

The Effects of the Sales and Use Tax Exemption For Manufacturing Machinery

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the staff of the
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2004, W.S. 39-15-105(a)(viii)(O) and W.S. 39-16-105(a)(viii)(D)

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Table of Contents

Overview.....	2
Specific Requirements by Statute	2
Employment.....	2
Wages.....	9
Benefits	12
Turnover.....	13
Exemption Cost.....	14
Wyoming Business Council Regional Project Assessment System (RPAS).....	17
REMI Analyses: Economic Impacts.....	17
References.....	20
Appendices.....	21

Overview

Original House Bill No. 44 (Enrolled Act No. 20) was signed into law on March 3, 2004. This act relates to taxation and revenue and provides for a sales and use tax exemption for machinery and machine tools used directly and predominantly in Manufacturing in the State of Wyoming. The act provides for definitions, limitations, a reporting requirement and an effective date. This law took effect on July 1, 2004, and per subsequent amendments, has a sunset of December 31, 2027.

The Manufacturing machinery 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); W.S. 39-16-105(a)(viii)]. The law exempts from Wyoming sales and use taxes, until December 31, 2027, the sale or lease of machinery to be used in Wyoming directly and predominantly in Manufacturing tangible personal property provided,

- The sale or lease is to a manufacturer classified by the Department of Revenue under the North American Industry Classification System (NAICS) code Manufacturing section 31 – 33; and
- The sale or lease does not include noncapitalized machinery except machinery expensed in accordance with Section 179 of the Internal Revenue Code.

Specific Requirements by Statute

2011 Session Laws, Chapter 83 requires the Wyoming Business Council, the Department of Workforce Services, and the Department of Revenue to report on this exemption annually to the Joint Revenue Interim Committee. Specifically, on or before December 1st of each year the exemption is in effect, these agencies are to report the effects of the sales and use tax exemption for Manufacturing machinery. If requested by the Department of Revenue, any person utilizing the exemption shall report the amount of sales tax exempted and the number of jobs created or impacted by utilization of the exemption. Furthermore, the report is to evaluate the cumulative effects of the exemption from initiation of the exemption and shall include:

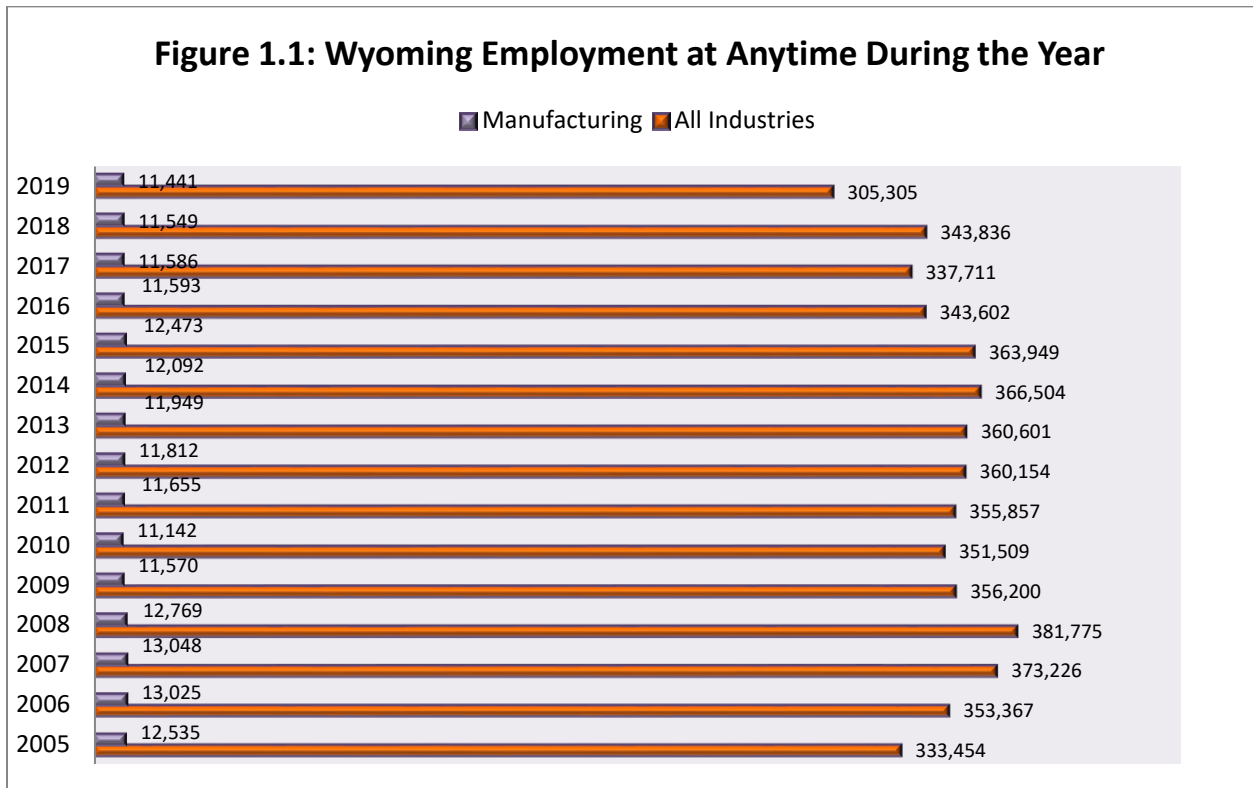
- (i) A history of employment in terms of the numbers of employees, full-time and part time employees, and rate of turnover classified by the 2007 edition, as amended, of the North American Industry Classification System (NAICS) code Manufacturing section 31 – 33 from information collected by the Department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

Employment

The total number of persons working in Wyoming stood at 333,454 persons in 2005.¹ Of that, employment in the manufacturing industry accounted for 12,535 persons, or 3.76% of the total employment pool. Wyoming employment realized moderate growth during the next three years

¹ Wyoming Department of Workforce Services, Research & Planning (2019). *Earnings in Wyoming by Industry, Age & Gender, 2000-2019*.

and peaked in 2008 with total employment reaching 381,775 persons. After losing 30,266 positions including 1,627 in the manufacturing industry from 2008 to 2010, Wyoming’s total employment saw a slight increase from 337,711 in 2017 to 343,836 in 2018. However, employment in the manufacturing industry showed a small decline from 11,586 in 2017 to 11,549 in 2018. In 2019, the workforce in Wyoming decreased to 305,305, employment in the manufacturing sector also showed a decline to 11,441². Figure 1.1 details employment history from 2005 to 2019 in both the manufacturing industry and Wyoming at large.



