist in states which allow counties and municipalities to be the franchising agents.

²²⁷ 47 U.S.C. § 541(a)(1).

²²⁸ 47 U.S.C. § 541(a)(3).

²²⁹ 47 U.S.C. § 541(f).

support PEG access by payments to Access Media Organizations (AMOs).²³⁰ Unlike some states, all franchise fee money in Vermont is applied to PEG access.

The franchise fee for operational costs cannot exceed 5 percent of the company’s revenue from cable operations.²³¹ Revenue that the cable company may earn from its telephone and internet operations do not form part of the base for the 5 percent calculation. This rule has been criticized more frequently in recent years. Many cable companies got their first franchises at a time when cable television was their only service. The franchise surcharge of 5 percent applied to substantially all of the company’s revenue and earned access to the public rights-of-way. Later, when cable companies started offering other kinds of services, they used the same facilities to expand their earnings, but the franchise fee is still anchored to cable operations. In this view, the cable companies have obtained cost-free access to public rights-of-way for their new internet and telephone operations. Today the total “franchise fee” for PEG support purposes is considerably below 5 percent of the cable companies’ total revenue.

Some payments required of cable companies are not considered franchise fees. Notably, “any tax, fee or assessment of general applicability” is not counted toward the limit on franchise fees.²³² The state Sales and Use Tax is an example. Likewise, “capital costs” for PEG access are not considered franchise fees.²³³

The FCC has interpreted this statutory scheme by adopting rules and issuing orders. Two orders were issued in 2007,²³⁴ one in 2015,²³⁵ and the last, the “*Third Order*,” in 2019.²³⁶ The FCC’s orders have been controversial, and portions of past orders have been reversed on

²³⁰ The PEG charge is usually shown separately on customers’ cable bills.

²³¹ 47 U.S.C. § 542(a).

²³² 47 U.S.C. §542(g)(2)(A).

²³³ 47 U.S.C. §542(g)(2)(B) and (C).

²³⁴ *Implementation of Section 621(a)(1) of the Cable Communications Policy Act*, 22 FCC Rcd. 5101 (March 5, 2007) (*First Order*); *Implementation of Section 621(a)(1) of the Cable Communications Policy Act*, 22 FCC Rcd. 19633 (Nov. 6, 2007) (*Second Order*).

²³⁵ *Implementation of Section 621(a)(1) of the Cable Communications Policy Act*, 30 FCC Rcd. 810 (January 21, 2015) (*Reconsideration Order*).

²³⁶ *Implementation of Section 621(a)(1) of the Cable Communications Policy Act, Third Report and Order*, FCC 19-80 (Aug. 2, 2019) (*Third Order*).

appeal.²³⁷ The FCC’s *Third Order* was also appealed, with the parties challenging many aspects of the FCC’s order.²³⁸ The appeal is ready for decision by the Sixth Circuit.²³⁹

Before the *Third Order* was issued, the FCC had established several restrictions on FAs and franchise fees. For example, business costs incidental to obtaining the franchise, such as payments for bonds or insurance, were not part of the franchise fee limit.²⁴⁰ On the other hand, donations not related to cable operations are franchise fees and have been included in the 5 percent franchise fee limit.²⁴¹ Many of these restrictions did not apply in states, like Vermont, that issue franchises at the state level.²⁴²

In addition, the rule was broadly established that cable company revenue from other operations, such as internet or telephone or telephone operations, cannot be surcharged as part of a franchise fee.²⁴³ When cable companies started offering new lines of business, such as telephone and internet, PEG revenues did not reflect that change.

The *Third Order* altered the states’ authority over cable companies in several ways, two of which are directly relevant here. First, the definition of “franchise fees” was expanded to include additional “in-kind” nonmonetary obligations. As a result, cable operators can count some new kinds of costs as part of the “franchise fee” and thus as offsets against cash payments to the AMOs:

²³⁷ E.g. *Montgomery County, Maryland v. FCC*, 863 F.3d 485 (2017 6th Cir.)

