

taxation and regulation of public utilities

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Taxation and Regulation of Public Utilities

This paper provides information on the taxation and regulation of public utility corporations in Wisconsin. Due to their unique operating conditions, public utilities are regulated by the Public Service Commission (PSC) and subject to state taxation on the basis of revenues (gross receipts) or property value (ad valorem).

The market and regulatory structure of public utilities has significant implications for their tax treatment. The diffuse nature of infrastructure supporting utility operations, such as high-voltage transmission lines, petroleum pipelines, hydroelectric dams, railroads, optical fiber cables, and nuclear power plants, means that the location of such infrastructure is not aligned with the location of the buying power that generates its construction. Thus, utility taxation is conducted on a statewide basis in order to provide a more uniform allocation of revenues from taxation of utilities, and avoid inconsistent tax rates for property owners in municipalities with or without significant utility infrastructure. Chapter 1 discusses taxation of public utilities, including the classes of utilities subject to taxation, utility tax rates, and annual revenues to the state.

Several factors combine to make the utility sector unique compared to other markets. The nature of utility service provision results in expensive initial infrastructure investments and rapidly declining costs per customer served. The resulting "natural monopoly" means that the most cost-efficient outcome for service provision is total market control by one provider. However, total market control may lead to anti-competitive behavior and thus increased costs to consumers. In order to balance the public interest of cost-efficient utility service provision with the potentially negative effects of total market power, public utilities are subject to strict regulation by the PSC, which in exchange allows them to operate as monopolies. Chapter 2 discusses regulation of public utilities, including the powers and programs of the Commission.

In addition to ad valorem, gross receipts, sales, and corporate income/franchise taxes, public utilities and their customers are subject to various fees. These fees include a universal service fee, low-income assistance fee, and police and fire protection fee. Fees are deposited into their respective segregated (SEG) funds and used to support a variety of state programs. Chapter 3 discusses these utility fees and the programs they support.

To offset forgone revenues from local tax-exempt utility property, municipalities are provided utility aid payments by the state that are generally intended to offset the costs municipalities incur in providing local government services to those properties. Revenues from utility taxation are not specifically segregated for utility aid payments, and the allocation of utility aid is not associated with the amount of utility tax revenue collected. For further discussion of utility aid, see the Legislative Fiscal Bureau's informational paper entitled "Shared Revenue Program."

UTILITY TAXES

Historical Development

Public utilities in Wisconsin are subject to state taxation in lieu of local general property taxation. The state tax takes one of two general forms, depending on the type of company: (a) an "ad valorem" tax based on the assessed value of company property within the state; or (b) a tax or license fee based on the gross revenues or receipts of the company generated in Wisconsin. The history of these tax provisions is varied for each type of company, but generally reflects the replacement of local with state taxation.

Almost since the state's creation, a recognition has existed that certain public utility property may be difficult to tax locally. An 1854 law exempted railroads from the property tax, and, instead imposed a state tax based on the railroads' earnings. In 1904 and 1905, that tax was phased out and replaced with an ad valorem tax based on the statewide average property tax rate. The state ad valorem tax was extended to street railway companies with connected light, heat, and power operations in 1908 and to all light, heat, and power companies in 1917, provided they operated in more than one municipality. Similarly, the state preempted local taxation of conservation and regulation companies (owners of dams and reservoirs used for hydroelectric power generation), which became subject to the state's ad valorem tax in 1915. Subsequently, the tax was imposed on commercial airlines in 1946 and on gas and oil pipeline companies in 1950.

As evidenced by the state's early taxation of railroad companies, the gross revenues tax has

been an alternative to the state's ad valorem tax for most of the state's history. Starting in 1883, gross revenues license fees were imposed on telephone companies at graduated tax rates, and separate toll and exchange rates were extended in 1931. A gross revenues based tax was extended to car line companies (lessors of passenger and freight railroad cars) in 1931 and to rural electric cooperatives in 1939.

Since 1986, the basis of taxation has shifted for a number of utilities, but the two basic forms of taxation continue. The tax basis for light, heat, and power companies was changed from ad valorem to gross revenues in 1986. In the same year, telegraph companies were recognized as providing telecommunications services and were also shifted from ad valorem to gross revenues taxation. In addition, all other companies providing telecommunications services to the public (such as resellers) were subject to the gross revenues tax. The gross revenues tax on telecommunications services was subsequently discontinued, and since 1998, all telephone companies have been taxed on an ad valorem basis.

Both types of tax are administered by the Department of Revenue (DOR). Table 1 summarizes the type of utility tax, the tax base, and the tax rate that currently applies to each type of Wisconsin utility company.

Ad Valorem Group

Utilities subject to ad valorem taxation include: (a) air carrier companies; (b) conservation and regulation companies; (c) municipal electric comp-

Table 1: Summary of Utility Tax by Type of Utility

Utilities Subject to Ad Valorem Taxes	Tax Base	Tax Rate
Air Carrier Companies Conservation and Regulation Companies Municipal Electric Companies Pipeline Companies Railroad Companies	All real and personal property, including all franchises, title, and interest of the company used or employed in its operations; value as a unit	Average net property tax rate in state
Telephone Companies	Real property and tangible personal property; value within the local jurisdiction where it is located	Net property tax rate in jurisdiction where property is located
Utilities Subject to Gross Revenues Licer	nse Fee	
Car Line Companies	Gross receipts from the operation of car line equipment	Average net property tax rate in state
Electric Cooperative Associations	Gross revenues, less certain deductions, from: - the sale of electricity for resale - all other sources	1.59% 3.19
Municipal Light, Heat, and Power Companies	Gross revenues from outside the municipality, less certain deductions, from: - the sale of gas services - the sale of electricity for resale - all other sources	0.97% 1.59 3.19
Private Light, Heat, and Power Companies	Gross revenues, less certain deductions, from: - the sale of gas services - the sale of electricity for resale - all other sources	0.97% 1.59 3.19

anies; (d) pipeline companies; (e) railroad companies; and (f) telephone companies.

Air Carrier Companies. Air carrier companies are defined as those engaged in the business of transportation in aircraft of persons or property for hire on regularly scheduled flights. There were 23 air carrier companies subject to tax in 2020 including Southwest Airlines, Delta Airlines, FedEx, SkyWest Airlines, Frontier Airlines, American Airlines, United Airlines, Air Wisconsin Airlines, and Endeavor Air. Air carrier utility taxes are categorized as segregated revenue and deposited in the transportation fund. Beginning in 2001, an exemption from ad valorem taxes was extended for any air carrier that operates a hub facility in Wisconsin. Although Frontier Airlines qualified for the exemption from 2010 to 2012, no airline has qualified for the exemption since that time.

Conservation and Regulation Companies. Conservation and Regulation companies are defined as those organized under the laws of the state for the conservation and regulation of the height and flow of water in public reservoirs in the state. This is done by impounding the rivers' headwaters with dams into reservoirs during times of heavy rainfall and then releasing the stored water during subsequent periods to generate hydroelectric power. The two conservation and regulation companies currently in operation in Wisconsin are the Chippewa & Flambeau Improvement Company and the Wisconsin Valley Improvement Company, which regulate flow in the Chippewa River and Wisconsin River watersheds.

Municipal Electric Companies. Any combination of municipalities may contract to create a public corporation for the joint development of electric energy resources or for production and transmission of electric power or energy, wholly or partially, for the benefit of the municipalities. In 2020, three municipal electric companies were subject to ad valorem utility taxes: Badger Power Marketing Authority of Wisconsin, Upper Midwest Municipal Energy Group, and WPPI Energy.

Pipeline Companies. Pipeline companies are defined as those that are engaged in the business of transporting or transmitting gas, gasoline, oils, motor fuels, or other fuels by means of pipelines and that is not a light, heat, and power company. In 2020, 11 pipeline utility companies operated in Wisconsin. The largest carriers, in terms of their property value allocated to Wisconsin, were Enbridge Energy and Southern Lights, which transport oil products; and ANR Pipeline Company, Guardian Pipeline Company, Northern Natural Gas Company, and Great Lakes Gas Transmission Company, which transport natural gas.

Railroad Companies. Railroad companies are defined as those, other than a local unit of government, that own and/or operate a railroad in the state or own or operate any station, depot, track, terminal, or bridge for railroad purposes. In 2020, there were 10 railroad companies in Wisconsin subject to tax. The major carriers were Wisconsin Central Ltd, the Burlington Northern and Santa Fe Railway Company, Union Pacific Railroad, and Soo Line Railroad Company. Railroad utility taxes are categorized as segregated revenue and are deposited in the transportation fund.

Telephone Companies. Telephone companies are those that provide telecommunications services to another, including the resale of services provided by another telephone company. "Telecommunications services" means the transmission of voice, video, facsimile, or data messages. Telegraph messages are included in this definition, but cable television, radio, one-way radio paging, and transmitting messages incidental to hotel occupancy are excluded. A telephone company does not include those who operate a private shared communications system and who are not otherwise a telephone company. As described below, state law provides a different assessment procedure for telephone companies than for other ad valorem taxpayers.