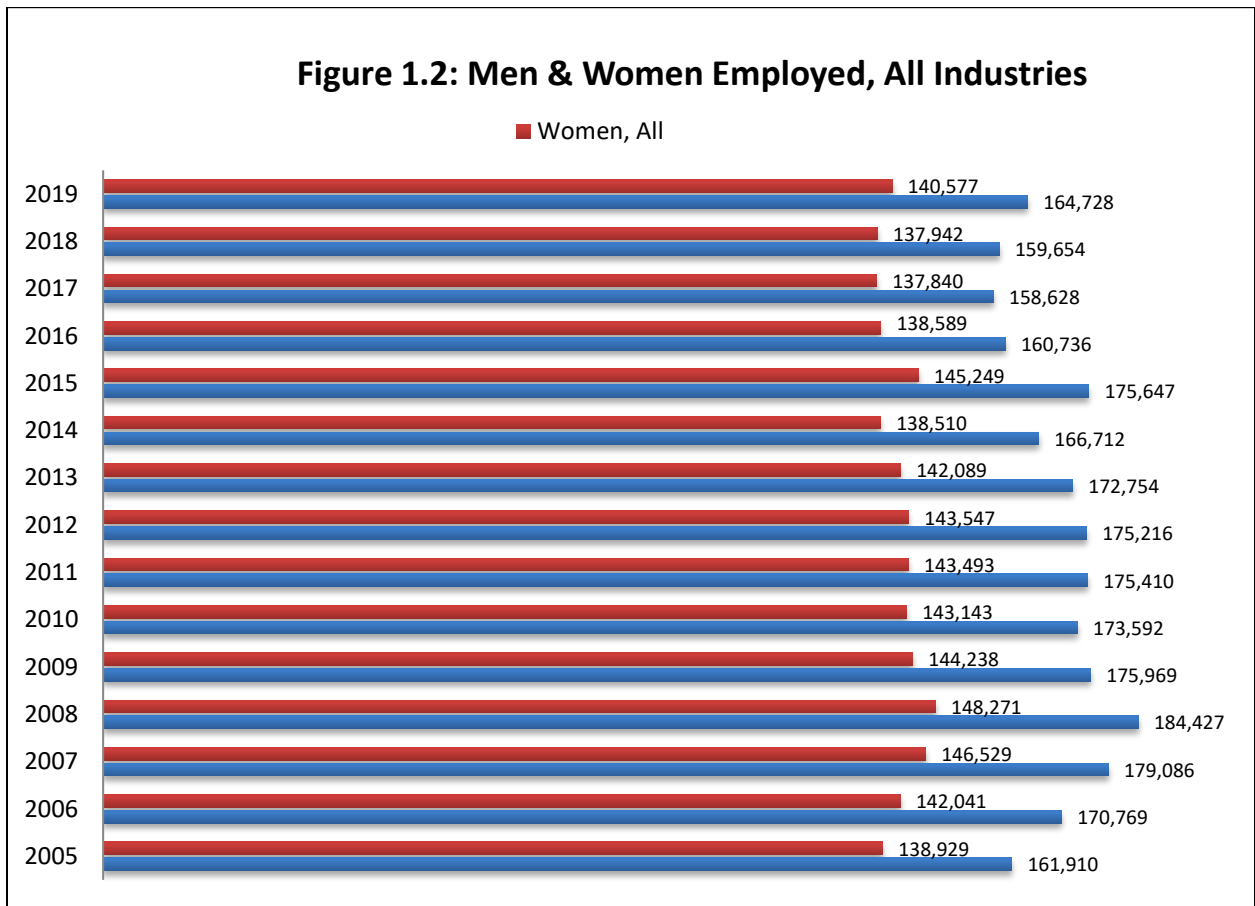
Over time, the relationship of male to female workers has remained relatively constant. In 2005 men occupied 49% of the workforce and women occupied 42%. With slight variances every year, by 2018, men accounted for 46% of the workforce and women accounted for 40% of the workforce. The remaining 14% are not identified by gender.³ However, 2019 shows women still occupied 46% of the workforce in Wyoming while men occupied the remaining 54%.

The percentage of male to female workers is remarkably higher within the manufacturing industry. For years 2005 through 2008, men accounted for roughly 73% while women accounted for roughly 21%. This has stayed relatively constant with men holding, on average, 74% of the available workforce and women making up an additional 20% of the workforce in 2018. In 2019, women accounted for 21% of the workforce in the manufacturing industry while men accounted for the

² Ibid.

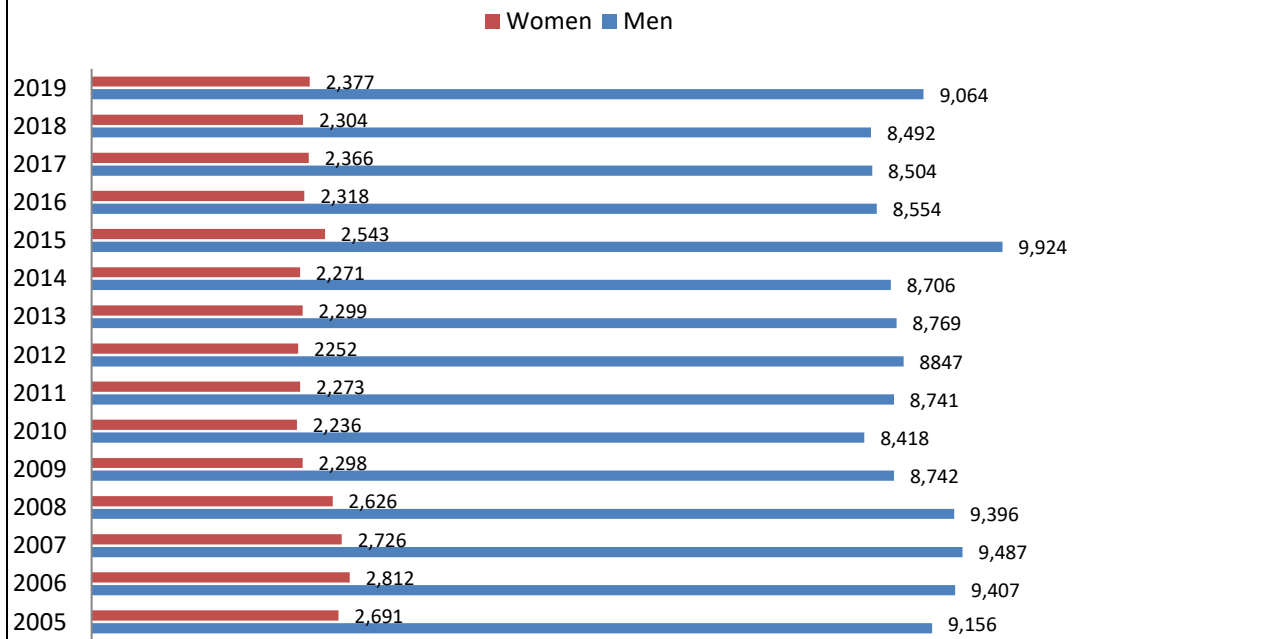
³ Ibid.

remaining 79%⁴. The Figures 1.2 and 1.3, on page 5, detail employment by gender both in the manufacturing industry and Wyoming at large.



⁴ Wyoming Department of Workforce Services, Research & Planning (2019). *Earnings in Wyoming by Industry, Age & Gender, 2000-2019*.

Figure 1.3: Men & Women Employed, Manufacturing



For inclusion in this report, the Department makes a special request of the Wyoming Department of Workforce Services, Research and Planning Office to provide data for full and part-time employment specifically for the manufacturing industry. However, due to COVID, the Department of Workforce Services was not able to provide information regarding part-time and full-time employment. As a result, the information in this section reflects the findings as stated in the 2019 Manufacturing Machinery report of November, 2019 with no new information available.

The number of persons employed in full-time versus part-time capacities across Wyoming has also remained relatively stable during the survey period. Regarding full-time employment for All Industries, 2005 held the low spot with 72% and the high spot in 2009 with 77%. From 2010 to 2018 the full-time employment averaged between 72% and 76%. From years 2005 through 2018, part-time employment for All Industries ranged from 23% - 28%.⁵

For those employed in the Manufacturing industry, full-time employment held a steady 91% or above for years 2005 through 2015 with a slight decline in 2016 to 89% with a further decline in 2017 to 88%; but then this increased again in 2018 to 91%. Figures 1.4 and 1.5, on page 6, graphically compares full-time and part-time employment for all industries and manufacturing.

⁵ Wyoming Department of Revenue. *The Effects of the Sales and Use Tax Exemption for Manufacturing Machinery, Thirteenth Edition.* (2018).