²³⁸ *City of Eugene, Ore. v. FCC*, Appeal No. 19-4162, etc., U.S. Court of Appeals for the Sixth Circuit.

²³⁹ Briefing was completed in October, 2020. The case had not been decided as of February 1, 2021.

²⁴⁰ 47 U.S.C. § 522(g)(2)(D).

²⁴¹ The FCC’s original in-kind rules were sustained in *Alliance for Community Media et al. v. FCC*, 529 F.3d 763 at 782-83 (6th Cir. 2008), *cert. denied*, 557 U.S. 904 (2009). The FCC cited several examples of in-kind contributions at the time, including one case where a city required the cable company to install a traffic light control system and another where the city required the company to fund a \$50,000 scholarship. *First Order* ¶ 105.

²⁴² *Reconsideration Order* ¶ 7.

²⁴³ *Third Order* ¶ 76.

- Where a cable company must provide free or discounted cable service to a public building, the value is part of the franchise fee.²⁴⁴
- Equipment, services, and similar contributions for PEG access facilities are “cable-related, in-kind contributions” and thus are franchise fees unless they are capital contributions.²⁴⁵
- Channel capacity given to PEG organizations is a franchise fee. However, the FCC did not immediately implement this new policy because it did not yet have a sufficient record to determine the value of this channel capacity.²⁴⁶
- PEG capital costs and the costs of complying with build-out and customer service requirements continue to be excluded from franchise fees.²⁴⁷

Second, under the so-called “mixed use rule,” franchising authorities cannot regulate or impose extra fees on the telecommunications services offered by cable companies.²⁴⁸ The FCC preempted any miscellaneous state fee on a cable operator that would exceed the 5 percent limit, “under the guise of regulating “non-cable services” or “otherwise restricting a cable operator’s construction, operation, or management of facilities in the rights-of-way.”²⁴⁹ The FCC clarified that:

“any assessment on a cable operator for constructing, managing, or operating its cable system in the rights-of-way is subject to the five-percent cap—even if other non-cable service providers (*e.g.*, telecommunications or broadband providers) are subject to the same or similar access fees.”²⁵⁰

²⁴⁴ *Third Order* ¶ 26. The FCC order did not explicitly state that free or discounted broadband *Internet* service is also subject to the franchise fee offset. However, the reasoning it applied to cable service is broad enough to also apply it to Internet service.

²⁴⁵ *Third Order* ¶ 28.

²⁴⁶ *Third Order* ¶ 42.

²⁴⁷ 47 C.F.R. § 76.42(b).

²⁴⁸ 47 C.F.R. § 76.43 (states “may not regulate the provision of any services other than cable services offered over the cable system of a cable operator, with the exception of channel capacity on institutional networks”).

²⁴⁹ *Third Order* ¶ 83.

²⁵⁰ *Third Order* ¶ 92.

The FCC’s decision was appealed, and the appellants challenged many aspects of the FCC’s order.²⁵¹ If the appeals court affirms the *Third Order*, AMO revenues could be reduced because of the in-kind ruling, a topic discussed in more detail in the main report. Affirmance could also limit the net revenue to be gained from any new pole attachment charge, a proposal that is also discussed in the main report.²⁵²

F. Internet Tax Freedom Act

1. History

The Internet Tax Freedom Act (ITFA) prohibits any state or political subdivision from imposing any tax on “internet access.”²⁵³ Internet access is defined as any “service that enables users to access content, information, electronic mail, or other services offered over the Internet.”²⁵⁴ The definitions are straightforward. In short, the ITFA says Vermont cannot tax any of the internet services widely sold by landline telephone companies, wireless telephone companies, cable companies, wireless ISPs, and satellite communications companies.

The ITFA prohibition thus serves as a potential brake on possible revenue sources relevant to this study, including options relating to sales taxes, excise taxes, and the Vermont Universal Service Fund.

