

# The Effects of the Sales and Use Tax Exemption For Qualifying Broadband Service Providers

*Compiled by*  
the staff of the  
Education and Taxability Section,  
Wyoming Department of Revenue

*and edited by*  
Terri Lucero, Administrator  
Excise Tax Division

First Edition

2019, W.S. 39-15-105(a)(viii)(U) and W.S. 39-16-105(a)(viii)(K)

Revenue, Department of  
(011)

<http://revenue.wyo.gov>

Cheyenne, Wyoming 82002

November 3, 2020

## Table of Contents

Overview.....	2
Specific Reporting Requirements by Statute .....	2
Findings.....	3
Exemption Cost.....	3
Employment.....	4
Wages.....	5
Benefits .....	7
Turnover.....	7
Survey Process and Costs .....	7
Wyoming Business Council Regional Project Assessment System (RPAS).....	8
REMI Analyses: Economic Impacts.....	8

## Overview

Original House Bill No. HB0097 (Enrolled Act No. 59) was signed by Governor Gordon into law on February 26, 2019. This act relates to taxation and revenue and provides for a sales and use tax exemption for the purchases of equipment used to provide broadband internet services in unserved areas. The act provides for a reporting requirement and an effective date of July 1, 2019. The broadband internet services equipment purchases exemption is located within the “economic incentive” group of sales and use tax exemptions in the Wyoming statutes [W.S. 39-15-105(a)(viii) and W.S. 39-16-105(a)(viii)].

The exemption is provided to broadband internet service providers and is for the purchase of equipment used to provide broadband internet services in unserved areas. “Unserved areas” is defined in W.S. 9-12-1501(e) as “an area in which there exists no fixed terrestrial broadband service, or in which the maximum fixed terrestrial broadband speed available:

- (i) To residential customers is at speeds less than twenty-five (25) megabits per second download and three (3) megabits per second upload;
- (ii) To a business corridor within a municipality:
  - (A) With a population of less than two thousand (2,000), is twenty-five (25) megabits per second download and three (3) megabits per second upload;
  - (B) With a population of two thousand (2,000) or more, is fifty (50) megabits per second download and five (5) megabits per second upload.
- (iii) To a business corridor in an unincorporated area of a county, is twenty-five (25) megabits per second download and three (3) megabits per second upload.”

## Specific Reporting Requirements by Statute

Wyo. Stat. Ann. § 39-15-105(b)

“The Wyoming business council, the department of workforce services and the department of revenue shall jointly report to the joint revenue interim committee on or before December 1 of each year that the exemption is in effect. If requested by the department of revenue, any person utilizing the exemption shall report to the department the amount of sales tax exempted, and the number of jobs created or impacted by the utilization of the exemption.”

This report is to evaluate the cumulative effects of the exemption from initiation of the exemption and shall include:

- (i) A history of employment in terms of the numbers of employees, full-time and part time employees, and rate of turnover classified by the 2007 edition, as amended, of the North American Industry Classification System (NAICS) code manufacturing section 31 -33 from information collected by the Department of Employment;
- (ii) A history of wages and benefit disaggregated by gender for each job category; and
- (iii) A comprehensive history of taxes paid to the state of Wyoming.

## Findings

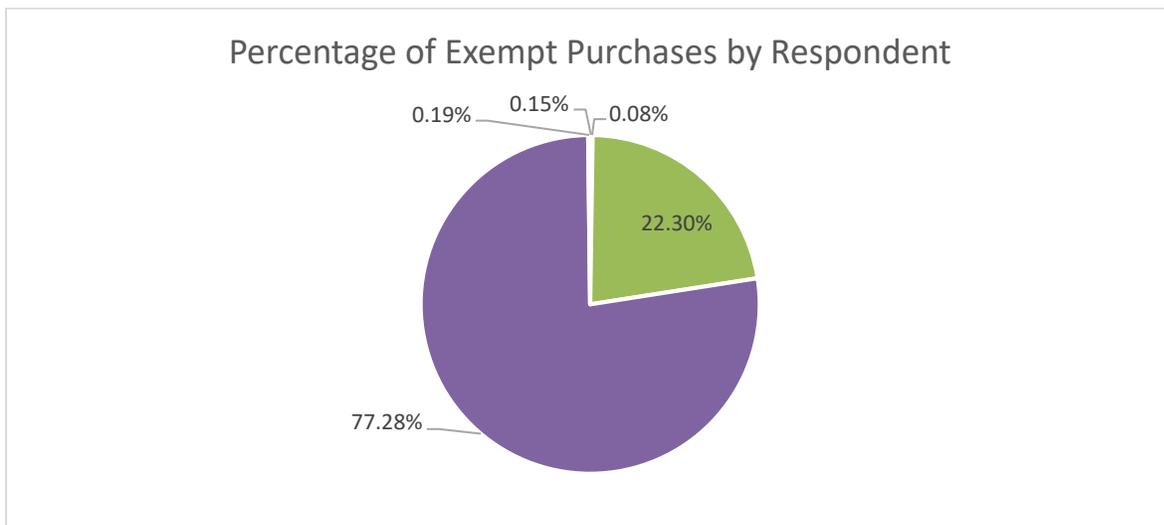
This year represents the first report in a series of annual reports on the effects of this sales and use tax exemption. References to data contained in this report will be referred to as FY20 and will cover the period of July 1, 2019 through June 30, 2020.

