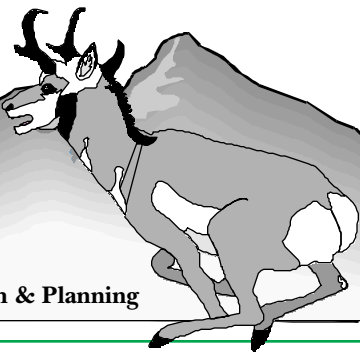


Wyoming Labor Force TRENDS

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Estimating Wage Differentials for the Western Region

Using the March Current Population Survey (CPS) Supplement

by: David Bullard, Economist

" ... we expect a high school graduate on average to earn \$5,391.77 more per year than a high school dropout."

There is considerable variation between the wages that workers earn. While this variation is most commonly attributed to the workers' different occupations and industries, other factors, such as gender, race, level of education and age also play a role. This article uses the March supplement to the Current Population Survey (CPS) to estimate wage differentials for these characteristics for full-time, year round employees in private business.

Our approach to the analysis of wage differentials is modeled after a similar study of wage differentials in Arkansas¹. This article shows that education is a positive and highly significant predictor of earned income. Age (as a proxy for experience) and the hours worked

are also positive and significant. The model suggests that women earn about \$7,000 less per year than men with similar education working in the same occupational group and major industry. While earnings for Blacks and Asians are not significantly different than Whites in this region, American Indians and Alaskan Natives (Aleuts) earn about \$2,600 less than workers of other races. Workers in the Mountain states and West North Central states tend to earn less than their counterparts in the Pacific region. Certain groups of occupations (Managerial and Professional Specialty) pay more than others while certain industries (most notably Mining and Transportation, Communication & Public Utilities) pay more as well.

respondents detailed questions about their work and income during the previous year in addition to the standard CPS questions about demographics, education, labor market activity, etc. It provides a rich source of information on the income and work activities of a large sample of the civilian noninstitutional population. The data file used for this analysis was downloaded from the Data FERRET (Federal Electronic Research and Review Extraction Tool), an Internet site maintained by the Census Bureau at <http://ferret.bls.census.gov/>.

The purpose of this article is to estimate the wage differentials paid to workers for different characteristics, such as gender,

The March CPS Supplement asks

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educational attainment, occupation, etc. Originally, this analysis was attempted using the 1998 CPS March supplement for Wyoming; however, the small sample size (n=313 workers) made analysis difficult and it was decided to use the 20 Western states of the Mountain, Pacific and West North Central Census Divisions². This gives a sample size of 9,471.

Economic Theory of Wage Differentials

Economic theory beginning with Adam Smith suggests that wage differentials will be primarily determined by differences in occupations³. Smith's theory states that wages will adjust so that the labor market for a particular occupation will be in equilibrium. He noted that occupations have many different characteristics; some are pleasant and don't require unusual physical activity or long hours, while others require workers to work long hours doing heavy labor. They also vary by the preparation for entry into the occupation. Some require long periods of education or training,

while others can be learned in a few minutes. Smith suggests that wages will adjust so that each occupation will have enough workers. Thus, unpleasant occupations will pay higher wages (*ceteris paribus*, i.e., all other things being equal) than pleasant occupations and occupations which require many years of education will pay more than occupations without such requirements.

A second, more recently developed theory applicable to wage differentials is the human capital theory of Gary Becker. In a nutshell, Becker's theory is that people invest in "human capital" through education, and by increasing their skills, they make their labor more valuable. Thus, we normally expect workers with higher levels of education to be more productive and receive higher wages.

A competing theory about the value of education is the screening or signaling model. It hypothesizes that education doesn't really teach anything or give people better skills, but it sorts out the most productive

workers. It is assumed that since college is easier for smarter people, it costs them less effort and they are more likely to get a degree. Employers are looking for the smartest, most productive workers, and those who have passed the screening test of school are the ones for which they are looking. This theory explains why those who have graduated from college earn so much more than those who have had some college but did not obtain degrees.

Regression Analysis

As stated in the introduction, this analysis only involves subjects who worked full-time (35 or more hours) year round (50-52 weeks) during 1997. The sample is further limited to those who worked in private business and excludes most self-employed individuals. This analysis only includes workers from age 22 to 59, which are recognized as prime working years. The few subjects with earnings below \$10,000 or above \$100,000 are excluded as outliers.