In 2020, there were 174 telephone companies with a Wisconsin public utility tax assessment. Some of these companies operate local exchanges. Others offer interstate service or intrastate service between local access and transport areas. A third group consists of firms that resell long distance services. These resellers purchase and resell bulk services from another telephone company. They own and operate switching facilities, but do not have separate transmission lines. Finally, commercial mobile telephone companies provide wireless (cellular and personal communications) services. While there are 174 taxpayers, 13 companies account for more than two-thirds of the telephone company taxes. The largest telephone taxpayers are Wisconsin Bell, AT&T Wireless, and Verizon Wireless.

Determination of Tax Assessment

For all ad valorem utilities, a tax assessment is calculated by determining the full market value of the utility's taxable property and multiplying that value by a tax rate. State law excludes from taxation the value of certain property that is also exempt from general property taxes: (a) motor vehicles; (b) treatment plant and pollution abatement equipment; and (c) computers, cash registers, and fax machines.

Except for telephone companies, the tax assessment equals the statewide average net property tax rate multiplied by the utility's Wisconsin value. DOR determines that value by deriving a unit value, which is equivalent to the utility's full market value if sold as a unit, and allocating a portion of that value to Wisconsin according to statutorily established formulas. Since actual sales price data do not generally exist, this process utilizes three distinct indicators of value -- cost, capitalized income, and stock and debt -- which attempt to take account of earning potential and are weighted differently according to the most appropriate indicator for a given type of utility.

Under the cost indicator, the Department may consider four types of costs -- historical, original, reproduction, and replacement. To these costs, allowances are made for loss of value due to depreciation, obsolescence, regulatory required writeoffs, and utility plant acquisition adjustments. The capitalized income indicator is based on a company's operating income (before subtracting depreciation), capitalized at a rate based on market rates for equity, debt, and other factors. The premise behind this method is that the company is worth what it can earn. That is, the purchase price of the company can be determined by estimating expected future earnings and a required rate of return for investors. The stock and debt indicator uses the market value of these two items and other current liabilities, which together are assumed to equal the market value of property and assets. As companies diversify or form conglomerates, the stock and debt method of valuation becomes more difficult to employ. Other indicators are also considered, including company and independent appraisals, prior year assessments, shareholder reports, and comparable sales, if available. Based on these indicators, the Department uses its judgment to arrive at an estimate of fair market value.

Telephone companies have been subject to a different assessment process than other ad valorem utilities. First, telephone company values are determined within each local taxing jurisdiction where the company's property is located. Second, the value within each local taxing jurisdiction is multiplied by the net tax rate applied in that jurisdiction in the prior year under the general property tax. This procedure causes the value of intangible property to be excluded from the telephone company's value, which differs from the unit value methods for valuing property, where the value of intangible property is generally included in the utility company's assessed value.

State law requires DOR to value telephone company property using the same methods the Department uses to assess manufacturing property, including a field review of all property once every five years on a rotating basis. Generally, DOR uses a sales-based approach to assess real property and the cost-based approach to assess personal property. For real property, DOR makes annual adjustments to reflect new construction and economic changes to value. The property's value is initially determined on a company-wide basis by multiplying the property's original cost by a conversion factor that reflects price changes and depreciation. The resulting value is allocated to individual local jurisdictions based on the original cost of the personal property in each jurisdiction relative to the original cost of personal property on a company-wide basis.

2019 Act 128 provides an exemption from tax for telephone company personal property used to provide broadband internet in rural or underserved areas. The exemption applies to two types of broadband service property: (a) property located in rural areas and installed prior to January 1, 2020, that provides internet speeds of at least 25 megabits per second download and 3 megabits per second upload ("25/3"); and (b) property located in rural or underserved areas and installed after January 1, 2020, that provides internet speeds of at least 25/3, or the standard for advanced telecommunications set by the Federal Communications Commission. whichever is faster. Rural areas are defined as municipalities with populations less than 14,000 or areas outside

a federal metropolitan statistical area. Underserved areas are defined as those lacking access to at least two internet service providers offering speeds of at least 25/3. Under the Act, broadband property under "a" is exempt from tax beginning January 1, 2025, and property under "b" is exempt from tax beginning January 1, 2021.

If telephone company property is used in part for utility operations and in part for nonoperating purposes, the property's predominant use determines how it is assessed. If real or tangible personal property is used more than 50% in the business's operation as a telephone company, then DOR assesses the property and the property is exempt from the general property tax. If real or tangible personal property is used less than 50% in the business's operation as a telephone company, then the property is assessed and taxed locally.

For other companies subject to ad valorem taxation, if a structure is used in part for utility operations and in part for nonoperating purposes, the structure is generally assessed for taxation by the state at the percentage of its full market value that represents its operating purposes. The balance is subject to local assessment and taxation.

Payment of Tax

Ad valorem taxpayers make semiannual payments on May 10 and November 10. Under this payment schedule, the utility company must pay either 50% of its previous year's net utility tax liability or 40% of its estimated current year's liability on May 10. The utilities are notified of their tax liability for the current year on either August 10 for railroads and municipal electric companies, October 1 for pipelines, airlines, and conservation and regulation companies, or November 1 for telecommunications companies. The remainder of the current year's assessment is due on November 10.

Gross Revenues Group

Utilities subject to the license fee on gross revenues include: (a) car line companies; (b) electric cooperatives; and (c) municipal and private light, heat, and power companies.

Car Line Companies. Car line companies are defined as those not operating a railroad that are engaged in the business of furnishing or leasing car line equipment to a railroad. Car line equipment are railroad cars or other railroad equipment used in railroad transportation provided under a rental agreement. In 2020, six car line companies were subject to the state utility tax.

Electric Cooperatives. Electric cooperatives are entities organized under state law as a cooperative association that generate, transmit, or distribute electric energy to their members at wholesale or retail. Cooperatives typically operate in less urban areas where service providers may not operate, in order to reduce the cost associated with accessing such services. The largest electric cooperative association is Dairyland Power Cooperative. It is headquartered in La Crosse and supplies wholesale electricity to 24 rural electric distribution cooperatives, including 18 in Wisconsin, and 17 municipal utilities, including 10 in Wisconsin. In 2020, Dairyland accounted for 46% of total electric cooperative license fees.

Light, Heat, and Power Companies. There are two basic types of light, heat, and power companies. They may be either investor-owned or operated as a municipal utility. Light, heat and power companies are defined as those engaged in the following businesses: (a) generating and furnishing gas for lighting or fuel or both; (b) supplying water for domestic or public use or for power or manufacturing purposes; (c) generating, transforming, transmitting, or furnishing electric current for light, heat, or power; (d) generating and furnishing steam or supplying hot water for heat, power, or manufacturing purposes; or (e) transmitting electric current for light, heat, or power. Only municipal public utilities that meet the definition and also provide service outside the boundaries of the municipality owning the utility are subject to the state tax.

Since the tax on light, heat, and power companies was converted from an ad valorem to a gross revenues tax in 1985, the definition of light, heat, and power company has been expanded several times to reflect industry changes. Beginning in 1996, the definition was modified to include qualified wholesale electric companies, defined as any person that: (a) owns or operates facilities for the generation and sale of electricity to a public utility or to any other entity that sells electricity directly to the public; (b) sells at least 95% of its net production of electricity; and (c) owns, operates, or controls electric generating facilities that have a total power production capacity of at least 50 megawatts. These companies are also called independent power producers. In 2001, the definition of qualified wholesale electric company was extended to wholesale merchant plants that have a total power production capacity of at least 50 megawatts.

In 2020, 102 light, heat, and power companies were subject to the gross revenues tax. Of these 102 companies, 77 were operated by municipalities, representing 1.2% of 2020 tax assessments. The remaining 98.8% of the tax was attributable to 25 private light, heat, and power companies, which included 15 companies providing primarily retail service, nine providing primarily wholesale electricity for resale, and one transmission company. The largest companies, comprising approximately 95% of total tax assessments were Wisconsin Electric Power Company and Wisconsin Gas Company (which collectively do business as We Energies), Wisconsin Power and Light Company (which does business as Alliant Energy), Wisconsin Public Service (WPS), Xcel Energy, Madison Gas and Electric, and NextEra Energy (the owner of the Point Beach nuclear plant, which was previously owned by We Energies).

Determination of Assessment

Gross revenues utilities submit annual reports to DOR on the amount of taxable gross revenues for the preceding year. The gross revenue amount is multiplied by the applicable tax rate to determine the amount of taxes due. For each type of taxpayer, state law specifies a rate and defines the tax base. Because the taxes are characterized as gross revenues or receipts, relatively few types of revenues are excluded from the tax base. Gross revenues are taxed at a rate of 3.19%, except that sale of gas services is taxed at 0.97% and wholesale sale of electricity is taxed at 1.59%.