Figure 1.4: Full & Part-Time Employment, All Industries

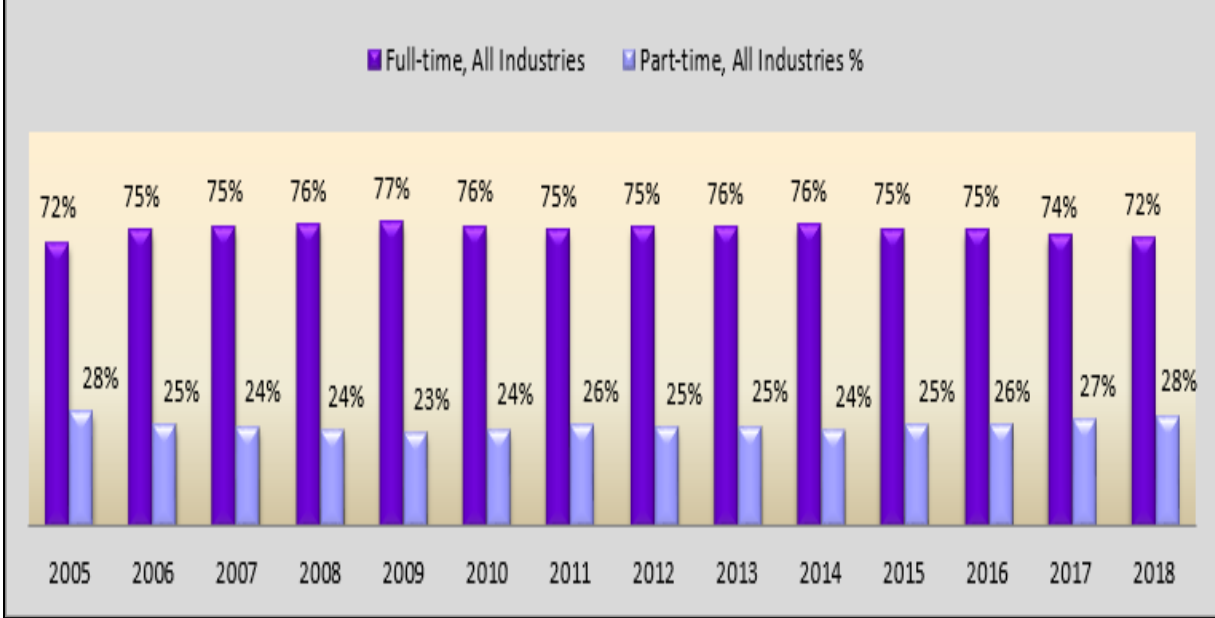
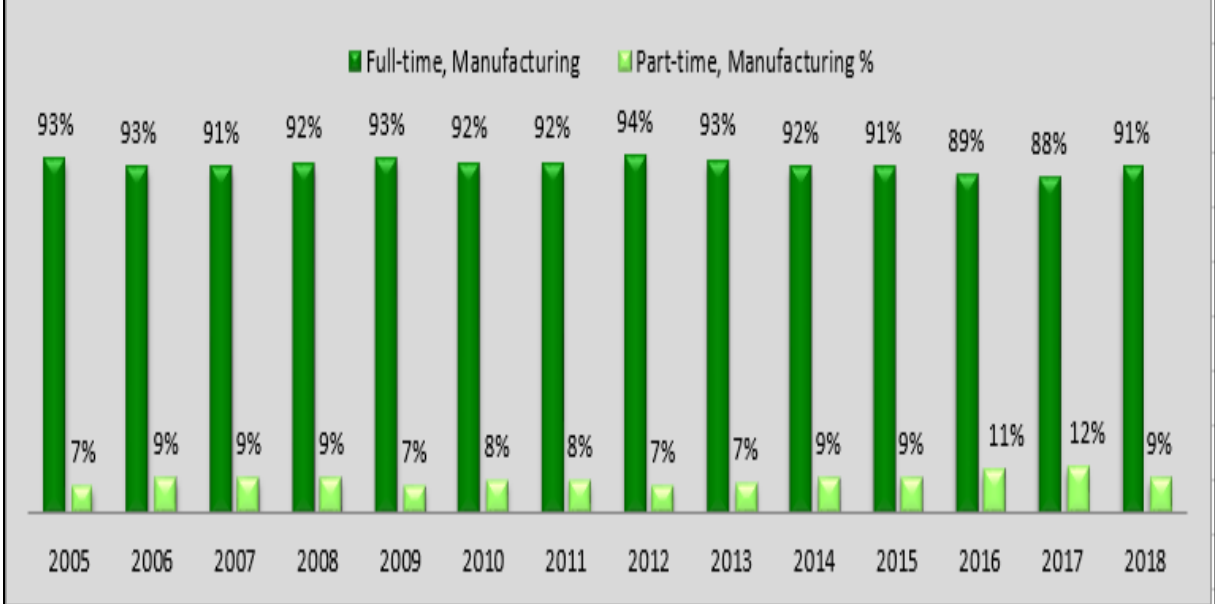


Figure 1.5: Full & Part-Time Employment, Manufacturing



A discussion about those employed in the manufacturing industry is not complete without a closer review of the Standard Occupational Classification (SOC) system. Wyoming utilizes the SOC system to categorize workers within the state; and while manufacturing has its own SOC code, several other occupational groups are typically found in the manufacturing industry as well. Table 1.1 (pg.8) illustrates the total number of persons working in the selected SOC categories within Wyoming from year 2005.⁶

Please note, the Department of Workforce Services updated the SOC classification system to include new classification numbers and occupational titles, therefore the new classification numbers have no reporting information prior to 2018.

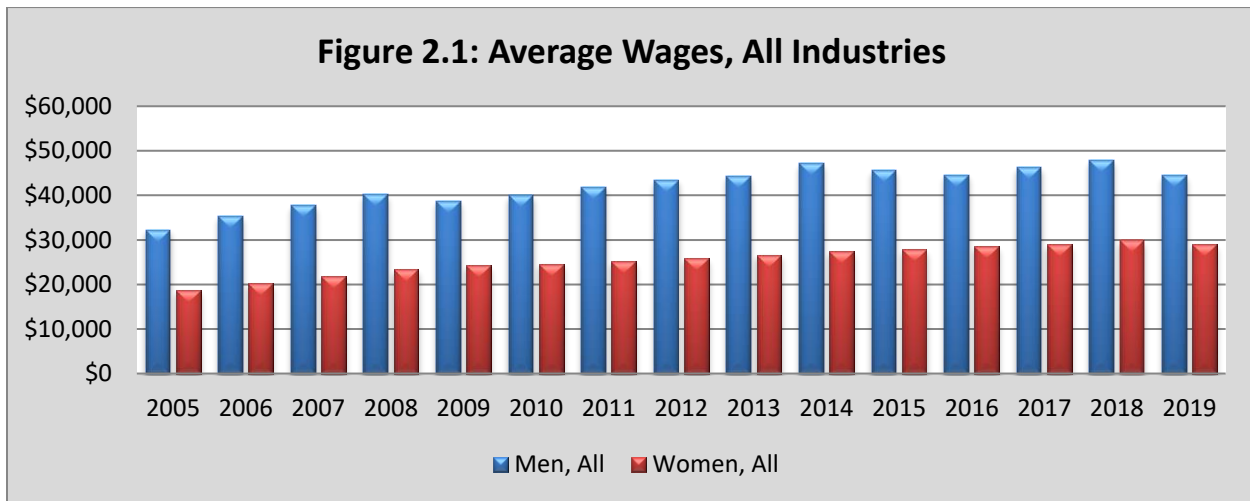
⁶ Wyoming Department of Work Force Services. *Wyoming Occupational Employment and Wages, March 2020*. Prior to 2016, Wyoming Department of Revenue. *The Effects of the Sales and Use Tax Exemption for Manufacturing Machinery, Fourteenth Edition*. (2019).

Table 1.1: Employment per SOC Classifications typically found in the Manufacturing Industry for Years 2005 – 2019

SOC	Occupational Title	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
11-0000	Management	12,780	12,450	NA	12,550	12,770	12,710	12,370	12,090	12,200	12,040	12,200	11,520	11,430	11,690	12,560
13-0000	Business & Financial	6,270	6,720	NA	7,070	7,290	7,350	7,270	7,530	7,850	8,130	8,540	8,820	8,480	8,220	9,170
15-0000	Computer & Mathematical	1,930	2,050	NA	2,040	2,210	2,200	2,210	2,290	2,620	2,750	2,730	2,650	2,650	2,660	3,170
17-0000	Architecture & Engineering	3,920	4,250	NA	4,650	5,150	5,040	5,090	5,090	4,910	5,130	5,580	5,690	4,860	4,170	4,490
19-0000	Life, Physical & Social Services	4,210	4,270	NA	4,260	4,750	4,860	4,360	4,250	4,340	4,180	4,520	4,420	4,200	3,980	4,150
21-0000	Community & Social Services														4,000	3,970
23-0000	Legal														1,580	1,740
25-0000	Education, Training & Library														20,170	19,580
27-0000	Arts, Design, Entertainment, Sports & Media	2,740	2,490	NA	2,570	2,900	3,130	2,920	2,970	2,810	3,100	3,110	3,280	3,070	2,870	2,780
29-0000	Healthcare Practitioners & Technical	10,550	10,850	NA	11,520	12,000	12,770	13,130	13,280	13,360	13,530	14,020	14,140	14,300	14,400	14,390
31-0000	Healthcare Support														6,890	9,430
33-0000	Protective Services														5,690	5,970
35-0000	Food Preparation & Serving-Related	24,440	23,600	NA	24,140	24,810	24,430	23,070	23,270	24,710	24,740	25,040	25,080	25,180	24,570	25,320
37-0000	Building & Grounds Cleaning & Maintenance	10,030	11,110	NA	11,370	11,950	11,250	11,220	11,110	11,070	11,350	11,440	11,390	11,670	11,360	10,950
39-0000	Personal Care & Service														8,310	5,350
41-0000	Sales & Related	21,760	22,480	NA	23,390	24,110	23,850	22,720	22,630	23,000	23,110	23,880	24,750	25,320	24,620	23,270
43-0000	Office & Administrative Support	36,160	36,530	NA	37,870	38,720	38,490	37,190	37,610	36,790	36,630	36,170	36,600	36,190	35,070	30,650
45-0000	Farming, Fishing & Forestry														570	660
47-0000	Construction & Extraction	27,090	29,260	NA	33,090	37,100	36,510	32,620	33,210	33,770	33,070	32,860	31,720	27,890	25,740	28,600
49-0000	Installation, Maintenance & Repair	14,730	15,520	NA	17,380	17,740	18,080	16,890	17,790	18,370	18,170	18,460	18,730	17,380	16,920	18,110
51-0000	Production	11,900	13,060	NA	14,320	14,830	14,200	13,280	12,300	13,260	12,850	13,230	13,180	12,770	12,330	13,300
53-0000	Transportation & Material Moving	24,020	26,640	NA	25,570	25,810	24,820	22,060	22,450	23,160	23,700	24,850	25,330	23,600	22,180	25,730