The FY20 report is based on 62 surveys mailed on June 12, 2020 to a list of businesses obtained from the Wyoming Business Council that were identified as providers of broadband internet services. A cover letter sent with the survey informed the businesses that once completed, the response could be either mailed or faxed to the Excise Tax Division for data processing. Total survey responses received were 22, or 35.5% of those surveyed in FY20. Of the 22 responses received, five of the respondents reported exempt purchases of broadband equipment.

## Exemption Cost

Based on survey responses for FY20, there was \$12,623,615.71 in exempt purchases made by the companies surveyed. Applying the statewide sale and use tax rate average of 5.37%, this amounts to \$677,888.16 in unrealized sales and use tax revenue by the State of Wyoming as a result of this exemption.

The single user with the highest utilization of the exemption reported \$9.7M in exempt purchases, representing 77.28% of the total exemptions utilization. Figure 1 illustrates each respondent's percentage of exempt purchases in FY20.



**Figure 1: Percentage of Exempt Purchases by Respondent**

## Employment

Of those businesses providing broadband internet services surveyed, a total of 1183 persons were employed: 1145 in full-time positions and 38 part-time positions. Figure 2 illustrates the total reported employment.

By occupational classification, 194 people held supervisory roles; 130 engaged in administrative capacities; 582 employees were in customer support services; 104 were skilled laborers; and the remaining 173 were unskilled laborers. Figure 2 details the number of employees by occupational classification.

	<b>FY20</b>
<b><i>Supervisor/Manager</i></b>	194
<b><i>Administrative Svcs</i></b>	130
<b><i>Customer Service</i></b>	582
<b><i>Skilled Labor</i></b>	104
<b><i>Unskilled Labor</i></b>	173

Figure 2: Number of Employees by Occupational Classification

Figure 3 compares the same figures as a percentage of the workforce.

	<b>FY20</b>
<b><i>Supervisor/Manager</i></b>	16%
<b><i>Administrative Svcs</i></b>	11%
<b><i>Customer Service</i></b>	49%
<b><i>Skilled Labor</i></b>	9%
<b><i>Unskilled Labor</i></b>	15%

Figure 3: Percentage of Employees by Occupational Classification

By gender, 849 were male and 334 were female; men accounted for 71.8% of the workforce. Of the 334 women holding positions: 63 were supervisory/managerial; 73 were administrative support, 176 were in customer support services roles and the remaining 15 were skilled laborers and 7 unskilled laborers. Figure 4, on page 5, illustrates the number of men and women as segments of the total workforce.