Car line companies' gross revenues are defined as all receipts by a car line company from the operation of equipment in the state. Earnings from interstate businesses are allocated to Wisconsin based on the ratio of Wisconsin car miles to total car miles. A tax rate equal to the average statewide net property tax rate is applied against the receipts. This is the same rate used for the state's ad valorem tax.

Electric cooperatives' gross revenues are defined as the previous year's total operating revenues, less interdepartmental sales and rents and the retailers' discount from the sales tax. Certain grants, public benefit fees, and low-income assistance fees are excluded from gross revenues. In addition, a deduction is allowed for the cost of power bought for resale if the cooperative buys more than 50% of the power it sells, or if the electric cooperative purchased more than 50% of the power it sold in 1987 from an out-of-state seller. For multistate associations, a share of total cooperative revenues are apportioned to Wisconsin using a three-factor formula based on the proportion of property, payroll, and sales in-state to the respective total of each factor.

Light, heat, and power companies' gross

revenues are based on their taxable gross revenues earned during the previous year. Except for qualified wholesale electric companies and transmission companies, gross revenues are defined as total operating revenues reported to PSC, less interdepartmental sales and rents and the retailers' discount from sales tax. Also, gross revenues include receipts from total environmental control charges paid to companies under financing orders issued by PSC. A private light, heat, and power company may deduct from its gross revenue either: (a) the actual cost of power purchased for resale, if that company purchases more than 50% of its electric power from a nonaffiliated utility that reports to PSC; or (b) 50% of the actual cost of power purchased for resale, if that company purchases more than 90% of its power and has less than \$50 million in gross revenues. Certain grants, public benefit fees, and low-income assistance fees are also excluded from the gross revenues of light, heat, and power companies. Municipal light, heat, and power companies are only taxed on that portion of their revenues from outside the boundaries of the municipality operating the utility.

For qualified wholesale electric companies, gross revenues are defined as total business revenues from the same services that are provided by light, heat, and power companies. For transmission companies, operating revenues are subject to the license fee, except for revenues from transmission services to a Wisconsin public utility or electric cooperative.

To determine Wisconsin taxable revenues for multi-state companies, an apportionment factor based on the shares of a company's total payroll, property, and sales that are in Wisconsin is applied to a company's gross revenues. The payroll factor includes management and services fees paid by a light, heat, and power company to an affiliated public utility holding company. As a result of this treatment, the portion of a public utility holding company's property that is used to provide services to a light, heat, and power company affiliated with the holding company is exempt from local property taxation.

Payment of Tax

The Department makes a tax assessment based on taxable revenues earned in the previous calendar year. Installment payments are made toward the tax in the year that the revenue is earned. A final payment is made in the assessment year to reconcile installment payments with final assessments.

For car line companies, at least 50% of the current or 50% of the subsequent year's liability is due on September 10 and the remaining liability is due on April 15.

For electric cooperatives and light, heat, and power companies, semiannual installment payments of either 55% of the previous assessment or 50% of the estimated assessment are due on May 10 and November 10 of the year in which the revenue is earned. These utilities are notified of their actual license fee by the following May 1. On May 10 of the year following the year in which the revenue was earned, either a final adjustment payment is made or a refund is issued to reconcile the two prior installment payments with the actual assessment.

Tax Collections

Ad valorem tax collections from airlines and railroads are classified as segregated revenue and deposited in the state's transportation fund, while the general fund receives remaining utility tax revenues. In 2019-20, general fund utility tax collections totaled \$357.2 million and comprised 2.0% of total general fund tax revenues. In 2019-20, Utility tax collections deposited in the transportation fund totaled \$49.1 million and comprised 2.3% of total transportation fund revenues.

Table 2 shows general fund utility tax collections over the last seven fiscal years.

Table 2: General Fund Utility Tax Collections (In Millions)

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Ad Valorem Tax							
Telephone Companies	\$72.20	\$81.94	\$76.47	\$70.78	\$63.59	\$67.20	\$66.17
Pipeline Companies	35.46	34.99	37.32	39.73	45.53	44.88	44.51
Municipal Electric Companies	5.17	5.16	4.95	4.93	4.80	4.71	4.44
Conservation & Regulation Companies	0.15	0.19	0.22	0.21	0.22	0.33	0.27
Total Ad Valorem Tax	\$112.98	\$122.28	\$118.96	\$115.65	\$114.14	\$117.12	\$115.39
Gross Revenues Tax							
Private Light, Heat & Power Companies	\$232.35	\$243.79	\$226.05	\$229.62	\$235.39	\$231.47	\$225.41
Electric Cooperatives	12.09	12.23	11.75	12.05	12.46	13.35	12.75
Municipal Light, Heat & Power Companies	3.35	3.30	3.49	2.90	3.07	2.70	2.73
Car Line Companies	0.19	0.20	0.16	0.14	0.21	0.27	0.21
Total Gross Revenues Tax	\$247.98	\$259.52	\$241.45	\$244.71	\$251.13	\$247.79	\$241.10
Refunds, Penalties, and Miscellaneous	0.01	0.02	0.19	0.11	0.07	0.03	0.66
General Fund Total Collections	\$360.97	\$381.82	\$360.60	\$360.47	\$365.34	\$364.94	\$357.15

Table 3: Transportation Fund Utility Tax Collections (In Millions)

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Ad Valorem Tax	\$21.25	*25 <0	\$20.50	<i>(</i> ((())	.	¢ 10 0 c	¢ 10.00
Railroad Airline	\$31.35 7.69	\$35.69 7.96	\$38.50 5.10	\$45.32 7.13	\$40.77 6.18	\$42.96 7.38	\$42.02 7.05
Annie		1.90			0.10	1.50	
Transportation Fund Total Collections	\$39.04	\$43.65	\$43.60	\$52.45	\$46.95	\$50.34	\$49.07

Declines in telephone company taxes reflect depreciation and obsolescence of property, although collections have recovered in recent years as telephone companies have increased investment in technologically improved equipment. Increases in pipeline taxes in recent years reflect increased investment in construction and repair of pipelines transporting oil. Declines in private light, heat, and power company taxes reflect declining costs of electricity and natural gas, and stable statewide electricity consumption in recent years.

Table 3 shows historical collections for the two transportation fund utility taxes. Over the sevenyear period, railroad company collections increased 34% and airline collections declined 8%. Increasing investments in railroad property have been partially offset by a declining statewide average property tax rate. Over the seven-year period, the statewide average tax rate decreased 13%, which has placed downward pressure on tax assessments on transportation fund utilities.

Other State Taxes on Utilities

The state imposes other general fund taxes and segregated fees on utilities. The following section discusses applicability of state corporate income/franchise tax and sales tax provisions to Wisconsin utilities. For discussion of other segregated fees, including universal service fees, lowincome assistance fees, and the police and fire protection fee, see Chapter 3.

Corporate Income/Franchise Tax

In addition to the ad valorem and gross revenues taxes described above, Wisconsin public utilities are generally subject to the state corporate income/franchise tax on the same basis as other corporations. However, certain types of utility companies are exempt from this tax. Municipal light, heat, and power companies are exempt due to their status as agencies of local government. Electric cooperatives are exempt from the corporate income tax based on the general exemption for all cooperatives organized under Chapter 185 of the Wisconsin Statutes.

Taxable utility companies determine net corporate income tax liability in the same manner as most corporations. State corporate income tax provisions are generally referenced to federal law. Thus, the starting point for determining state income tax liability is determined by subtracting allowable federal deductions from federal gross income. However, there are certain state adjustments that must be made in arriving at net taxable income for state purposes. The state utility tax is specified as an allowable deduction in these adjustments. The state corporate income tax is imposed at a flat 7.9% rate on taxable income. If applicable, state tax credits are used to offset gross tax liability to arrive at net tax liability. Utility companies that are members of a combined group report their income, deductions, and tax liability in the group's combined return. More information about the state corporate income tax may be found in the Legislative Fiscal Bureau's informational paper entitled "Corporate Income/Franchise Tax."

Sales Tax

Current law provides a number of energyrelated sales and use tax exemptions to utilities and other businesses, including exemptions for the following: (a) purchases by power companies of fuel used to produce electricity, steam, or other power; (b) transfers of transmission facilities to an electric transmission company; (c) the gross receipts of electric utilities and retail electric cooperatives from collections of low-income assistance fees; (d) fuel and electricity consumed in manufacturing tangible personal property; and (e) purchases of electricity and fuel, including natural gas, used in farming.

A sales tax exemption is provided for products, other than an interruptible power source for computers, whose power source is wind energy, direct radiant energy received from the sun, or gas generated from anaerobic digestion of animal manure and other agricultural waste, subject to minimum power production requirements. The sale, use, or consumption of electricity or energy produced from such a product is also exempt. Finally, state law provides a sales tax exemption for residential purchases of electricity and natural gas from November through April. Most other fuels purchased for residential use (such as coal, fuel oil, propane, steam, and peat) are totally exempt.