Wages

The average wage for men in all industries in 2005 was \$32,218. After a setback, in 2009 mens wages increased though 2014. 2015 showed a slight decline from 2014 and in 2016 mens wages show a further decline to \$44,544. However, wages in 2017 show an increase of mens wages to \$46,270 and again in 2018 to \$47,803 and wages in 2019 showed a decrease in men’s wages to \$44,502. In comparing the average wage in All Industries from 2005 through 2018, the average annual wage for men rose by \$15,585 or roughly 48%. In 2019, the average wage for men decreased \$3,301 or approximately 7%. Unlike their male counterparts, female workers did not face a setback, rather experienced consistent annual wage increases in all industries from 2005 through 2018, starting at \$18,721 in 2005 and reaching \$29,869 in 2018, an increase of \$11,148 or roughly 60%. However, in 2019, women’s wages also declined by approximately \$806 to \$29,057⁷. Figure 2.1 details the average worker’s wage in all industries during the surveyed periods.



Men and women employed in the manufacturing industry enjoy higher wages than their counterparts in all industries, and have also seen annual wage increases over the last nine years. In 2005, men employed in the manufacturing industry earned an average annual wage of \$38,463 and women earned \$19,795. In 2017, the average wage for men and women rose to \$60,853 and \$32,820 respectively. 2018 wages in the manufacturing industry, for both men and women increased to \$63,104 for men and \$34,870 for women. Average wage data for year 2019 for men showed a decrease of \$6,537 to \$56,567. The average wage for women in the manufacturing industry also showed a decline in 2019 of \$2,392 to \$32,478⁸. Figure 2.2, on page 10, portrays the average Wyoming wage for the Manufacturing Industry categorized by gender between years 2005 and 2019. Figures 2.3, 2.4 and 2.5, on page 10, compare average wages within the manufacturing industry to all industries. Also between 2005 and 2019, wages increased per SOC occupation. Table 2.1, on page 11, outlines wages typically found by SOC occupation.⁹

⁷ Wyoming Department of Workforce Services, Research & Planning (2018). *Earnings in Wyoming by Industry, Age & Gender, 2000-2019*.

⁸ Ibid.

⁹ Ibid.