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Table: Predictive Model/Regression Equation for Wages of Full-Time Year Round Workers in Western States (R²=0.369, N=9,471)

		Coefficient	Standard Error	t-Value	Significance
	Constant	-\$5,950.86	1,140.03	-5.22	0.000
	Age	\$332.09	15.82	21.00	0.000
	Usual Hours of Work	\$300.35	19.86	15.12	0.000
Educational Attainment	High School Diploma	\$5,391.77	526.88	10.23	0.000
	Some college but no degree	\$7,528.72	569.72	13.22	0.000
	Associate Degree--occupational/vocation	\$9,320.59	777.97	11.98	0.000
	Associate Degree--academic program	\$7,445.71	861.59	8.64	0.000
	Bachelors Degree	\$13,327.42	624.96	21.33	0.000
	Masters Degree	\$17,594.92	936.18	18.79	0.000
	Professional Degree	\$26,599.02	1,553.80	17.12	0.000
	Doctorate	\$24,935.30	1,752.93	14.23	0.000
Occupation	Executive, Administrative and Managerial	\$12,557.66	516.54	24.31	0.000
	Professional Specialty	\$11,851.42	620.27	19.11	0.000
	Technicians and related support	\$8,958.34	839.46	10.67	0.000
	Sales	\$8,677.47	560.34	15.49	0.000
	Precision Production, Craft and Repair	\$5,117.23	517.72	9.88	0.000
	Administrative Support including Clerical	\$2,225.22	558.69	3.98	0.000
Industry	Mining	\$12,022.60	1,224.88	9.82	0.000
	Transportation, Communication & Public Utilities	\$8,677.16	572.45	15.16	0.000
	Durable Goods Manufacturing	\$7,203.25	488.29	14.75	0.000
	Finance, Insurance and Real Estate	\$4,490.80	583.25	7.70	0.000
	Construction	\$4,485.14	660.43	6.79	0.000
	Nondurable Goods Manufacturing	\$4,415.20	585.75	7.54	0.000
	Wholesale Trade	\$4,079.48	663.90	6.15	0.000
Gender	Female	-\$7,014.83	347.52	-20.19	0.000
Race	American Indian, Alaskan Native	-\$2,606.90	1,170.98	-2.23	0.026
Region	Mountain	-\$3,550.35	355.88	-9.98	0.000
	West North Central	-\$4,339.32	383.94	-11.30	0.000

For example, the expected wage for a 25 year old white man with a Bachelors Degree usually working 40 hours a week in a sales occupation in a wholesale trade establishment in California would be:

Constant:		-\$5,950.86
Age:	\$332.09 multiplied by 25 years of age	\$8,302.25
Usual hours of work:	\$300.35 multiplied by 40 hours per week	\$12,014.00
Education:	Bachelors Degree	\$13,327.42
Occupation:	Sales	\$8,677.47
Industry:	Wholesale Trade	\$4,079.48
Estimated Annual Wage Earnings		\$40,449.76

The Table summarizes the results of the regression model for wages. The adjusted R² is 0.369 suggesting that this model explains about 37 percent of the variation in wages. Throughout the discussion that follows, additional variables will be suggested that could account for some of the other 63 percent of variation. The dependent variable⁴ explained by the regression model is wage earnings in 1997 expressed in

dollars.

Age is included in the model as a proxy for experience. This is one of the two quantitative independent variables⁵ included in the model. The coefficient is positive and highly significant. The coefficient suggests that on average, workers earn \$332.09 for each year of age.

The second independent variable

is usual hours of work. Only full-time (35 hours and up) workers are included, so the minimum value for this variable is 35, but the mean is 43.9 and the maximum is top coded at 99. The coefficient is positive and highly significant, suggesting that those usually working more hours earn more income.

(Continued on page 4)

Education

Respondents are classified according to the highest level of education completed. All categories are positive and highly significant. As shown in the Table, the coefficients for wages generally increase as the level of education increases. The interpretation of these coefficients is the difference in annual earnings of a person having this level of education compared to someone with less than a high school diploma. For example, we expect a high school graduate on average to earn \$5,391.77 more per year than a high school dropout.