The state sales tax is generally imposed on telecommunications services, mobile telecommunications service, and most ancillary services (such as voicemail service and directory assistance). These services, other than telecommunication services sold on a call-by-call basis, are subject to the tax if the customer's place of primary use is in Wisconsin. Telecommunications services that are sold on a call-by-call basis are sourced to this state if the call originates or terminates in Wisconsin and is charged to a service address in this state. Beginning July 1, 2020, internet access charges are exempt from sales tax, pursuant to 2017 Act 59, and reflecting federal prohibition of the tax under the federal Trade Facilitation and Trade Enforcement Act of 2015.

The state's sales tax also applies to sales of prepaid calling services (calling cards) and prepaid wireless calling services (prepaid mobile phones), if the sales are sourced to Wisconsin. Generally, these sales are sourced to Wisconsin if the sale takes place at a retailer's location in this state, if the item that will implement the right to receive telecommunications services (such as a calling card) is shipped to a customer's address in this state, or if no item is shipped to a Wisconsin address but the customer's billing address is located in this state.

State law provides certain exemptions from the

tax, such as for the cost of the countywide 911 emergency phone systems, the police and fire protection fee, detailed telecommunications billing services, and interstate 800 services.

More information about the sales tax may be found in the Legislative Fiscal Bureau's informational paper entitled "Sales and Use Tax."

PUBLIC SERVICE COMMISSION

Wisconsin's Public Service Commission (PSC) was preceded by a Railroad Commission, which first regulated railroad rates in 1874. In 1907, the Railroad Commission's responsibilities were expanded to include regulation of telephone, telegraph, gas, water, and electric light and power companies, making Wisconsin the first state to regulate essential utility services provided to the public by entities that generally operated as noncompetitive, natural monopolies. The Public Service Commission was established as successor to the Railroad Commission in 1931.

PSC's regulatory authority is vested in three full-time commissioners appointed by the Governor, with the advice and consent of the Senate, to staggered, six-year terms. The Governor designates the Commission chairperson, who serves a two-year term, and the chairperson may appoint division administrators, the chief legal counsel, and the communications and legislative director from outside the classified service. The agency's professional and support staff are members of the classified civil service. The Office of the Commissioner of Railroads (OCR) is administratively attached to PSC, and is a quasi-judicial agency responsible primarily for overseeing the 4,300 railhighway crossings in Wisconsin.

Commission Budget

The Commission's operations are funded almost entirely by assessments on utilities it regulates, calculated to reflect the cost of their regulation. These amounts are collected as general monthly and annual assessments, as well as

additional special assessments on individual utilities for costs related to proceedings of the Commission or regulatory functions specific to that utility. State law requires PSC to remit 10% of its assessment revenues to the general fund, with the remainder deposited into various program revenue (PR) accounts supporting PSC regulation and programs. Other funding sources for PSC include: (a) federal revenues supporting the Office of Energy Innovation and pipeline safety program; and (b) a portion of segregated revenues from the universal service fund, utility public benefits fund, and police and fire protection fund necessary to administer those funds and their programs. Programs funded by the universal service fund, utility public benefits fund, and police and fire protection fund are discussed in Chapter 3.

Under 2019 Wisconsin Act 9, the biennial budget act, PSC is authorized 147.25 positions, consisting of 133.0 PR, 10.25 FED, and 4.0 SEG positions. An additional 6.0 PR positions are authorized for OCR.

Commission Powers

PSC regulates electric, natural gas, steam, water, and combined water and sewer utilities and certain aspects of local telephone service. The Commission is generally responsible for:

• Setting the level and structure of rates for utility service based on authorized rates of return on investment;

• Regulating the construction, use, modify-

cation, and financing of utility operating property, including the use of depreciation accounts for new construction;

• Valuing operating property;

• Overseeing, examining, and auditing utility accounts and records;

• Approving utility mergers;

• Overseeing transactions between a public utility and an affiliated interest;

• Determining levels of adequate and safe service; and

• Responding to consumer complaints about utility operations and prices.

The statutes grant PSC broad jurisdiction to do all things necessary and convenient in the exercise of its regulatory authority over public utilities. The Commission has traditionally used a flexible approach in exercising its jurisdiction. Under this approach, PSC has had discretionary authority to adjust, as needed, the degree of regulation of classes of public utilities.

PSC's authority extends to intrastate utilities and the intrastate operations of multi-state utilities. At the federal level, regulatory responsibilities over interstate utility operations are divided between the Federal Communications Commission (FCC) for interstate services of telecommunications companies and the Federal Energy Regulatory Commission for interstate operations of, and wholesale sales by, energy service companies. Primary oversight of commercial nuclear power reactors that generate electricity is provided by the federal Nuclear Regulatory Commission, which regulates the operation and decommissioning of nuclear power plants and the transportation, storage, and disposal of nuclear waste from the plants.

PSC authority over rates does not extend to all public utilities. In addition to interstate utilities, some intrastate utilities are also excluded from PSC oversight. These include electric cooperatives, telephone cooperatives, certain specified providers of telecommunications services, and cable television companies. Further, these regulatory powers generally do not apply to telecommunications providers, as discussed later.

Rate Setting

Rate setting has historically been the Commission's most visible regulatory function. In a monopoly market, the rate-setting process attempts to establish prices at levels that would occur naturally under competitive market forces. While a utility's natural interest is to set prices at levels that maximize profits, the regulatory process provides a balance so that services are extended at prices that are reasonable both to ratepayers and to utility owners.

Rate setting typically involves three basic determinations. First, the Commission sets a rate of return that the utility is allowed to earn on its investment in generating facilities and equipment. Second, the amount of revenue necessary for the utility to operate, pay debt, and meet its allowable rate of return is determined. Third, prices are set at levels that will generate the company's revenue requirement, allocated across categories of service according to relative costs and other factors for each category. All corporate income taxes, ad valorem or gross revenue utility taxes, and sales taxes are treated as expenses, and are generally fully recovered through the rates.

Commission Review Process

For utilities subject to regulation, the Commission review process generally has three procedural phases: pre-hearing, public hearing, and decisionmaking. First, the pre-hearing phase begins when a utility action is subject to a Commission proceeding, such as when a utility proposes to modify rates, issue stocks and bonds, or undertake major construction projects. Prior to any formal hearing, PSC staff analyze the request and its impact and conduct a company audit. Second, during the public hearing phase, the utility makes a formal presentation of its proposal. During this phase, the public, authorized intervenors, or PSC staff may challenge the utility's request or suggest alternatives. Finally, during the decision-making phase, commissioners hold an open meeting in which they deliberate and make a decision based on the factual record developed during initial filings and the public hearing, and seek to balance the interests of the public and the utility.

While PSC decisions are generally final, they may be appealed by the utility or by other parties with an interest in the matter. Appeals may be made either directly to circuit court, or to PSC for a rehearing and then to circuit court.

Intervenor Compensation

Commission proceedings represent substantial planning and investment by the involved utility, which must make a case for the necessity of its proposal. If approved, the cost of most proposals brought before the Commission is typically borne by a broad base of ratepayers. Any item before the Commission typically represents a small increase in any given ratepayer's bill, and the cost to contest a proposed increase is considerably higher than any individual benefit of doing so. Thus, while the utility is able to allocate resources to argue its case before the Committee, the diffuse set of ratepayers lack the individual financial incentive to participate in proceedings, but subsequently bear any cost associated with approval of a utility's proposal.

The Commission operates an intervenor compensation program to provide financial support to parties that participate in a proceeding to represent the interests of ratepayers or other interested parties. Any party granted intervenor status is required to appear at technical hearings and be avail-able for cross-examination by other parties in the proceeding. Further, the intervenor may submit testimony to be included in the factual record considered by the Commission. Thus, the program allows the Commission to develop a broader perspective and set of evidence in making decisions.

To fund the program, PSC imposes assessments on utilities participating in the proceeding, and the assessments are subsequently passed on to ratepayers. As a result, the intervenor compensation program allows for representation of the interests of a broad base of ratepayers, who then contribute funding via their utility bill commensurate with their benefit of representation before the Commission. Further, while any person affected by a Commission decision may petition for judicial review, Commission decisions based on a complete factual record are less likely to be subject to judicial challenge, meaning increased intervenor participation may reduce future costs of litigation.

During the 2019-21 biennium, PSC is authorized to assess utilities up to \$842,500 each year to support the intervenor compensation program. The Commission only assesses utilities for actual expenditures under the program, and has not used its full authorization in recent years. In 2019-20, intervenor compensation expenditures totaled \$675,100.

Eligibility. To receive intervenor compensation, an organization or individual must first request and be granted intervenor status in a specific proceeding. To be granted intervenor status, the intervenor must demonstrate that they will be materially affected by the proceeding, that participation in the proceeding is a financial hardship absent intervenor compensation, and that representation of their interest is necessary for a fair determination by the Commission. Compensation is provided on a reimbursement basis for expenses determined by the Commission as necessary for the intervenor's participation and may include: (a) attorney's fees; (b) expert witness fees; (c) clerical services; (d) preparation of studies, displays, and exhibits; and (e) travel expenses.