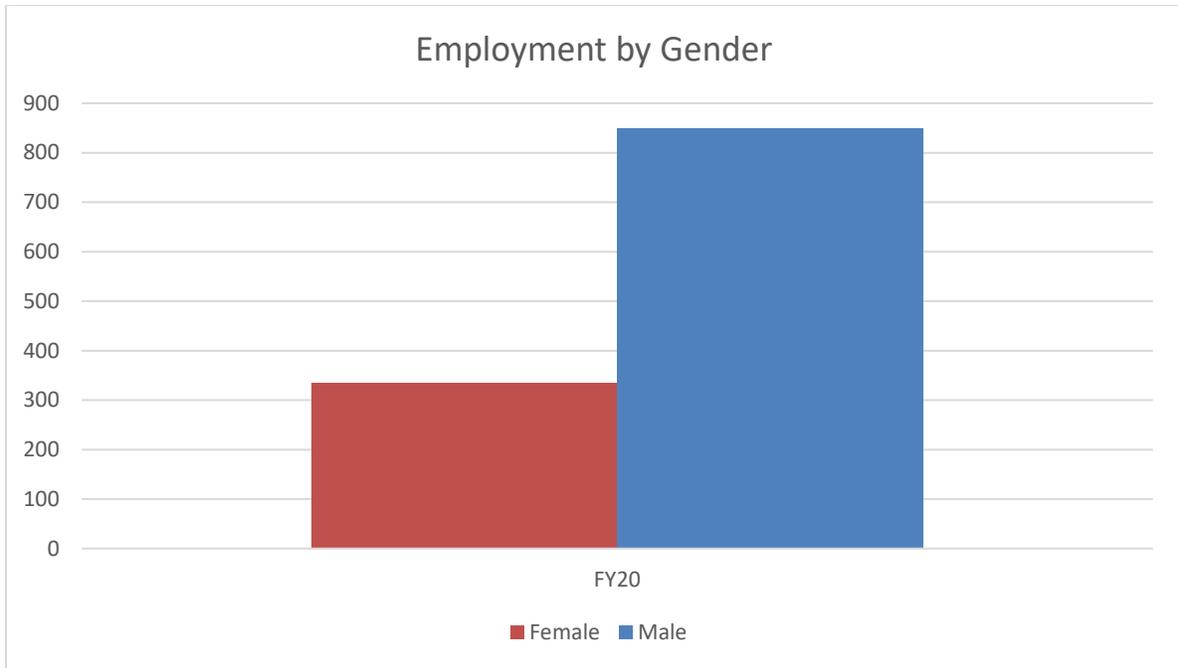


Figure 4: Employment by Gender

## Wages

According to the information provided, the average wage across the industry was \$25.36/hour. Per occupational classification, employee wages ranged from an average of \$24.63 per hour for administrative positions, to an average of \$43.32 per hour for upper level supervisors and managers. Figure 5 details the average wage per occupational classification.

	<i>FY20</i>
<i>Supervisor/Manager</i>	\$ 43.32
<i>Administrative Svcs</i>	\$ 24.63
<i>Customer Service</i>	\$ 19.91
<i>Skilled Labor</i>	\$ 29.72
<i>Unskilled Labor</i>	\$ 21.47

Figure 5: Average Wage by Occupational Classification

Figure 6, on page 6, illustrates the annual average wage as compared to the average wage per occupational classification.

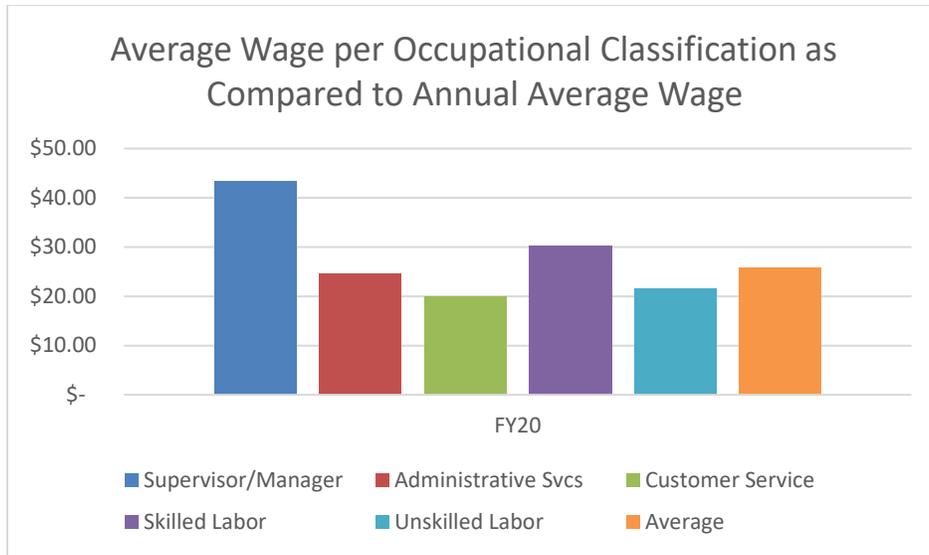


Figure 6: Average Wage per Occupational Classification as Compared to Annual Average Wage

FY20 shows women hold positions in each occupational classification. In occupational categories where women were represented, men’s wages generally out-performed women’s wages. The only category where this did not hold true, on average, was in the skilled labor category in which women earned an average of \$30.52 per hour, and men earned an average of \$29.58 per hour, women earned 3% more than men in this category. Alternatively, men in administrative positions were paid an average of \$25.85 per hour, whereas women were paid an average of \$23.68 per hour or 8% lower than men’s wages. In customer support services positions, men were paid an average of \$20.88 per hour, as opposed to the average of \$17.66 per hour paid to women which reflects women’s wages 15% lower than men’s. In unskilled labor, men were paid an average of \$21.68 per hour with women only earning an average of \$16.55 per hour for the same position where women’s wages 24% lower than men’s. Figure 7 compares men’s and women’s wages by occupational classification and also provides the percentage of wages women received as compared to men in similar positions.