It should be noted that the two associate degree categories have different coefficients. This suggests that workers who hold an associate degree in an occupational or vocational program are earning \$1,875 per year more than their counterparts who hold associate degrees in an academic program. One possible explanation is that since academic associate degrees are primarily intended to prepare people to enter four-year degree programs, having this as one's highest degree suggests that one's education is still not complete. In contrast, associate degree programs in occupational or vocational subjects give students training in a specific occupation and are seen as a terminal degree.

Occupation

All of the occupational dummy variables⁶ are interpreted as the difference between the occupation in question and the occupations not included in the regression equation. These generally low-paying occupations not included are:

1. Private household occupations
2. Protective service occupations
3. Service occupations, except

private household and protective service

4. Farming, forestry and fishing occupations
5. Machine operators, assemblers and inspectors
6. Transportation and material moving occupations
7. Handlers, equipment cleaners, helpers and laborers

All of the estimated occupations have positive coefficients. That is, they pay more than the non-estimated occupations as a group. Executive, Administrative and Managerial Occupations pay the highest, followed by Professional Specialty Occupations. The occupational wage differentials generally reflect the amount of skill required in the occupation.

Industry

For various economic reasons, some industries pay higher wages across occupations than others. The omitted industries are:

1. Agriculture, Forestry and Fishing
2. Retail Trade
3. Services

Many of these reasons are related to Adam Smith's theory of occupational wage differentials. For example, much of the work in the Construction industry is short-term, lasting only a few months. Therefore, construction workers are paid a premium for the short-term nature of their work and the high probability that they will be laid off.

The capital intensity of industries also accounts for some of the difference in wages. In cases where the capital to labor ratio is high, such as Mining, workers are more productive⁷ and paid higher wages. In certain Retail and Service industries, the capital to labor ratio might be quite low, making workers

less productive and giving them lower wages.

In addition, the economic effects of competition also keep wages low in certain industries, while allowing others such as Transportation, Communication & Public Utilities (TCPU) to maintain monopoly power and increase profits and wages.

Gender

In an effort to identify the effect of gender on wages, a dummy variable for females is introduced into the model. This variable is negative and highly significant. It suggests that holding all other modeled factors constant, on average females earn \$7,015 less than males in the 20 Western states. This is lower than other estimations, indicating that the male-female wage gap may be getting smaller. The Arkansas model of wage differentials based on the March 1993 CPS supplement estimated the female wage differential at \$13,318. Other comparisons between male and female average wages have ignored education, hours worked, occupation and other important variables included here⁸.

Several possible explanations exist for the difference between the earnings of men and women. First, the occupational groups included in this model are broad. An analysis using detailed occupations would probably have different results; certain occupations are dominated by either males or females. Estimating wage differentials for detailed occupations⁹ would require a larger sample and more detailed information.

Historically, men and women have had different levels of

(Continued on page 5)

attachment to the labor force¹⁰, with women generally being less attached, using age as a proxy for experience can introduce some serious errors into the model. For example, comparing a 50-year-old man's wages with a 50-year-old woman's wages would be difficult if the man had been working steadily for 30 years but the woman had not.

Although educational attainment is included in the model, the subject or field of study is not included. Just as there are male-dominated occupations and female-dominated occupations, some majors tend to attract mostly men or mostly women. Average earnings vary widely by field of study¹¹.

Race

Interestingly, for the regions being covered by this analysis, wages are not significantly different for Blacks or Asians than Whites. While this does not necessarily mean that minorities aren't subject to discrimination in the workplace, or that they don't earn less than their majority counterparts, it does suggest that for these similarly situated minority workers (age, gender, education, occupational group, industry and hours of work), the difference isn't large enough to be statistically significant.

However, using a 95 percent confidence level, American Indians do earn significantly less than other workers. The Table (see page 3) shows that this is the only variable not significant at the 99 percent level. Since many American Indians live on reservations where employment opportunities are limited, this result is not surprising.

Region

As previously mentioned, this study only includes 20 Western

states. Earnings are significantly lower in the Mountain and West North Central divisions than in the Pacific division. Although there are no reliable figures which allow interstate cost of living comparisons¹², the author believes that some of the difference in wages may be accounted for by lower cost of living in Mountain and West North Central states than those on the West Coast.