Citizens Utility Board. 2009 Wisconsin Act 383 authorizes PSC to provide annual grants of up to \$300,000 from the intervenor compensation appropriation to one or more nonstock, nonprofit corporations that have a history of advocating on behalf of residential ratepayers for affordable rates. Grants may support general operating expenses of recipients, including salaries, benefits, rent, and utility expenses. Since its inception, only the Citizens Utility Board (CUB) has received funding under this provision. CUB frequently participates in Commission proceedings as an intervenor, and has received \$2,393,000 under this provision since its inception in 2009-10, including the most recent grant of \$300,000 in 2019-20. CUB also regularly applies for and receives reimbursement through the general intervenor compensation program.

Energy Regulation

In addition to general utility regulation duties described previously, such as rate setting and financial oversight, PSC exercises its authority specific to electric utilities in matters related to transmission, wholesale generation, wind turbine siting, and reliability and adequacy of generation infrastructure.

Siting of Power Plants and Transmission Facilities

State law prohibits the construction of large electric generating facilities and high-voltage transmission lines unless PSC has issued a certificate of public convenience and necessity (CPCN). Unlike other PSC regulatory activities, the siting portion of the CPCN requirement also applies to electric cooperatives and merchant companies.

A CPCN is required for any generating facility in Wisconsin with a capacity of 100 megawatts or more and high-voltage transmission facilities operating at 345 kilovolts or more. Certificates of public convenience and necessity are generally not required for transmission lines rebuilt for operation at the same voltage in largely the same right of way. For smaller facilities not meeting the CPCN threshold of 100 megawatts or 345 kilovolts, PSC may require an electric utility to obtain a certificate of authority. The certificate of authority requirement also extends to distribution and transmission lines of natural gas utilities.

Before issuing a CPCN, PSC must determine that the proposed facility meets a number of statutory standards. These standards relate to electric energy reliability, service efficiency, future electricity needs, wholesale market competition, the impact on the environment, and existing land use and development plans. Some facilities, such as merchant plants, are specifically excluded from certain standards, and other standards are specifically limited to high-voltage transmission lines and PSC-regulated public utilities. Based on its findings, PSC may approve, deny, or modify proposed facility applications.

Wind Turbine Siting

State law directs PSC to establish a 15-member Wind Siting Council and promulgate administrative rules with the Council's assistance to establish standards for wind energy systems. These rules are established in administrative code Chapter PSC 128. The Wind Siting Council last met in October 2014 to approve submittal of its report to the Legislature on wind turbine siting policy and health effects. The Council examined peer-reviewed scientific literature studying the health effects of wind turbines and found that "the majority of individuals living near utility-scale wind systems do not report stress, sleep deprivation, or chronic adverse health effects attributed to wind turbines." The report did not recommend changes to existing wind siting regulation in Wisconsin, noting the lack of notable health effects and that existing wind siting regulations under PSC 128 are consistent with other states and national policy.

Transmission Regulation

Effective October 1, 2001, state law requires the transfer of ownership of high-voltage transmission lines held by Wisconsin-based public utility companies operating primarily in the eastern part of the state to a newly created transmission company, the American Transmission Company (ATC). Utilities transferring property received an equivalent equity interest in ATC for those assets. Because it is jointly owned by connected utilities, ATC is able to provide equitable access to the transmission grid at fair rates. Additionally, ATC is responsible for constantly monitoring the flow of electricity across the transmission grid, as well as for the planning, construction, operation, maintenance, and expansion of the grid. ATC is subject to regulation primarily by the Federal Energy Regulatory Commission, which regulates transmission and wholesale sale of electricity. However, PSC still retains authority to regulate ATC's construction and siting of transmission infrastructure. In western Wisconsin, Xcel Energy and Dairyland Power Company, among others, continue to maintain their own transmission infrastructure.

Affiliated Interests and Leased Generation

Generally, an affiliated interest is a person or company with an ownership interest in a public utility or a company in which a public utility has an ownership interest. State law authorizes public utilities and the affiliated interests of those utilities to enter into long-term, leased-generation contracts with one another. By entering into a leasedgeneration contract, utilities are able to take advantage of less-regulated financing and contracting options available to the affiliated interest than if they constructed the facility themselves. Under a leased-generation contract, the affiliated interest agrees to construct or improve generation infrastructure that it then leases to a utility for a minimum of 20 years (gas-burning facilities) or 25 years (coal-burning facilities). After the initial period, the contract must allow a utility to purchase the facility at fair market value or renew the lease. The project must be at least a \$10 million improvement in order to qualify as a leased-generation contract.

State law requires PSC approval of leases and lease renewals between public utilities and affiliated interests. The Commission must find that the lease will not have a substantial, anticompetitive effect on electricity markets for any class of customers. Also, state law prohibits PSC from increasing or decreasing the retail electric rates of a utility on the basis of any gain or loss incurred or by the utility's affiliated interest due to its ownership of equipment and facilities under a leased generation contract. PSC must allow a utility to recover in rates all costs related to a leased-generation contract.

Strategic Energy Assessment

Section 196.491 of the statutes directs PSC to prepare a biennial report that evaluates the adequacy and reliability of the state's current and future electrical supply. Each Strategic Energy Assessment (SEA) covers a seven-year period and must identify the projected demand for electric energy and assess whether sufficient electric capacity and energy will be available to the public at a reasonable price. Also, the SEA must identify and describe electric generation and transmission facilities planned for construction, existing and planned renewable-resource generating facilities, plans for ensuring that there is adequate ability to transfer electric power into the state, and activities to discourage inefficient and excessive power use. In addition, the SEA must assess factors related to competition, purchased generation capacity and energy, and regional bulk power, and must consider other factors such as the public interest in economic development, public health, the preservation of the environment, and the diversification of energy sources. The Commission's latest report was issued in October, 2020, covering the period between 2020 and 2026.

Water and Sewer Regulation

PSC is responsible for regulating the 575 drinking water utilities in Wisconsin, including both investor-owned and municipal utilities. Regulatory responsibilities include the general utility regulatory powers described previously, covering rate setting, financial oversight and complaint mediation. In several instances a municipality has elected to combine its water and sewer services into a single utility. In those instances, the combined utility is subject to regulation similar to other drinking water utilities.

The 600 sewer utilities in Wisconsin are operated by municipalities and not subject to PSC regulation. Additionally, while state law requires PSC to regulate investor-owned sewer utilities, no such investor-owned utilities exist. Municipal storm water utilities are similarly not subject to PSC regulation. While sewer and storm water utilities are not subject to regulation, PSC retains authority to mediate customer complaints related to the rates, rules, or practices of municipal sewerage operations and municipal storm water utilities. These complaints may be addressed informally by the Commission, or subject to a formal hearing.

Financial Assistance for Replacement of Customer-Side Lead Service Lines

Many older cities and villages in Wisconsin have water service lines that contain lead. Water service lines, also known as laterals, connect a building to the water mains in the street, and carry drinking water from the public water system to the individual building. In general, the portion of the lateral that extends from the water main to the curb is the responsibility of the public water system, and the portion of the lateral that extends from the curb to the building is the responsibility of the property owner.

2017 Wisconsin Act 137 authorizes public water utilities to provide grants and loans to customers for replacing the customer-owned portion of a lead service line. Under the act, a water utility may offer such financial assistance only if: (a) it has received approval from the PSC for its program; and (b) the municipality in which it operates requires property owners to replace lead service lines. The utility-side service line also either must not contain lead or, if it is a lead-containing line, must be replaced at the same time as the customer-side line. Act 137 allows utilities to assess water utility ratepayers an amount sufficient to fund the financial assistance program. Grants may be no more than 50% of the cost of replacement of the lead service line, but may also be paired with a loan to fund the entire initial cost of the project. As of October, 2020, the cities of Kenosha, Manitowoc, Menasha, Fond du Lac, Sun Prairie, Green Bay, Kaukauna, and Sheboygan have programs approved by PSC.

Telecommunications Regulation

Beginning in 1984 with the breakup of AT&T under settlement conditions of an antitrust lawsuit initiated by the U.S. Department of Justice, telecommunications utilities have become incrementally less regulated as modern technologies, competitive forces, and public policy have shaped the structure of the telecommunications industry. Most recently culminating with 2011 Wisconsin Act 22, these changes have left telephone, internet, and cable service providers largely free from traditional utility regulation by PSC related to rate setting, auditing of utility finances, overseeing service provision and infrastructure investment, and requiring service to all who request it.

The remaining telecommunications responsibilities of PSC include regulating intercarrier relations and administering the universal service fund. However, it should be noted that the FCC still retains federal regulatory control of interstate telecommunications providers, and the Department of Agriculture, Trade and Consumer Protection still enforces consumer protection laws associated with telecommunications services.