	FY20		
	M	F	% Earnings
<b>Supervisor/Manager</b>	\$ 43.45	\$ 43.05	99%
<b>Administrative Svcs</b>	\$ 25.85	\$ 23.68	92%
<b>Customer Service</b>	\$ 20.88	\$ 17.66	85%
<b>Skilled Labor</b>	\$ 29.58	\$ 30.52	103%
<b>Unskilled Labor</b>	\$ 21.68	\$ 16.55	76%

Figure 7: Men and Woman Wages per Occupational Classification

## Benefits

Of the respondents, only two of the businesses reported not offering benefits to its full-time employee(s). The remaining businesses offered full benefits packages consisting of health, dental and vision coverage, as well as a prescription plan and retirement 401(k) options to the full-time employees. One respondent reported not offering vision coverage in their benefits package. No benefits were offered to the part-time employees.

## Turnover

Respondents reported varying degrees of turnover. Figure 8 illustrates the turnover rate per occupational classification, as well as the average turnover rate for the year for the combined occupational classifications. The Department of Workforce Services has not published turnover information for FY20 as of the writing of this report, therefore turnover rates for respondents compared to that of Wyoming turnover rates are not available.

	<i>FY20</i>
<i>Managerial</i>	3.80%
<i>Administrative</i>	5.57%
<i>Customer Service</i>	18.76%*
<i>Skilled Labor</i>	3.94%
<i>Unskilled Labor</i>	11.14%
<i>Average</i>	8.64%

Figure 8: Turnover Rate per Occupational Classification

\*One respondent reported turnover in customer service as seasonal turnover for part time positions.

## Survey Process and Costs

All surveys were sent in the mail. The primary expense associated with this report is the time spent following up with the respondents; reviewing and analyzing the data received; as well as the preparation of this report. The Department estimates office personnel expended 40 to 50 hours over the course of several weeks on this endeavor.

## **Wyoming Business Council Regional Project Assessment System (RPAS) Manufacturing sales tax incentive economic analysis**

The Department of Revenue requested this information from the Wyoming Business Council. The following information was received in regard to this request:

“Previous year's reports included results of an additional economic model, RPAS. To simplify and clarify reporting, all outputs including economic and revenue outcomes have been calculated using the REMI model.”

- Wyoming Business Council, October 28, 2020

### **REMI Analyses: Economic Impacts**

[Please note the following narrative below references the economic impacts of three separate sales and use tax exemptions. For clarity and ease of reading we have taken the liberty of removing those comments not specifically related to the Sales and Use Tax exemption for Broadband Service Providers.]

The analyses of the economic impacts of the sales and use tax exemptions for (1) purchases of machinery and machine tools used directly and predominantly in manufacturing, for (2) purchases and rentals of qualifying computer equipment necessary for the operation of a data processing center, for (3) the sales/purchases of tangible personal property or services performed for the repair, assemble, alteration, or improvement of railroad rolling stock, and for (4) purchases of equipment by a telecommunications service provider, video programming service provider, or provider of internet access used to provide broadband internet service was prepared using the Regional Economic Models, Inc. (REMI) PI+ model. REMI PI+ is the next generation Policy Insight model built exclusively for Wyoming. It is an integrated model that combines the best features of the input-output, general equilibrium, econometric, and economic geography methodologies. PI+ is also a dynamic rather than a static model allowing for year-by-year analysis of the total regional effects of any specific policy.

Table 4: Economic Impact of **Sales & Use Tax Exemption Removal** for Broadband Internet Providers

Category <i>(Change from Baseline)</i>	2020	2021	2022	2023	2024	Average 2020-2030
Total Employment - Jobs	-2	-3	-3	-4	-4	-3
Population - Individuals	-1	-2	-2	-3	-3	-3
Wages and Salaries	-\$0.1	-\$0.1	-\$0.2	-\$0.2	-\$0.2	-\$0.2
Personal Income	-\$0.2	-\$0.2	-\$0.2	-\$0.3	-\$0.3	-\$0.3
Disposable Personal Income	-\$0.2	-\$0.2	-\$0.2	-\$0.2	-\$0.3	-\$0.3
Gross Domestic Product	-\$0.3	-\$0.3	-\$0.4	-\$0.5	-\$0.5	-\$0.5
Output	-\$0.5	-\$0.7	-\$0.8	-\$0.9	-\$1.0	-\$0.9
Sales & Use Tax Revenue	-\$0.004	-\$0.004	-\$0.006	-\$0.006	-\$0.008	-\$0.007
Property Tax Revenue	-\$0.002	-\$0.002	-\$0.002	-\$0.003	-\$0.003	-\$0.003
<i>Note: All dollar amounts are expressed as millions of fixed (2018) dollars.</i>						