The ITFA was first signed into law in 1998, when the internet was in its infancy. Originally, it was in force for 10-years. But the ITFA was renewed several more times before being enacted permanently in 2016. A recent amendment to ITFA also ended the ‘grandfather’ rights for the six states that in 1988 had been allowed to continue taxing internet access.

²⁵¹ *City of Eugene, Ore. v. FCC*, Appeal No. 19-4162, etc., U.S. Court of Appeals for the Sixth Circuit. Briefing was completed in October, 2020. The case had not been decided as of February 1, 2021.

²⁵² If a pole attachment charge were enacted in Vermont, the more cautious route would be to read the FCC preemption broadly and allow cable companies to offset their franchise payments to PEG in equal dollar amounts to their payments under the new pole attachment charge.

²⁵³ Internet Tax Freedom Act (ITFA) § 1101(a) (1) (codified as a note following 47 U.S. Code §151). The ITFA also prohibits “multiple or discriminatory” taxes on electronic commerce.” ITFA § 1101(a)(2). Multiple taxes occur when two jurisdictions tax items by electronic means, without offering a credit for taxes paid in the other jurisdiction. ITFA § 1105(6) (A).

²⁵⁴ ITFA § 1105(5).

2. Exceptions

The ITFA contains possibly important exceptions. First, the ITFA applies only to “taxes.” A tax is defined as a “charge imposed by any governmental entity for the purpose of generating revenues for governmental purposes.” But the ITFA also excludes any “fee imposed for a specific privilege, service, or benefit conferred.”²⁵⁵

This exception, on its face, it suggests that the Vermont could expand franchise fees on cable providers and other telecommunications providers. As shown in the section III above, however, a different federal law limits cable franchise fees solely to cable television services. The FCC may also use its universal service powers to preempt any franchise fee imposed on the internet service of a cable company.

In one case, a state court held the ITFA did not prohibit a cable company franchise agreement that required payment of franchise fees on revenue derived from cable modem services. The franchise fee was not a tax, the court reasoned, but rather a contractual compensation for the privilege of using the public ways to operate a franchise.²⁵⁶ Until this holding is adopted by a few other courts, however, we recommend caution in relying on it.

The second possibly important exception is for 911 programs. The ITFA explicitly allows a state to impose and collect a tax:

“on a service used for access to 911 or E-911 services, of any fee or charge specifically designated or presented as dedicated by a State ... for the support of 911 or E-911 services if no portion of the revenue derived from such fee or charge is obligated or expended for any purpose other than support of 911 or E-911 services.”²⁵⁷

²⁵⁵ The ITFA allows “any franchise fee or similar fee imposed by a State or local franchising authority, pursuant to section 622 or 653 of the Communications Act of 1934 (47 U.S.C. 542, 573), or any other fee related to obligations or [sic] telecommunications carriers under the Communications Act of 1934 (47 U.S.C. 151 et seq.). ITFA § 1105(8) (B).

²⁵⁶ *City of Chicago v. Comcast Cable Holdings, L.L.C.*, 375 Ill. App. 3d 595, 872 N.E.2d 368 (2007), as modified, (Aug. 23, 2007) and judgment rev'd on other grounds, 231 Ill. 2d 399, 900 N.E.2d 256 (2008).

²⁵⁷ ITFA, § 1107(b).

Under this exception Vermont could enact a state tax or charge on internet access, so long as the proceeds are segregated and are used solely to fund the E-911 program. We discuss this exemption in more detail in the main report.

A third exception is for universal service. It provides:

Nothing in this Act [probably means "this title"] shall prevent the imposition or collection of any fees or charges used to preserve and advance Federal universal service or similar State programs . . . authorized by section 254 of the Communications Act of 1934.²⁵⁸

This exception, on its face, it suggests that the Vermont Universal Service Fund base could be expended to include internet access. The key condition, however, is that the state program must be “authorized” by section 254.