In lieu of traditional regulation, PSC telecommunications oversight has transitioned to the imposition of universal service fees on telecommunication providers. Under traditional utility regulation, utilities are generally required to provide service to any individual within their service territory that requests it. Instead of this mandate, PSC and other state agencies use revenues from universal service fees to administer a variety of programs that increase accessibility and affordability of telecommunications service for low-income and disabled persons and those living in areas with high costs of service. For further discussion of the universal service fund and its programs, see Chapter 3.

Pipeline Regulation

Both the federal and state governments impose regulations regarding pipeline safety. These regulations cover the design, construction, operation, inspection, repair, and maintenance of pipelines, the training and testing of pipeline employees and contractors, and the maintenance of pipeline company records. The Office of Pipeline Safety (OPS) in the U.S. Department of Transportation has certified PSC to regulate, inspect, and enforce intrastate gas pipeline safety requirements in Wisconsin. OPS has retained authority over safety requirements for interstate gas pipelines and for intrastate and interstate liquid pipelines in Wisconsin. PSC activities include completely inspecting every natural gas company at least once every three years, reviewing every natural gas company's maintenance records at least once every year, inspecting in-state gas pipeline construction plans, making unscheduled inspections of pipeline construction projects, and advising natural gas companies about safety matters. The federal government reimburses the state for up to 80% of its costs for administering the pipeline safety program.

Energy Efficiency and Renewable Energy

Office of Energy Innovation

PSC's Office of Energy Innovation (OEI) provides assistance to residents, businesses, and local governments to increase investment in renewable energy and energy efficiency projects. OEI projects include, among others: (a) increasing utilization of ethanol in motor vehicle fuel; (b) providing grants to local governments, school districts, and manufacturers to support investment in renewable energy and energy efficiency; (c) collaborating with local governments and schools to implement renewable energy and energy efficiency programs; and (d) collecting and reporting energy statistics, including participating in the U.S. Department of Energy's state heating oil and propane pricing survey. OEI is also responsible for oversight of the Focus on Energy program, discussed later. As of October 1, 2020, OEI had 9.0 positions, consisting of 5.0 FED, 3.75 utility public benefits fund SEG, and 0.25 PR positions.

Renewable Portfolio Standards

Section 196.378 of the statutes establishes a renewable portfolio standard (RPS) that 10% of electricity sold by utilities and electric cooperatives in Wisconsin be from renewable sources by 2015. Wisconsin's RPS was incrementally phased in over time, up to its current requirement that 10% of electricity sold be from renewable sources by 2015 and annually thereafter. This goal was first achieved in 2013, and has been achieved each year since. Renewable resources are defined as those that generate electricity from, among others: (a) wind power; (b) solar thermal or photovoltaic systems; (c) hydroelectric systems; (d) biomass, including landfill gas, wood or wood waste, and other biogas; (e) geothermal systems; or (f) tidal or wave action.

In 2019, Wisconsin electric providers produced 10.7% of their energy from renewable sources. Providers may also procure renewable energy for their green pricing programs, by which customers voluntarily pay a premium to purchase renewable energy. Adding in voluntary programs, 11.1% of electricity produced in 2019 was from renewable sources. In 2019, electricity from renewable sources was derived primarily from wind (7.3% of all electricity), hydro (2.6%), biomass (1.1%) and solar (0.2%).

Biennially, PSC is required to report to the Governor and Legislature on the impact of RPS on electricity rates relative to having no RPS in place. PSC analysis indicates that in 2017 and 2018, the program resulted in rates that were between 2.48% and 3.52% higher, on average, than rates would have been without the these renewable standards. Given that Wisconsin's RPS is not set to increase further, it is expected that the higher ratepayer cost related to RPS requirements will diminish over time. Further, given recent advances in technology, especially related to wind and solar power, renewable energy in certain instances may be less expensive than nonrenewable alternatives.

Focus on Energy

Section 196.374 of the statutes establishes a statewide energy efficiency and renewable-resource program known as Focus on Energy (Focus). Investor-owned electric utilities are required by law to contribute 1.2% of revenues from retail sales of electricity and natural gas to support the program. In the case of large energy

customers, state law froze contributions based on the amount raised in 2005, adjusted for the lesser of inflation (measured by the Consumer Price Index) or the increase in utility operating revenues.

Municipal utilities and electric cooperatives are required to collect an average of \$8 per year per electric meter served to fund similar energy efficiency and renewable-resource programs. Municipal utilities and electric cooperatives may elect to operate their own program independently, or contribute to Focus. In 2020, all 82 municipal electric utilities contributed to Focus, and 11 of 24 electric cooperatives contributed to Focus.

In 2019, Focus recorded revenues of \$101,793,200, consisting of \$98,269,600 in contributions from investor-owned utilities, \$3,497,700 in contributions from municipal electric providers and cooperatives, and \$25,900 from education and training program fees.

Focus is operated by the Statewide Energy Efficiency and Renewables Administration (SEERA), a nonprofit formed by Wisconsin's investor-owned utilities. SEERA contracts with private companies to implement the Focus program, including APTIM for program administration and Wipfli for financial management. SEERA contracts are subject to approval by PSC.

Because Focus is administered by SEERA and contributions are made directly from participating utilities, it is not subject to the state budget process. However, PSC provides program oversight, which includes: (a) setting annual targets and fouryear goals for electricity and natural gas savings; (b) developing, approving, and monitoring program budgets; and (c) reviewing and approving program designs developed by the program administrator. At least once every four years, the Commission must conduct a formal evaluation of existing energy efficiency and renewable-resource programs and set or revise goals, priorities, and measurable targets for the programs. *Focus Programs*. APTIM contracts with a variety of companies to deliver individual Focus programs. Focus is structured into three components: (a) business energy efficiency programs; (b) residential energy efficiency programs; and (c) residential and business renewable-energy programs. In general, 40% of Focus program funding is allocated for residential programs and 60% for business programs, intended to reflect the relative contribution of each customer type. In addition to these programs, Focus funds research related to program design and delivery. Five research projects were awarded \$244,500 in 2020 and \$155,000 in 2021.

Focus's energy efficiency programs employ a number of techniques, including: (a) financial incentives such as discounts and rebates for purchase and installation of energy-efficient lighting, ventilation systems, appliances, and insulation; (b) on-site consultations for business, government, education, and agriculture customers to improve access to incentives and assist in implementation of energy-efficient practices; (c) financial incentives for new construction projects that use energy-efficient design elements or components. Renewable-resource Focus programs provide financial support for solar photovoltaic installations for all customer types, and installation of biogas, biomass, solar thermal, and wind technologies in nonresidential settings. Additionally, Focus renewable-resource funding supports feasibility studies and development of anaerobic digester facilities producing biogas.

Other Energy Efficiency and Renewable-Resource Programs. In addition to the statewide Focus program and independently operated electric cooperative programs, additional energy efficiency and renewable programs are also authorized by statute, consisting of: (a) large energy customer programs, which may be administered by the customer itself or the utility; and (b) voluntary utility-administered programs. With Commission approval, a utility or large energy customer may use contributions that otherwise would be made to the Focus program to operate its own program. Additionally, utilities may operate voluntary programs not funded by the 1.2% required contribution. PSC reports no such utility- or customer-administered large energy programs have ever operated. As of 2020, four utilities (We Energies, Alliant Energy, Wisconsin Public Service, and Xcel Energy) operate voluntary programs not funded by Focus contributions.

Wisconsin Broadband Office

The Wisconsin Broadband Office within PSC is responsible for advancing the availability, adoption, and use of broadband technology. The Office does so through comprehensive mapping of broadband availability in Wisconsin, administration of the broadband expansion grant program, and certifying communities that are broadband- and telecommuter-friendly.

Broadband Mapping

The Wisconsin Broadband Office maintains an interactive map of broadband access throughout the state. Map data is collected from a variety of sources, including directly from telecommunications providers and the FCC. The map provides data on the quality and availability of service, including a list of providers at a location and advertised connection speeds. The map is updated several times annually and is available on the PSC website at: https://maps.psc.wi.gov/apps/WisconsinBroadbandMap/.

Broadband Promotion

PSC promotes broadband access by offering Broadband Forward! and Telecommuter Forward! certifications for municipalities. In order to receive these certifications, communities implement policies intended to reduce barriers to telecommuting and construction of broadband infrastructure in order to achieve social and economic benefits for the community and attract outside investment.

Broadband Forward! certified municipalities are those that adopt an ordinance meeting the requirements under section 196.504(5) of the statutes. Generally, the section requires that the municipality implement measures to facilitate and expedite review of permits and applications related to broadband network projects, including appointing a single point of contact for applicants, shortening the review period of proposals, and requiring a transparent review process. As of October, 2020, 54 municipalities have received Broadband Forward! certification. A listing and map of certified municipalities is available on PSC's website.