Figure 2.2: Average Wages, Manufacturing

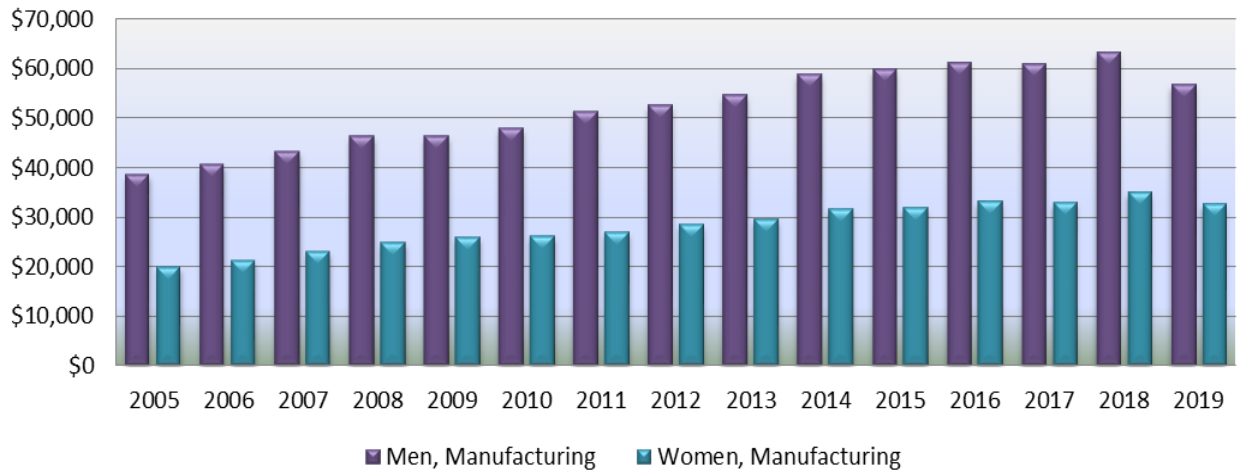


Figure 2.3: Wages, Men

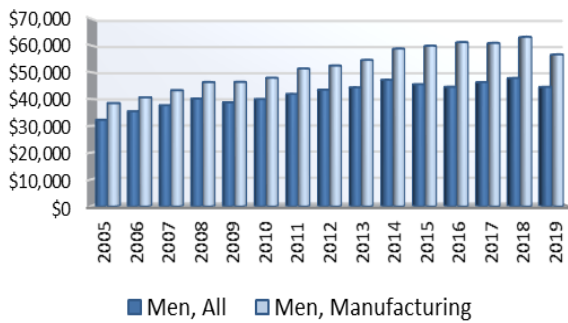


Figure 2.4: Wages, Women

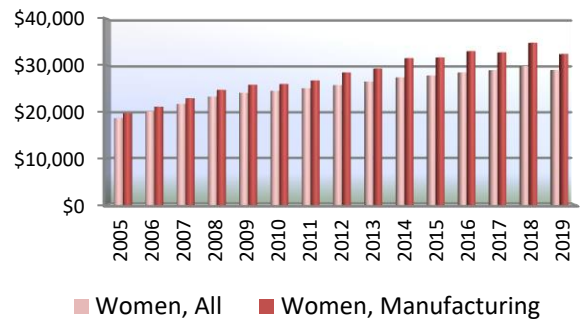


Figure 2.5: Wages, Manufacturing V. All Industries

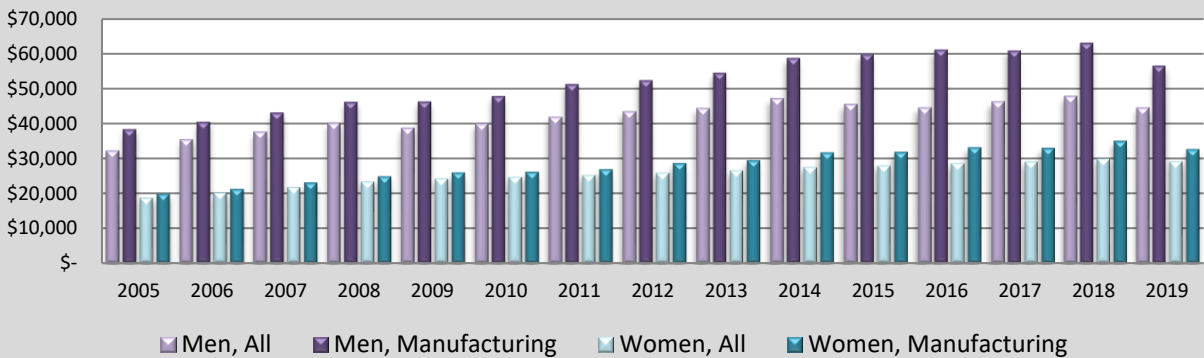


Table 2.1: Hourly Median Wage

SOC	Occupational Title	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014-	2015	2016	2017	2018	2019
11-000	Management Occupations	\$27.66	\$28.79	NA	\$31.40	\$32.83	\$34.56	\$36.04	\$36.75	\$38.16	\$39.42	\$40.85	\$42.09	\$42.75	\$50.12	\$47.88
13-000	Business & Financial	\$19.67	\$21.03	NA	\$22.90	\$23.78	\$24.92	\$25.92	\$26.43	\$26.94	\$27.92	\$28.80	\$29.04	\$33.45	\$33.93	\$34.30
15-000	Computer & Mathical	\$20.27	\$21.90	NA	\$23.75	\$25.14	\$25.71	\$26.62	\$27.30	\$27.51	\$27.65	\$28.00	\$28.70	\$30.27	\$31.72	\$33.26
17-000	Architecture & Engineering	\$24.23	\$25.89	NA	\$27.72	\$29.19	\$30.40	\$30.88	\$31.61	\$30.40	\$31.68	\$32.86	\$33.73	\$37.98	\$38.90	\$40.80
19-000	Life, Physical & Social Services	\$20.11	\$20.98	NA	\$22.94	\$22.35	\$22.84	\$23.74	\$24.68	\$24.88	\$26.19	\$26.37	\$26.55	\$27.39	\$28.23	\$32.72
21-0000	Community & Social Services														\$23.69	\$23.96
23-0000	Legal														\$37.60	\$35.71
25-0000	Education, Training & Library														\$24.04	\$24.24
27-000	Arts, Design, Entertainment, Sports, etc.	\$12.13	\$13.31	NA	\$13.48	\$13.35	\$14.12	\$15.44	\$15.57	\$16.42	\$16.81	\$16.18	\$16.70	\$19.99	\$21.20	\$21.49
29-000	Healthcare Practitioners & Technical	\$22.37	\$23.19	NA	\$25.07	\$25.35	\$26.92	\$27.41	\$28.32	\$28.72	\$29.21	\$29.07	\$29.79	\$37.77	\$39.99	\$40.70
31-0000	Healthcare Support														\$15.92	\$15.99
33-0000	Protective Services														\$22.94	\$23.28
35-000	Food Preparation & Serving Related	\$6.92	\$6.32	NA	\$7.97	\$8.55	\$8.96	\$9.11	\$9.24	\$9.15	\$9.21	\$9.33	\$9.72	\$11.74	\$12.30	\$12.55
37-000	Building & Grounds Clearing & Maint.	\$8.86	\$9.31	NA	\$10.24	\$10.78	\$11.23	\$11.33	\$11.46	\$11.50	\$11.85	\$11.90	\$12.39	\$13.96	\$14.84	\$15.38
39-0000	Personal Care & Service														\$13.67	\$15.29
41-000	Sales & Related	\$9.11	\$9.58	NA	\$10.17	\$10.57	\$11.13	\$11.49	\$11.86	\$12.06	\$12.41	\$12.79	\$12.83	\$17.62	\$18.21	\$18.42
43-000	Office & Administration Support	\$11.09	\$11.70	NA	\$12.71	\$13.43	\$13.92	\$14.35	\$14.61	\$15.11	\$15.15	\$15.63	\$16.03	\$17.32	\$18.08	\$18.91
45-0000	Farming, Fishing & Forestry														\$15.49	\$15.85
47-000	Construction & Extraction	\$16.29	\$17.68	NA	\$18.84	\$19.38	\$19.75	\$20.66	\$21.13	\$21.45	\$21.72	\$22.72	\$23.03	\$24.96	\$25.52	\$26.49
49-000	Installation, Maintenance & Repair	\$18.24	\$18.81	NA	\$19.92	\$20.13	\$20.98	\$21.82	\$22.92	\$23.06	\$23.57	\$23.78	\$24.34	\$26.55	\$27.48	\$28.33
51-000	Production	\$14.26	\$15.21	NA	\$17.00	\$18.53	\$19.75	\$21.12	\$21.57	\$21.27	\$21.85	\$22.70	\$24.12	\$25.74	\$27.05	\$27.79
53-000	Transportation & Material Moving	\$14.16	\$14.99	NA	\$15.50	\$15.82	\$16.25	\$17.12	\$18.13	\$19.01	\$19.32	\$19.44	\$19.93	\$21.54	\$22.69	\$22.42

Benefits

In accordance with the specific statutory requirements, the Department of Revenue has included benefit data collected by the Wyoming Department of Work Force Services, Research & Planning Division. Employers are surveyed on a quarterly basis and the compiled results are published annually as part of *Wyoming Benefits Survey* publications. However, due to COVID, the Department of Workforce Services was not able to provide information regarding benefits. As a result, the information in this section reflects the findings as stated in the 2019 Manufacturing Machinery report of November, 2019 with no new information available.

Starting in 2013, the Department requested benefit information prior to the Benefits Survey official publication.¹⁰ Workforce Services tracks twenty benefits that may or may not be offered to employees. For simplicity sake, the Department of Revenue opted to follow seven of the most familiar benefits offered by employers during years 2005 through 2018.

Benefits offered to full-time employees in All Industries increased at a steady pace from 2005 through 2006 and generally increased from 2009 through 2013. In 2014 to 2017, a majority of employee benefits offered had declined. However, in 2018, the benefits offered to full-time employees remained fairly consistent across the board. All Industries show an increase in the benefits offered to part-time employees in 2018.

Benefits offered by employers to full-time employees in the Manufacturing Industry have fluctuated over the years; however, most of the benefits offered to these full-time employees in 2018 saw marked increases. The greatest increases being for dental and life insurance, as well as paid sick time. The same benefits offered to part-time employees in the Manufacturing Industry in 2018 were more steady. Tables 3.1 and 3.2 (pg.13) represent a compilation of excerpts from the *Wages and Benefits Surveys*, and chronicle the selected benefits offered to full-time and part-time employees across All Industries and isolated specifically to those offered in the Manufacturing Industry.¹¹

¹⁰ Wyoming Department of Work Force Services. *Wyoming Occupational Employment and Wages, September 2018*. Prior to 2016, Wyoming Department of Revenue. *The Effects of the Sales and Use Tax Exemption for Manufacturing Machinery, Thirteenth Edition*. (2018). 2018 preliminary data by special request provided by Wyoming Department of Work Force Services.

¹¹ Ibid

Table 3.1 - Percentage of Full-Time Employees Offered Select Benefits, Manufacturing v. All Industries

Benefit Type	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Medical Ins., Manufacturing	80.5%	85.5%	75.5%	88.1%	84.7%	89.7%	85.5%	86.7%	87.9%	82.1%	82.0%	83.3%	84.2%	87.3%
Medical Ins., All	78.0%	79.2%	76.3%	80.1%	80.2%	80.0%	77.7%	84.8%	81.9%	78.6%	79.7%	80.5%	79.7%	79.3%
Dental Plan, Manufacturing	67.2%	73.2%	52.2%	77.9%	70.9%	82.0%	74.2%	80.2%	86.1%	83.0%	77.5%	74.9%	73.4%	79.1%
Dental Plan, All Industries	67.8%	69.7%	65.3%	67.7%	71.7%	67.7%	70.5%	72.0%	73.5%	73.6%	73.1%	68.4%	69.3%	71.9%
Life Insurance, Manufacturing	71.2%	76.5%	62.5%	80.7%	77.2%	77.1%	80.6%	83.0%	85.4%	85.1%	82.1%	77.2%	77.1%	82.0%
Life Insurance, All Industries	66.8%	69.7%	67.3%	71.1%	71.6%	69.8%	68.8%	71.1%	73.3%	72.2%	72.1%	71.0%	69.8%	69.9%
Paid Vacation, Manufacturing	81.4%	85.9%	90.1%	85.4%	82.7%	77.9%	89.9%	87.3%	84.6%	78.5%	71.9%	68.7%	70.2%	71.2%
Paid Vacation, All Industries	74.8%	76.0%	71.8%	71.8%	75.3%	79.4%	73.0%	72.9%	72.8%	74.3%	70.2%	68.5%	68.4%	66.1%
Retirement, Manufacturing	76.4%	81.4%	80.8%	84.2%	78.4%	76.4%	86.2%	85.2%	84.2%	82.8%	76.5%	73.0%	77.3%	85.9%
Retirement, All Industries	75.2%	77.8%	75.8%	79.0%	78.3%	76.5%	73.5%	75.4%	77.2%	74.8%	76.3%	75.8%	75.5%	77.4%
Paid Sick, Manufacturing	53.0%	41.1%	20.6%	48.7%	50.1%	40.2%	52.6%	44.0%	35.3%	34.9%	37.7%	27.8%	25.7%	36.8%
Paid Sick, All Industries	51.7%	47.0%	39.1%	42.7%	50.8%	47.8%	50.9%	50.0%	49.1%	54.3%	51.3%	50.3%	50.7%	48.5%
LT Disability, Manufacturing	46.9%	56.3%	33.8%	45.0%	42.6%	57.5%	64.8%	69.3%	73.8%	61.0%	54.4%	56.2%	57.8%	62.0%
LT Disability, All Industries	45.1%	44.1%	40.7%	42.7%	50.9%	40.5%	46.9%	50.4%	53.8%	53.1%	49.5%	49.3%	49.2%	50.5%