Any attempt to use the universal service exception would, in our view, create substantial litigation risk. Any new tax or charge would have to avoid the many pitfalls built into section 254(f). The FCC has great influence in these matters and, as discussed above, the FCC’s current attitudes about state programs make compliance with federal universal service requirements a hazardous undertaking. Several states have failed in that quest, and we do not recommend attempting an internet service tax in reliance on the universal service exception.

G. FCC Preemption of Broadband Internet Access

The Telecommunications Act of 1996 passed at a time when the internet was still a relatively new phenomenon. The main congressional purpose was to open up local exchange telephone services to competition, but that purpose related to the existing public switched network. Congress was apparently unsure what kinds of regulation, if any, should apply to this new worldwide communications network that, for the first time, wasn’t owned by traditional utilities.

Congress includes some definitions in the 1996 act which later assumed greater importance. Two important terms were “telecommunications service” and “information service.” A telecommunications service is at least nominally subject to traditional “common carrier” regulation at the federal level. But an information service is either unregulated or, at most, subject to some kind of “ancillary” jurisdiction arising from other parts of the federal statute.

²⁵⁸ ITFA § 1107(a).

In the ensuing years, the FCC issued a number of decisions trying to clarify how much regulation would apply to internet services, and at what government level. Prior to 2003, the FCC regulated Internet service as a special access telephone service. Starting in 2003 regarding cable modem service, and then in 2004 regarding wireline telecommunications providers, the FCC asserted broad, preemptive jurisdiction over the broadband version of internet access that we know today. The FCC's logic had three steps. First, the FCC asserted that basic internet access service is an "information service" and not a "telecommunications service." This removed internet access from traditional forms of utility regulation. Second, the FCC asserted that this new information service was preemptively "interstate."²⁵⁹ Finally, the FCC asserted that it would choose not to actually regulate the internet, except in very minor "light-handed" ways, and that states were likewise preempted from such regulation.²⁶⁰

The FCC summarized these policies in its 2010 *Open Internet Order*,²⁶¹ which was partially vacated on appeal. Before the underlying issues were fully resolved, President Obama appointed new FCC members. The FCC then reversed course and found that broadband internet service was a "telecommunications service" after all, and it was subject to at least some the forms of regulation that applied to public utilities.²⁶² The so-called "*Title II Order*" in 2015 again imposed some limited regulations on internet service providers, including "bright-line" rules prohibiting blocking, throttling, and paid-prioritization.

1. The Restoring Internet Freedom Order

In 2017, under President Trump, the FCC again reversed course. The *Restoring Internet Freedom* order asserted once again that "broadband internet access service"²⁶³ is an "information

²⁵⁹ For example, in 2005 the Supreme Court sustained an FCC decision ruling that cable modem broadband internet service was an "information service" and therefore not subject to mandatory common carrier regulation. *Nat'l. Cable & Telecomm. Ass'n. v Brand X Internet Svcs.*, 545 U.S. 967 (2005).

²⁶⁰ E.g. Michael K. Powell, Chairman, FCC, *Preserving Internet Freedom: Guiding Principles for the Industry, Remarks at the Silicon Flatirons Symposium* (Feb. 8, 2004), https://apps.fcc.gov/edocs_public/attachmatch/DOC-243556A1.pdf.

²⁶¹ *Preserving the Open Internet; Broadband Industry Practices, Report and Order*, GN Docket No. 09-191, WC Docket No. 07-52, 25 FCC Rcd 17905 (2010).

²⁶² *Protecting and Promoting the Open Internet, Report and Order on Remand, Declaratory Ruling, and Order*, WC Docket No. 14-28, 30 FCC Rcd 5601 (2015) (*Title II Order*).