Telecommuter Forward! certified municipalities are those that adopt a resolution the requirements under section 196.5045(3) of the statutes. Generally, the section requires that the municipality demonstrate commitment to facilitating the availability of telecommuting options in a community and appoint a single point of contact that collaborates with broadband providers, the Wisconsin Broadband Office, economic development professionals, and others to support telecommuting. As of October, 2020, 40 municipalities have received Telecommuter Forward! certification. A listing and map of certified municipalities is available on PSC's website.

Broadband Expansion Grant Program

As part of its broadband duties, PSC administers the broadband expansion grant program to increase internet access and quality in Wisconsin. Profit and not-for-profit organizations, telecommunications utilities, and municipalities partnering with those organizations and utilities are eligible to apply for grants. Priority is given to projects that include matching funds, that involve publicprivate partnerships, that affect areas with no broadband service providers, that are scalable, that promote economic development, that will not delay broadband deployment to neighboring areas, or that affect a large geographic area or a large number of underserved individuals or communities. The program first awarded grants during the 2013-14 fiscal year.

Funding. Table 4 shows broadband expansion grant funding by year. Funding for broadband expansion grants has been provided from several different sources: (a) transfers from the federal e-rate program administered by the Department of Administration (DOA); (b) universal service fund (USF) SEG appropriations and transfers; (c) federal coronavirus relief funds; and (d) a one-time transfer of DOA information technology and communications services PR.

USF SEG funding is derived from PSC assessments on companies providing retail intrastate voice telecommunications services. Providers pay assessments monthly based on an assessment rate that PSC adjusts annually. USF SEG funding for broadband expansion grants consists of appropriated amounts, as well as transfers, or "sweeps," of funds in other USF program appropriations that remain unexpended or unencumbered at the end of the fiscal year. If these swept amounts do not total \$2 million, PSC is authorized to assess contributing telecommunications providers the difference. The first sweep occurred on June 30, 2018, and totaled \$2,242,600. Subsequent sweeps at the end of 2018-19 and 2019-20 totaled \$3,075,700 and \$3,392,500, respectively. For further discussion of the universal service funding and programs, see Chapter 3.

The federal e-rate program provides funding from the federal USF to reimburse the state for a percentage of funds used to support telecommunications availability in schools and libraries, provided primarily through the state's Technology for Educational Achievement (TEACH) program. As Wisconsin has received federal reimbursement for

Table 4: Broadband Expansion Grant Funding

		USF	E-Rate	CRF	
Year	<u>PR</u> ^a	SEG	FED	FED	Total
2013-14	\$4,300,000				\$4,300,000
2014-15					0
2015-16	-3,347,400	\$6,000,000 ^b			2,652,600
2016-17					0
2017-18			\$11,000,000		11,000,000
2018-19		2,242,600 ^c			2,242,600
2019-20		3,075,700 °	22,000,000		25,075,700
2020-21		<u>3,392,500</u> °	22,000,000	\$ <u>5,378,500</u>	\$30,771,000
Total	\$952,600	\$14,710,800	\$55,000,000	\$5,378,500	\$76,041,900

^a From the Department of Administration's appropriation for information technology and communications services to nonstate entities. Remaining amounts were transferred to the general fund under 2015 Wisconsin Act 55.

^b From the unencumbered balance of the USF.

^c Sweeps of unexpended amounts from other USF program appropriations.

state USF funding dedicated to e-rate reimbursement-eligible expenditures under TEACH, funding has accumulated in the federal e-rate aid appropriation. These accumulated funds have been transferred to the broadband expansion grant program, with \$11 million in 2017-18 under the 2017-19 biennial budget, and \$22 million each year under the 2019-21 biennial budget. TEACH is discussed in further detail in Chapter 3.

In fall 2020, PSC opened an extraordinary grant round to distribute federal funding allocated by the Governor as part of Wisconsin's federal Coronavirus Relief Fund allocation under the Coronavirus Aid, Relief, and Economic Security (CARES) Act. The CARES Act provided funding to states to support extraordinary needs during the coronavirus public health emergency. CARES Act funding for broadband was intended to increase internet access to support telehealth, distance learning, and telecommuting needs in underserved areas of the state precipitated by the coronavirus public health emergency.

Awards. Table 5 shows broadband expansion grant awards by grant round. Over nine grant rounds from 2013-14 to 2020-21, the Commission

Table 5: Broadband Expansion Grant Awards

Round	Fiscal <u>Year</u>	Fund Source	Projects	Amount <u>Awarded</u>
1	2014	PR	7	\$500,000
2	2015	PR	7	452,600
3	2016	SEG	11	1,500,000
4	2017	SEG	17	1,500,000
5	2018	SEG	13	1,500,000
6	2018	SEG/FED	46	7,689,000
7	2019	SEG/FED	37	7,053,600
8	2020	SEG/FED	72	23,995,000
9	2021	FED	11	5,378,500
10	2021	SEG/FED	*	*
Total			221	\$49,568,700

*Awards will be announced in Spring, 2021.

has awarded \$49,568,700 in grants to 221 projects. The most recent grant allocation was made with federal funding in October, 2020. An additional grant round in 2020-21 will allocate funding appropriated under 2019 Act 9.

Broadband expansion grant appropriations are provided on a continuing basis, meaning any unexpended amount at the end of a fiscal year may be carried forward for expenditure in future fiscal years. Occasionally, final grant expenditures are below original award amounts due to cancelled projects or projects costing less than originally estimated, freeing up previously awarded funding for use in a subsequent grant round. The total available for grant awards in the 2020-21 cycle is \$32 million, consisting of prior year funds of \$1,258,600, a transfer of \$22 million in federal erate funding, an allocation of \$5,378,500 in federal coronavirus relief fund monies, and a sweep of \$3,392,500 of unexpended funds from other USF appropriations.

UNIVERSAL SERVICE FUND AND OTHER UTILITY FEES

In addition to utility, corporate, and sales taxes described in Chapter 1, and cost-of-regulation assessments described in Chapter 2, public utilities and their customers are also subject to several other fees under state law, including: (a) state universal service fees; (b) state low-income assistance fees; and (c) the police and fire protection fee. The following sections provide a description of each of these fees and the programs they support.

Universal Service Fund

Since 1996, the PSC has administered the state universal service fund (USF) to ensure that all state residents receive essential telecommunications services, as defined under federal law to include: (a) single-party voice-grade access to the public switched network or its functional equivalent; (b) local usage; (c) access to emergency services; and (d) toll limitation for low-income customers. To implement this general statutory directive, PSC has promulgated administrative rules establishing the various USF-funded programs. Several other state entities operate USF programs, including DOA, Department of Public Instruction (DPI), and University of Wisconsin System.

The USF is overseen by the 15-member Universal Service Fund Council. Members of the USF Council are appointed by the Commission and consist of seven representatives of telecommunications providers and eight representatives of consumer groups. The Council serves as an advisor to the Commission in administration of USF programs, including reviewing and recommending

for approval the annual budget of Commission-operated USF programs. The USF is administered by a private firm under contract with PSC.

Revenue

The USF is funded through assessments on providers of retail <u>intrastate</u> voice telecommunications services. Providers pay assessments equal to a percentage of their gross revenues on a monthly basis, and PSC adjusts the percentage annually to an amount sufficient to support USF program appropriations. Under section 196.218(3)(e) of the statutes, telecommunications providers are authorized to pass on the cost of these assessments as a fee on customer bills. The FCC administers a federal USF funded by assessments on telecommunications provider revenues derived from <u>interstate</u> telecommunications services.

Assessment rates are set at a level sufficient to support the program budgets of USF programs. The most recent rate adjustment occurred in October, 2020, and set a monthly assessment rate of 0.344% of gross revenue from intrastate services, or \$3.44 per \$1,000 of revenue. The assessment rate is determined based on 2019 gross revenues, which totaled \$1,021,465,000, and is expected to result in annual assessment revenue of \$42.2 million to the fund.

The assessment total of \$42.2 million roughly equals the total program budgets of all USF programs in 2020-21, excluding the broadband expansion grant program. The broadband expansion grant program budget is derived from unexpended assessment revenues from prior years. However, PSC is authorized to assess telecommunications providers an additional amount to meet a minimum funding level of \$2 million for the broadband expansion grant program in the event that year-end unencumbered amounts transferred from other USF programs do not provide at least that amount. To date, no such additional assessment has been necessary.

Public Service Commission

PSC USF programs, with the exception of the broadband expansion grant program, are supported by a single appropriation authorized to expend \$5,940,000 in 2020-21 under 2019 Act 9. Actual expenditures in the appropriation fell below the budgeted amount in 2018-19 (\$3.5 million) and 2019-20 (\$3.4 million), and the Commission has adopted a \$4.7 million budget for 2020-21. In addition to the following budgeted amounts for each program, \$236,100 is budgeted in 2020-21 for administrative costs for the privately contracted administrator of the USF.