Table 3.2 Percentage of Wyoming Part-time Employees Offered Selected Benefits, Manufacturing v All Industries

Benefit Type	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Medical Ins., Manufacturing	12.7%	5.7%	0.0%	11.6%	2.0%	3.7%	7.4%	8.1%	8.7%	9.0%	7.7%	8.2%	7.7%	7.0%
Medical Ins., All Industries	11.3%	12.1%	13.4%	9.8%	19.8%	11.4%	9.7%	14.8%	19.8%	12.1%	12.8%	10.9%	10.6%	14.5%
Dental Plan, Manf.	12.1%	5.2%	0.0%	13.4%	1.0%	4.5%	7.4%	10.3%	12.3%	10.0%	8.2%	8.2%	8.0%	7.6%
Dental Plan, All Ind.	9.4%	11.2%	11.9%	9.2%	18.3%	11.4%	9.9%	28.2%	18.3%	11.9%	13.5%	11.2%	12.5%	17.7%
Life Insurance, Manf.	60.0%	1.2%	2.0%	5.6%	1.0%	0.6%	7.4%	6.1%	4.8%	3.3%	2.6%	2.1%	1.8%	3.2%
Life Insurance, All Ind.	8.1%	8.9%	10.0%	9.4%	13.9%	11.7%	9.3%	12.3%	15.3%	10.1%	13.1%	10.4%	9.9%	14.0%
Paid Vacation, Manf.	5.4%	7.1%	17.3%	8.6%	3.2%	10.5%	10.9%	7.0%	3.1%	5.4%	7.4%	5.1%	3.5%	4.4%
Paid Vacation, All Ind.	21.3%	21.8%	28.5%	17.4%	18.5%	21.8%	14.6%	17.7%	20.8%	19.1%	19.4%	15.0%	15.9%	20.4%
Retirement, Manf.	21.0%	18.7%	23.9%	21.4%	2.6%	12.5%	19.6%	17.6%	15.6%	14.2%	15.3%	15.1%	14.4%	15.1%
Retirement, All Ind.	28.3%	30.8%	33.1%	33.1%	32.4%	27.9%	25.0%	26.2%	27.3%	21.9%	23.8%	26.1%	28.5%	32.0%
Paid Sick, Manf.	0.0%	0.7%	3.4%	4.8%	4.2%	2.7%	1.6%	3.1%	4.5%	1.8%	1.4%	2.3%	2.1%	1.9%
Paid Sick, All Ind.	19.7%	17.5%	15.1%	11.1%	18.2%	13.7%	14.7%	14.7%	14.7%	13.4%	15.4%	12.8%	11.3%	16.7%
LT Disability, Manf.	0.0%	0.0%	0.0%	6.3%	0.3%	0.0%	0.0%	0.9%	1.5%	0.4%	0.1%	0.8%	1.0%	0.4%
LT Disability, All Ind.	5.7%	6.0%	6.2%	6.0%	9.3%	6.1%	4.9%	6.3%	7.6%	8.3%	11.0%	9.1%	7.9%	11.4%

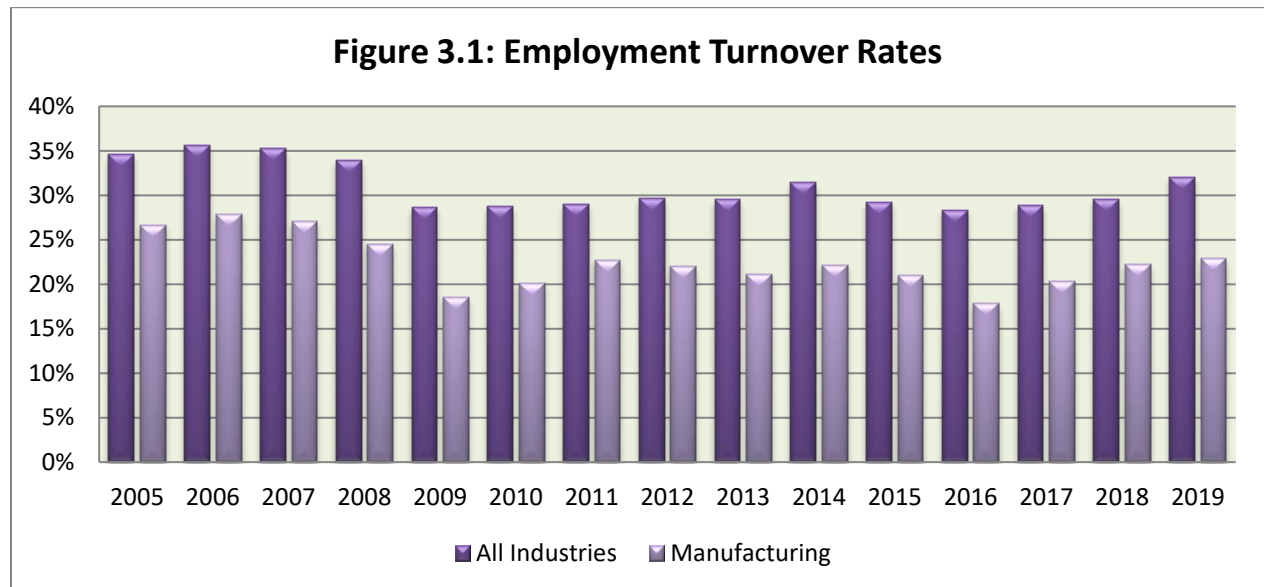
Turnover

Turnover is the rate at which an employer gains or loses employees and includes open positions new hires, and exits; as well as attrition that exists over a specific period of time. An unusually high turnover rate is symptomatic of challenges related to a possible host of factors both externally and internally, such as benefits offered, pay, recognition, schedules, or even industry health. In whole from 2005 through 2019, the manufacturing industry experienced considerably lower turnover rates than all industries.

On average between 2005 and 2018, the manufacturing industry experienced an 8.5% lower turnover rate than those employed in all industries statewide. The overall rate of turnover in

Wyoming increased slightly to 28.9% in 2017, and turnover in the first three quarters of 2018 slightly increased again to 29.5%. In the first three quarters of 2019 turnover increased again to 32.0%.