The economic impact of the **removal of the sales tax exemption** for purchases of equipment by a telecommunications service provider, video programming service provider, or provider of internet access used to provide broadband internet service was modeled in REMI as an increase in the production costs for the telecommunications industry of \$1.0 million per year beginning in 2019 (see Table 4). This exemption removal would result in an average annual loss of 3 jobs and a decrease in GDP of \$0.5 million per year over the period of 2020 to 2030 when compared to the baseline scenario.

### Key Definitions

**Total Employment** comprises estimates of the number of non-farm jobs, full-time plus part-time, by place of work. Full-time and part-time jobs are counted at equal weight. Includes direct, indirect, and induced jobs.

**Population** reflects mid-year estimates of people, including survivors from the previous year, births, special populations, and three types of migrants (economic, international, and retired).

**Wages and Salaries** are the monetary remuneration of employees, including the compensation of corporate officers; commissions, tips, and bonuses; voluntary employee contributions to certain deferred compensation plans, such as 401(k) plans; and receipts in kind that represent income. Wages and salaries disbursements are affected by changes in Wage Rate and Employment.

**Personal Income** is the income that is received by all persons from all sources. It is calculated as the sum of wage and salary disbursements, supplements to wages and salaries, proprietors' income with inventory valuation and capital consumption adjustments, rental income of persons with

capital consumption adjustment, personal dividend income, personal interest income, and personal current transfer receipts, less contributions for government social insurance.

**Disposable Personal Income** equals personal income minus personal taxes.

**Gross Domestic Product** or **GDP** is the market value of goods and services produced by labor and property. It is often referred to as "value added" and is equal to its gross output (sales or receipts and other operating income, plus inventory change) minus its intermediate inputs (consumption of goods and services purchased from other industries or imported).

**Output** is the amount of production, including all intermediate goods purchased as well as value-added (compensation and profit). Output can also be thought of as sales or supply or simply price multiplied by quantity ( $P \times Q$ ).

### **About the REMI PI+ Model**

The REMI PI+ model incorporates aspects of four major modeling approaches: **Input-Output**, **General Equilibrium**, **Econometric**, and **Economic Geography**. Each of these methodologies has distinct advantages as well as limitations when used alone. The REMI integrated modeling approach builds on the strengths of each of these approaches.

The REMI model at its core has the inter-industry relationships found in **Input-Output models**. As a result, the industry structure of a particular region is captured within the model, as well as transactions between industries. Changes that affect industry sectors that are highly interconnected to the rest of the economy will often have a greater economic impact than those for industries that are not closely linked to the regional economy.

**General Equilibrium** is reached when supply and demand are balanced. This tends to occur in the long run, as prices, production, consumption, imports, exports, and other changes occur to stabilize the economic system. For example, if real wages in a region rise relative to the U.S., this will tend to attract economic migrants to the region until relative real wage rates equalize. The general equilibrium properties are necessary to evaluate changes such as tax policies that may have an effect on regional prices and competitiveness.

REMI is sometimes called an "**Econometric model**," as the underlying equations and responses are estimated using advanced statistical techniques. The estimates are used to quantify the structural relationships in the model. The speed of economic responses is also estimated, since different adjustment periods will result in different policy recommendations and even different economic outcomes.

The **New Economic Geography** features represent the spatial dimension of the economy. Transportation costs and accessibility are important economic determinants of interregional trade and the productivity benefits that occur due to industry clustering and labor market access. Firms benefit having access to a large, specialized labor pool and from having access to specialized intermediate inputs from supplying firms. The productivity and competitiveness benefits of labor and industry concentrations are called agglomeration economies, and are modeled in the economic geography equations.

The primary national, state, and county data source for REMI PI+ is the Bureau of Economic Analysis (BEA) State Personal Income (SPI) and Local Area Personal Income (LAPI) series (which also include employment and total population at both the state and county level). REMI also relies on numerous other data sources including the Bureau of Labor Statistics, Energy Information Administration, Center for Disease Control and Prevention, National Center for Health Statistics, and the Department of Defense. *Source: remi.com.*