²⁶³ The order defined "broadband internet access service" as "the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental

service.”²⁶⁴ The order applied to all technology platforms, including broadband provided by cable television platforms.²⁶⁵

The 2017 order also claimed broad preemptive effect over state regulation of the internet. The FCC asserted a national need for a “uniform set of federal regulations, rather than [for] a patchwork that includes separate state and local requirements.” Probably the best summary is that the order imposed a “preemptive federal policy of nonregulation.”²⁶⁶ The FCC asserted that it was preempting:

“... any state or local measures that would effectively impose rules or requirements that we have repealed or decided to refrain from imposing in this order or that would impose more stringent requirements for any aspect of broadband service that we address in this order.”²⁶⁷

The historical FCC vacillations about internet regulation are of interest mainly to internet service providers and the companies that provide content over the internet. The main issues are, for example, whether an internet service provider can block a customer’s access to lawful content. But the 2017 order also had major implications for state regulatory and taxing policies. As to state regulation of broadband, the FCC said it was not disturbing the:

“...states’ traditional role in generally policing such matters as fraud, taxation, and general commercial dealings, *so long as the administration of such general state laws does not interfere with federal regulatory objectives*.... We appreciate the many important functions served by our state and local partners, and we fully expect that the states will continue to play their vital role in protecting consumers from fraud, enforcing fair business practices, for example, in advertising and billing, and generally

to and enable the operation of the communications service, but excluding dial-up Internet access service.’ ¶ 21. The FCC excluded some services that are not offered directly to residential customers. ¶ 25.

²⁶⁴ *Restoring Internet Freedom, Declaratory Ruling, Report and Order, and Order*, WC Docket No. 17-108, FCC 17-66 (Jan. 4, 2018).

²⁶⁵ *Id.* ¶¶ 22, 25.

²⁶⁶ *Id.* ¶ 203. The FCC explained that there is an “affirmative federal policy of deregulation” which is entitled to the same preemptive effect as any federal policy that imposes regulation. *Id.* ¶ 194.

²⁶⁷ *Id.* ¶ 195.

responding to consumer inquiries and complaints *within the framework of this order.*”²⁶⁸

In all cases, however, the FCC left the preemption door partly open by recognizing that no state effort can be permitted to “impose an undue burden on or conflict with federal policy.”²⁶⁹ This meant that the FCC planned to proceed on a case-by-case basis to decide preemption questions. States are left with only uncertainty about which measures would likely be “within the framework” and which would “interfere with federal regulatory objectives.”

The FCC’s holdings with regard to state taxes and fees are more directly relevant here and were more prescriptive. Specifically with regard to state actions regarding universal service funds, the FCC was quite specific about preemption. In a footnote the FCC explained that the states are preempted from using their universal service funds to require any contributions based on broadband internet access service.²⁷⁰ Later in the main text of the order, the FCC again made a similar declaration, but this time leaving the door partly open to future change. It stated that states may not impose universal service charges on broadband “at least until the Commission rules on whether to provide for such contributions” for its own universal service programs,” which it has not yet done.²⁷¹

2. The Appeal Court’s Decision

The *Restoring Internet Freedom Order* was appealed. The Court of Appeals for the D.C. Circuit issued an opinion in *Mozilla v. FCC* in October, 2019.²⁷² The order reversed the FCC’s preemption claims and broadly rejected its authority to preempt state action. The court said that the FCC fatally lacked a lawful source of statutory authority.

The court’s preemption opinion is long and it reads like a treatise. The first inquiry, said the court, is always whether the agency has statutory authority for preemption. Here, the court stated the principle simply, that “in any area where the Commission lacks the authority to

²⁶⁸ *Id.* ¶ 196, (internal quotations omitted, italics added). The footnotes also gave examples of state laws that would not be preempted, including some torts, as well as state data gathering efforts and right-of-way safety issues.

²⁶⁹ *Id.* notes 732, 736.

²⁷⁰ *Id.* note 736.

²⁷¹ *Id.* ¶ 432.

²⁷² *Mozilla Corp. v. FCC*. 940 F.3d 1 (2019) (“*Mozilla*”).

regulate, it equally lacks the power to preempt state law.”²⁷³ This fundamental view arose again and again in the subsequent analysis.