The Manufacturing Industry’s turnover also experienced a rise in turnover to 22.2% based on the first three quarters of 2018. Figure 3.1, illustrates Wyoming’s annual turnover rates for the Manufacturing Industry as compared to All Industries for years 2005-2019.¹²



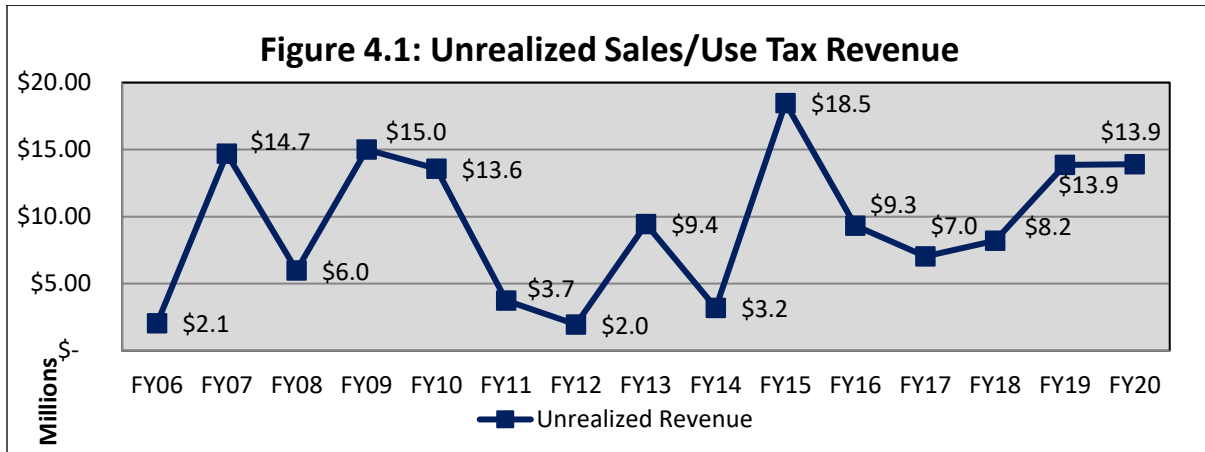
Exemption Cost

Based on survey responses in 2020, for purchases between the periods of July 1, 2019 through June 30, 2020, exempt manufacturing machinery purchases by Wyoming manufacturers equaled \$258,102,592.10.¹³ As a result of this exemption and applying the average sales and use tax rate of 5.37%, the unrealized sales and use tax revenue for the State of Wyoming totaled \$13,860,109.20. For this period, 1046 Manufacturing Machinery Survey Forms were sent, 520 responses were received, which reflects a response rate of 49%. Of the 520 responses received, 159 companies reported exempt machinery purchases.

¹² Wyoming Department of Workforce Services, *Wyoming Industry Turnover by Year and Quarter, 1992Q1 to 2018Q3*, (totals derived from Q1 – Q4 yearly average).

¹³ Survey Aggregate for 2020.

Figure 4.1, below shows unrealized sales/use tax revenue from years 2006–2020 for exempt manufacturing purchases.¹⁴



In addition to exact figures, the Department also evaluated purchases based on eight dollar ranges:

- | | | |
|------------------------------|------------------|-------------------|
| • \$0 | | by 361 purchasers |
| • \$1 - \$1,000 | \$7,960.26 | by 18 purchasers |
| • \$1,001 - \$10,000 | \$192,930.49 | by 44 purchasers |
| • \$10,001 - \$50,000 | \$900,144.35 | by 37 purchasers |
| • \$50,001 - \$100,000 | \$842,853.35 | by 11 purchasers |
| • \$100,001 - \$1,000,000 | \$9,519,989.61 | by 29 purchasers |
| • \$1,000,001 - \$10,000,000 | \$77,297,730.43 | by 15 purchasers |
| • \$10,000,001+ | \$169,340,983.61 | by 5 purchasers |

The final range of \$10M+ accounts for approximately 65% of all purchase dollars. Figure 4.2, on page 16 graphically represents the number of purchasers per dollar range. Figure 4.3, on page 16 illustrates the dollar amount purchased per dollar range.

¹⁴ Wyoming Department of Revenue. *The Effects of the Sales and Use Tax Exemption for Manufacturing Machinery, Fourteenth Edition* (2019).

Figure 4.2: Number of Purchasers/Dollar Range

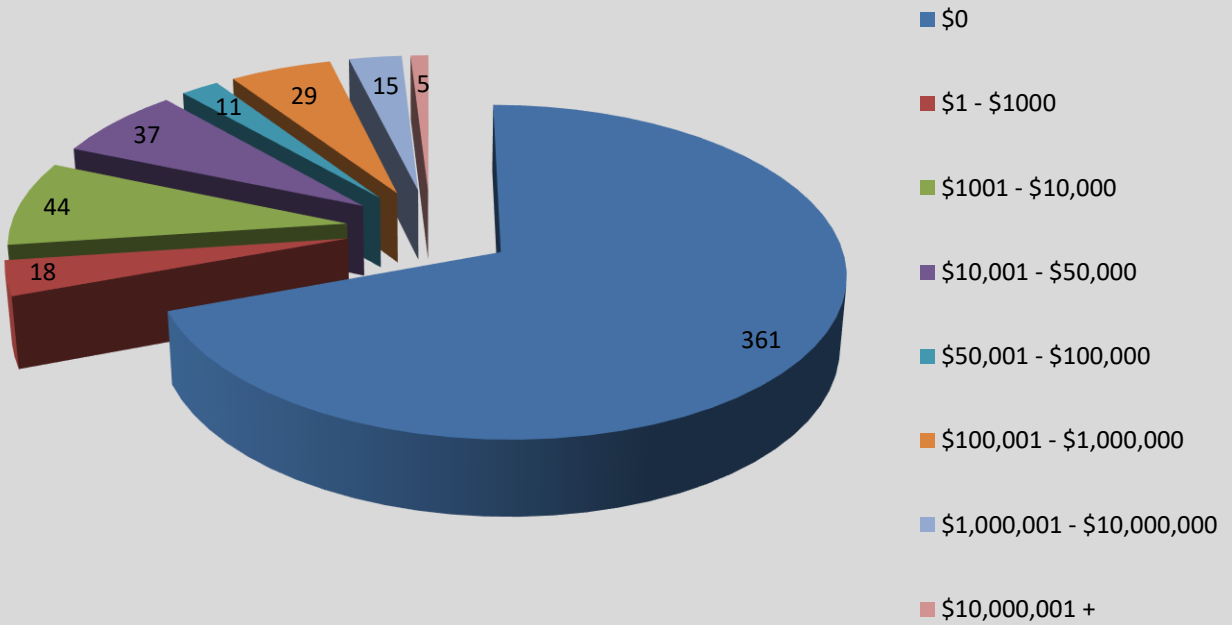
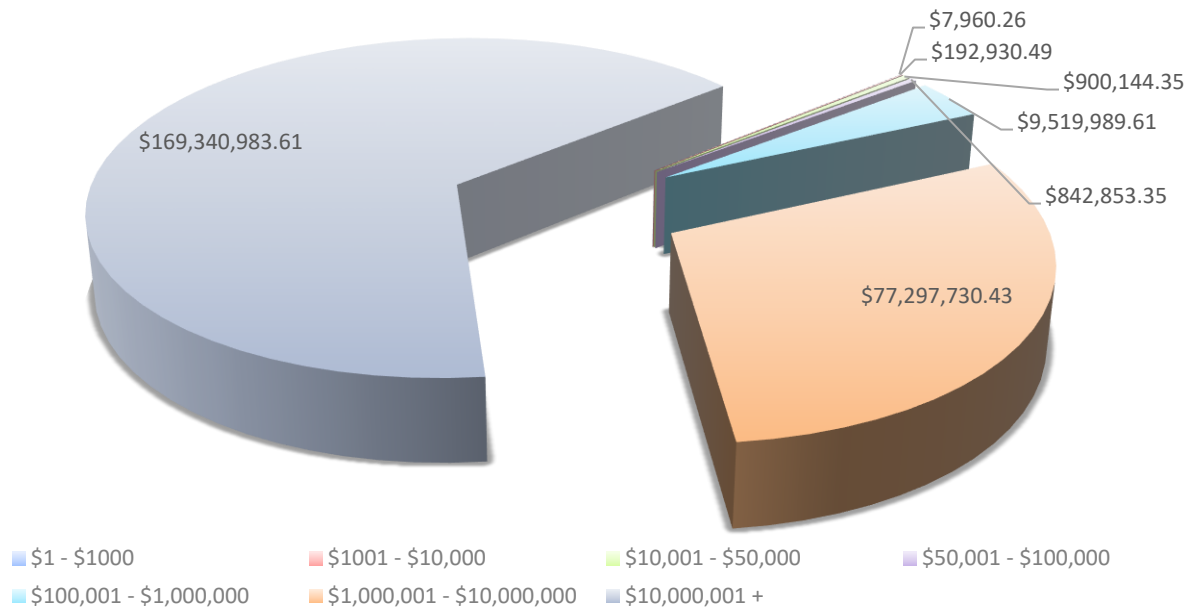


Figure 4.3: Amount of Purchases/Dollar Range



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 qualifying manufacturing machinery.]