In recent years, the Commission has maintained a budget for USF programs below its \$5.9 million appropriation level to sweep remaining funding to the broadband expansion grant program. Leaving a portion of its USF appropriation unexpended has allowed PSC to avoid imposing additional assessments to meet the \$2 million USF SEG funding level for broadband expansion grants. Each PSC program and its 2020-21 budget is described in the following paragraphs. Table 6 shows appropriations by institution and program under the universal service fund.

Lifeline. The lifeline program pays a portion of services charges for monthly basic telephone landline service or low-usage prepaid wireless service for low-income households. In 2020-21, lifeline is budgeted \$1,750,000 for program outreach and services.

Telecommunications Equipment Purchase Program (TEPP). TEPP provides vouchers to persons with disabilities to help fund the purchase of special telecommunications equipment necessary to use a telephone. In 2020-21, TEPP is budgeted \$1,675,000 for program outreach and services.

Nonprofit Access Grant Program. The nonprofit access grant program provides grants to organizations that facilitate affordable access to telephone and internet services to low-income or disabled individuals, or those living in areas with high costs. Grant recipients must provide a 33% funding match. In 2020-21, the program is budgeted \$500,000.

Telemedicine Equipment Grant Program. The telemedicine equipment grant program provides grants to nonprofit medical clinics and public health agencies to purchase telecommunications equipment that promotes technologically advanced medical services, enhances access to medical care in rural or underserved areas, or enhances access to medical care to underserved populations or persons with disabilities. In 2020-21, the program is budgeted \$500,000.

Two-Line Voice Carryover Program. The two-line voice carryover program provides funding to support the costs of a second telephone line to certain hearing-impaired customers who require two lines to communicate over the telephone. In 2020-21, the program is budgeted \$5,000.

High-Rate Assistance Credit Program. The high-rate assistance credit program reimburses telecommunications providers for credits they extend to residential customers when the total rate for residential service exceeds a specified percentage of the median household income for a county in their service area. Due to changes in federal regulations intended to increase competition and reduce service cost and changes in program rules, HRAC has been inactive in recent years and is budgeted \$0 in 2020-21.

Broadband Expansion Grant Program. The broadband expansion grant program provides grants to support projects that increase internet access and quality in Wisconsin. During the 2019-21

biennium, the program is budgeted \$22 million each year, plus additional unexpended amounts swept from other USF appropriations at year-end, which totaled \$3,075,700 in 2019-20 and \$3,392,500 in 2020-21. For more discussion of the broadband expansion grant program, see Chapter 2.

Department of Administration

Technology for Educational Achievement (**TEACH**). DOA administers the TEACH program to support internet access for eligible entities through rate discounts and subsidized installation of data lines and information technology infrastructure. Eligible entities include public school districts, private schools, CESAs, technical college districts, charter school sponsors, juvenile correctional facilities, private and tribal colleges, public museums, and public libraries.

State funding for the TEACH program is provided from the USF and federal e-rate funds. In 2019-20, expenditures for the TEACH program totaled \$13,805,400, consisting of \$13,359,700 USF SEG and \$445,700 e-rate FED. While the program is budgeted \$15,984,200 SEG in 2020-21, DOA anticipates expenditures of \$14,797,500, as shown in Table 6.

Department of Public Instruction

BadgerLink and Newsline for the Blind. Under 2019 Act 9, DPI is budgeted \$3,283,300 in 2020-21 for its BadgerLink and Newsline for the Blind programs. Badgerlink is a publicly accessible online library maintained through vendor contracts that offers access to licensed content such as magazines, newspapers, scholarly articles, videos, images, and music. Newsline for the Blind provides access to daily newspapers via an automated electronic voice that can be accessed by telephone for those who are not able to read print newspapers.

Aids to Public Library Systems. Act 9 provides \$16,013,100 in 2020-21 for aid to public library

Table 6: 2020-21 Universal Service Fund ProgramBudgets

Duugets	
Public Service Commission	
Broadband Expansion Grant Program*	\$4,651,100
USF Administration	\$236,100
Lifeline	1,750,000
Telecommunications Equipment	
Purchase Program (TEPP)	1,675,000
Nonprofit Access Grant Program	500,000
Telemedicine Equipment Grant Program	500,000
Two-Line Voice Carryover Program	5,000
High-Rate Assistance Credit Program	0
Department of Administration Technology for Educational Achievement (TEACH)	\$14,797,500
Department of Public Instruction	
Badgerlink and Newsline for the Blind	\$3,283,300
Aids to Public Library Systems	16,013,100
Library Service Contracts	1,342,400
Wisconsin Digital Learning Collaborative	1,000,000
University of Wisconsin System	
Badgernet	\$1,054,800
Total	\$46,808,300

*Excludes \$22 million transferred from the federal e-rate program appropriation and a \$5.4 million federal Coronavirus Relief Fund allocation.

systems. Funding is provided to public libraries to extend services, promote resource sharing among libraries, and increase access to library materials and services by the state's residents. Public library aid is distributed based on a statutory formula.

Library Service Contracts. Act 9 provides \$1,342,400 in 2020-21 for library service contracts with four providers: the Milwaukee Public Library, the University of Wisconsin-Madison, the Wisconsin Talking Book and Braille Library, and the Cooperative Children's Book Center. Contracts with Milwaukee Public Library and UW-Madison support Wisconsin residents' access to those institutions' libraries through interlibrary loan. The Wisconsin Talking Book and Braille Library provides access to audio books and braille materials to Wisconsin residents who cannot see. The Cooperative Children's Book Center is a

research library for Wisconsin school and public librarians, teachers, university students, and early childhood care providers housed at the University of Wisconsin-Madison's School of Education.

Wisconsin Digital Learning Collaborative. Act 9 provides \$1,000,000 in 2020-21 for the Wisconsin Digital Learning Collaborative, which provides access to online courses, professional learning, research and best practices, and administrative planning support for Wisconsin public, private, and charter schools.

University of Wisconsin System

Act 9 provides UW System \$1,054,800 in 2020-21 for UW to reimburse DOA for Badgernet telecommunications services provided to its campuses.

Low-Income Assistance Fees

The segregated utility public benefits fund is supported by revenues from state low-income assistance fees collected by utilities as line items on customer bills. Investor-owned electric utilities are required to collect the fee and remit it to the Department of Administration. Funding supports the Home Energy Plus program at DOA, the Wisconsin Works program at the Department of Children and Families, and several positions at PSC. In addition to investor-owned utility contributions, municipal electric utilities and electric cooperatives may contribute to the utility public benefits fund in lieu of operating their own low-income assistance program. Low-income assistance fees are not included in the base for the purposes of calculating gross revenue-based public utility taxes.

The Home Energy Plus program helps low-income households with payment of energy and heating bills, weatherization, energy conservation, and crisis prevention. In 2019-20, a total of \$46.9 million was expended from the utility public benefits fund for the Home Energy Plus program. For further discussion of the utility public benefits fund and the Home Energy Plus program, see the Legislative Fiscal Bureau's informational paper entitled "Department of Administration's Energy Services."

Wisconsin Works (W-2) is a work-based program that provides training and support services to assist low-income parents to obtain permanent and stable employment. W-2 also provides employment services and cash assistance to eligible families. Although W-2 is primarily funded by federal Temporary Assistance for Needy Families (TANF) funding, W-2 is budgeted \$9,139,700 utility benefits fund SEG in 2020-21. For further discussion of W-2, see the Legislative Fiscal Bureau's informational paper entitled "Wisconsin Works, Child Care, and Other Economic Support Programs."

The utility public benefits fund also supports 4.0 SEG positions at PSC and \$398,800 SEG annually in the 2019-21 biennium for Office of Energy Innovation programs and administration of the Focus on Energy program.

Police and Fire Protection Fee

State law requires telecommunications providers to impose a police and fire protection fee on each telephone line with an assigned phone number, including landlines, cellphones, and internet-based voice lines. For each subscriber, the fee is equal to 75ϕ per month for each phone number up to 10, plus an additional 7.5ϕ for each line thereafter. Prepaid wireless subscribers pay one-half the typical fee, or 38ϕ per line per month. The fee is collected by providers, and may be listed separately as part of customer bills or in conjunction with county-level 911 fees. The police and fire protection fee is not included for the purposes of

calculating sales tax.

PSC is budgeted \$166,600 each year of the 2019-21 biennium for administration of the police and fire protection fund, for which it contracts with the Department of Revenue (DOR). DOR deposited police and fire protection fees totaling \$55.4 million in 2019-20 into the segregated police and fire protection fund. Funding from the police and fire protection fee supports: (a) the

county and municipal aid program; and (b) the Department of Military Affairs' Interoperability Council and its programs. For further discussion of the county and municipal aid program, see the Legislative Fiscal Bureau's informational paper entitled "Shared Revenue Program." For further discussion of the Interoperability Council, see the Legislative Fiscal Bureau's informational paper entitled "Emergency Communications Systems.