The FCC has two kinds of regulatory jurisdiction. Express authority is found in the text of a statute that assigns the FCC specific duties or powers. For example, telecommunications services regulated under Title II of the Communications Act contains many express powers. But the FCC’s order claimed that broadband internet access was not a telecommunications service. Therefore the FCC could not claim express jurisdiction.

The other kind of regulatory jurisdiction is ancillary jurisdiction. This is the power to regulate matters that are “reasonably ancillary to the [FCC’s] effective performance of an express power.” But the same underlying problem arises here. The lack of an underlying statutory power, such as the FCC has over telecommunications services, cable services, or radio broadcasts blocked ancillary jurisdiction in this case.²⁷⁴

Next, the court discussed “impossibility” preemption. This doctrine has occasionally allowed a federal agency to preempt state action when

“(i) the matter to be regulated has both interstate and intrastate aspects; (ii) preemption is necessary to protect a valid federal regulatory objective; and (iii) state regulation would negate the exercise by the [Commission] of its own lawful authority because regulation of the interstate aspects of the matter cannot be ‘unbundled’ from regulation of the intrastate aspects.”²⁷⁵

Once again, the FCC’s justification was rejected. The FCC failed to meet the third requirement because it has no statutory authority to regulate such matters. In summary, the court said, “the “impossibility exception” does not create preemption authority out of thin air.”²⁷⁶

Next, the court discussed what the FCC had called the “federal policy of nonregulation for information services.” Once again, the court looked for but did not find any underlying statutory authority. Preemption of this sort, said the court, cannot “be a mere byproduct of self-made agency policy.” Moreover, a statutory statement of federal “policy” is not the same as a

²⁷³ *Mozilla* at 75.

²⁷⁴ *Id.* at 76.

²⁷⁵ *Id.* at 77 (internal quotation marks omitted).

²⁷⁶ *Id.* at 78.

delegation of regulatory authority.²⁷⁷ Not only did the FCC have no statutory basis to preempt, but Congress had expressly withheld authority over intrastate telecommunications in section 152(b) of the 1934 Communications Act.²⁷⁸

Finally, the court discussed “conflict preemption.” This doctrine allows a federal agency to preempt a specific state action that a state has taken. The agency must find that “under the circumstances of the particular case [the state action] stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.” But conflict preemption cannot justify the kind of broad advance preemption announced in the FCC order, without any consideration of the particular facts of a case.²⁷⁹ Since the case presented no specific facts about a particular state action, the court could not sustain the FCC’s action under the conflict preemption doctrine.²⁸⁰

In sum, the appeals court reversed all of the FCC’s preemptions in the *Restoring Internet Freedom Order*. The root of the problem was summarized near the end of the opinion. The court recognized that the FCC had the power to interpret the words “information service” in its own statute. But having found broadband to be an information service, the FCC deprived itself of its usual powers over telecommunications services. “The Commission’s power to choose one regulatory destination or another does not carry with it the option to mix and match its favorite parts of both.”²⁸¹

3. The Net Effect of the FCC’s Preemptions of Broadband

The *Restoring Internet Freedom Order* seems to have been the high water mark for FCC preemption. Henceforth, when the FCC wants to protect an industry from state regulation, it will certainly have to tie any preemption to an underlying power delegated in the Communications Act.

This does not settle the question for PEG access funding, however. In our view, substantial risk remains if Vermont were to attempt add broadband Internet to the VUSF base. While the FCC has no power to preempt a state from regulating an information service, it has

²⁷⁷ *Mozilla* at 78.

²⁷⁸ *Id.* at 80.

²⁷⁹ *Id.* at 81.

²⁸⁰ *Id.* at 82.

²⁸¹ *Id.* at 84.

less direct authority under a variety of other federal statutes, and it is common for the FCC to reach deeply into its basket of authorities when it wants to reach a particular result. For this reason, even though the *Mozilla* decision limited the FCC's preemption authority, there still is litigation risk if Vermont were to impose a direct tax on broadband access.