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 1: Economic Impact of **Sales & Use Tax Exemption Removal** for Manufacturing Machinery

Category <i>(Change from Baseline)</i>	2020	2021	2022	2023	2024	Average 2020-2030
Total Employment - Jobs	-44	-57	-68	-75	-79	-75
Manufacturing	-12	-15	-18	-20	-21	-20
Construction	-9	-11	-13	-14	-14	-13
Retail Trade	-4	-5	-6	-6	-7	-6
Accommodation & Food Services	-2	-3	-4	-4	-4	-4
All Other	-17	-23	-27	-31	-33	-32
Population - Individuals	-20	-32	-43	-54	-63	-69
Wages and Salaries	-\$2.1	-\$2.6	-\$3.0	-\$3.4	-\$3.7	-\$3.6
Personal Income	-\$3.3	-\$3.9	-\$4.6	-\$5.1	-\$5.6	-\$5.7
Disposable Personal Income	-\$2.9	-\$3.5	-\$4.1	-\$4.6	-\$5.1	-\$5.2
Gross Domestic Product	-\$5.7	-\$7.7	-\$9.3	-\$10.5	-\$11.4	-\$11.2
Output	-\$13.5	-\$18.3	-\$22.0	-\$25.0	-\$27.2	-\$26.9
Sales & Use Tax Revenue	-\$0.05	-\$0.07	-\$0.09	-\$0.11	-\$0.13	-\$0.13
Property Tax Revenue	-\$0.01	-\$0.02	-\$0.03	-\$0.04	-\$0.05	-\$0.05
<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 manufacturing machinery and machine tools used directly and predominantly in manufacturing was modeled in REMI as an increase in the production costs for the manufacturing industry of \$10.0 million per year beginning in 2019 (see Table 1). The removal of this exemption would result in an average annual loss of 75 jobs and a decrease in GDP of \$11.2 million per year over the period of 2020 to 2030 when compared to the baseline scenario.

The manufacturing, construction, retail trade, and accommodation & food services sectors endure most of the job losses. While manufacturing and construction account for the direct job losses, the retail trade and accommodation & food services sectors, in particular, will be hindered by the decline of disposable personal income. Fewer jobs and a decline in salaries will result in less household spending.

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.*



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- Wyoming Department of Workforce Services, Research & Planning (2018). Confidential 2018 preliminary findings provided by Workforce Services 10/10/2019.
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- Wyoming Department of Employment, Research & Planning (2019). *Wyoming Wage Survey, Occupational Employment and Wages: May 2005, November 2006, September 2008 – 2019*. All Industries and Manufacturing. Cheyenne, WY: Retrieved from http://doe.state.wy.us/lmi/OES_toc.htm; accessed 10/27/2020.
- Wyoming Department of Revenue, Education & Taxability (2019). *The Effects of the Sales and Use Tax Exemption for Manufacturing Machinery, Fourteenth Edition*. Cheyenne, WY.

Appendices

Appendix A: Manufacturing Machinery Survey Form 108 Cover Letter

Appendix B: Manufacturing Machinery Survey Form 108

Appendix A: Manufacturing Machinery Survey Form 108 Cover Letter

The State of Wyoming



DEPARTMENT OF REVENUE

122 W 25TH ST STE E301
HERSCHLER BUILDING EAST
CHEYENNE WY 82002-0110
E-Mail: directorofrevenue@wyo.gov
Web: <http://revenue.wyo.gov>

MARK GORDON, *Governor*
DANIEL W. NOBLE, *Director*

Telephone (307) 777-7961
DOR Main FAX (307) 777-7722
Property Tax FAX (307) 777-7527
Excise FAX (307) 777-3632
Mineral FAX (307) 777-7849
Liquor FAX (307) 777-6255

Dear Manufacturer:

Effective July 1, 2004, the Wyoming Legislature passed a sales/use tax exemption designed to benefit and diversify Wyoming's manufacturing sector. This exemption applies to qualifying machinery, materials used to construct the machinery, specialized tools and repair parts. This survey has been sent to you because the Department of Revenue has received information that you are a manufacturer, and you are therefore statutorily required to respond to the survey. [W.S. 39-15-105(b)]

To qualify for the exemption, a manufacturer must satisfy two requirements. First, the manufacturer must be classified as a business primarily engaged in activities categorized under the North American Industry Classification System (NAICS) manufacturing sector. Second, the machinery must generally be capitalized using the IRS's rules regarding depreciable machinery.

Accompanying this letter is Form 108. It must be completed and returned to the Department of Revenue **no later than August 31, 2020**. If you are not a manufacturer, please provide details about your business so we can correct our database. If you are a manufacturer, but did not make any qualifying purchases, please report zero purchases.

We have also provided an online form of the survey, which will save you the cost of a stamp. To access this survey, please visit the Department of Revenue website at <http://revenue.wyo.gov>. On the upper left corner under, "What's New" is a link to the **2020 Manufacturers Machinery Survey**. The link may be accessed from there, or by going to <https://www.surveymonkey.com/r/WYO-2020>

Examples:

Quilters buy fabric, thread and batting, sew it together and "manufacture" a quilt. (NAICS code 314129) Someone who does embroidering is a manufacturer. (NAICS code 314999) A saddle maker buys the leather, cuts it, tools it, and puts it together to manufacture a saddle. (NAICS code 314999)

Please contact the department with any questions you may have at (307) 777-2459 or by e-mail at DOR_taxability@wyo.gov. Thank you for your time and attention to this matter.

Sincerely,

Handwritten signature of Terri Lucero in blue ink.

Terri Lucero, Administrator
Excise Tax Division

Appendix B: Manufacturing Machinery Survey Form 108



State of Wyoming
DEPARTMENT OF REVENUE

Manufacturer's Sales/Use Tax Return Form 108
Manufacturing Machinery Exemption

Per Wyoming Statutes Titles 39-15-105 & 39-16-105, this form must be completed and returned by August 31, 2020

Please return form to:
Revenue, Excise Tax Dept.
122 West 25th Street, Ste E301
Cheyenne, Wyoming 82002

Fax: 307-777-3632
Email:
DOR_taxability@wyo.gov

Phone: 307-777-2459
Web: <http://revenue.wyo.gov>

This form may also be completed online by going to: <https://www.surveymonkey.com/r/WYO-2020>

Company Name:	DBA Name: <small>(Doing Business As)</small>	
Address:		
City:	State:	Zip:
Email Address:	Phone:	
WY License Number or RID (if applicable)		

NAICS code(s), four or more digits, i.e. 3112 : _____

The North American Industrial Classification System (NAICS) is the standard used by Federal and state agencies to organize establishments into industries on the basis of the activity in which they are primarily engaged. To find your NAICS Code, if unknown, please visit: <http://www.census.gov/eos/www/naics/>. If your NAICS code does not fall between 3111 and 3399, stop here and sign affidavit at bottom.

If you are unsure of your NAICS code, please provide a detailed description of the process your business uses to produce products. (Even if you hand-produce individual items or modify other products, you may be categorized as a manufacturer under NAICS).

Purchases or leases of machinery (including machine tools and parts thereof or materials purchased for the repair/construction of machinery) are exempt from state sales/use tax when the machinery will be used directly and predominantly in manufacturing in Wyoming, subject to stipulations outlined in W.S. 39-15-105 and W.S. 39-16-105.*

Amount of Exempt Purchases for Machinery, Tools, Parts, and Machinery Materials (as per W.S. 39-15-105 and W.S. 39-16-105) for the period of July 1st, 2019 through June 30th, 2020. (If zero, please enter \$0.00)	\$ _____ <small>(See *Definitions on back for qualifications)</small>
---	--

I _____ (Authorized agent of company), certify that the company named on this form is entitled to the sales and use tax exemption on purchases of machinery or machine tools to be used in manufacturing, as per W.S. 39-15-105 and 39-16-105. I further certify that the Company Information, NAICS Information, and Exempt Purchases Information provided above is true and accurate to the best of my knowledge.

Signature _____ Title _____ Date _____

Information obtained is confidential, and will only be distributed in aggregate form.