Other regional differences could be related to detailed industry patterns. The industry groups used in the model are broad like the occupational groups. Since Pacific states have a different mix of industries (even within an industry group such as Durable Goods Manufacturing), they have different earnings patterns than Mountain or West North Central states.

The power of unions could also affect regional wages. None of the Pacific states have right-to-work laws, while more than half of the Mountain and West North Central states do. These laws tend to decrease the bargaining power of unions and limit their ability to increase their members' wages.

Conclusion

This analysis shows that education is a positive and highly significant predictor of earned income. Age (as a proxy for experience) and the hours worked are also positive and significant. The model suggests that women earn about \$7,000 less per year than men with similar education working in the same occupational group and major industry. While earnings for Blacks and Asians are not significantly different than Whites in this region, American Indians and Aleuts earn about \$2,600 less than workers of other races. Workers in the Mountain states and West North

Central states tend to earn less than their counterparts in the Pacific region.

1 Christy Rollow and Bill Seyfried, "An Analysis of the Determinants of Wage Differentials in the State of Arkansas," *Arkansas Business and Economic Review*, Summer 1995.

2 The Census Divisions and the states they include are:

West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

Pacific: Alaska, California, Hawaii, Oregon, Washington

3 **Occupation** is defined as "a group of similar jobs found in different industries or organizations." An example of an occupation is accountant. Accountants are found in practically all industries. The Current Population Survey (CPS) uses the Standard Occupational Classification (SOC) scheme to classify occupations. The SOC classifies occupations based on the type of work performed.

4 The **dependent variable** is the variable that the model explains. For example, this model attempts to explain the annual wage earnings of full time year-round workers in private industry in 20 Western states.

5 The **independent variables** are the explanation for the level or change in the dependent variable. In this model, educational level is an independent variable that helps explain the level of wages.

6 A **dummy variable** is a qualitative independent variable used in

(Continued on page 6)

multiple regression analysis. It is thus distinguished because the usual multiple regression analysis uses quantitative data for both independent and dependent variables.

7 **Labor productivity** is defined as output divided by the hours of labor input. Capital can make labor more productive. For example, a person using a computer can do much more work in an hour than the same person with only paper and a pencil. Similarly, a person using a backhoe, or earth moving equipment can move more dirt in an hour than the same person using a shovel.

8 Mary Beth O'Loughlin, "Gender Tenure and Wages," *Wyoming Labor Force Trends*, August 1997; Gregg Detweiler and Brett Judd,

"The Relation of Age and Gender to Employment in Wyoming," *Wyoming Labor Force Trends*, May and June 1996.

9 This model uses 13 occupational classifications. A detailed occupational breakout (for example the *Wyoming Wage Survey*, see page 10) includes several hundred different occupations.

10 **Attachment to the labor force** refers to how much and how often a person works for pay. A person who worked every week in the past year, or every week for the past several years is said to be more attached than someone who only works sporadically. Brett Judd found that in 1996, 16 percent of all Wyoming workers only worked one quarter, "The Wyoming Wage Record Classification System,"

Wyoming Labor Force Trends, March 1998.

11 Daniel E. Hecker, "Earnings of College Graduates: Women Compared With Men," *Monthly Labor Review*, March 1998; Rosalind R. Bruno, *What's It Worth? Field of Training and Economic Status: 1993*, U.S. Census Bureau.

12 For an explanation of the difficulty of interstate cost of living comparisons see Gayle C. Edlin, "Selected Determinants of Elementary and Secondary Teachers' Wages," *Wyoming Labor Force Trends*, September 1998.



Afterword

The preceding article shows that our labor market outcomes (specifically wages) are a function of both variables that we control and circumstances that we don't control. Examples of variables we control include education, occupation and industry. Circumstances that we don't control would be gender, race, age and the occupations and industries in our local area. Other variables included in the model are a combination of things we sometimes control and sometimes don't. For example, some workers can influence their usual hours of work (perhaps by choosing a certain occupation or industry), while others cannot. The regional variable suggests that workers in the Mountain or West North Central Regions will earn less than similarly situated workers in the Pacific Region. While workers are free to move from one state to another, choosing to live in the Mountain Region usually means accepting lower wages than could be earned on the West Coast.

Wyoming Wage Record Summary Statistics Update

by: **Norman Baron, Economist**

Based on the numbers for second quarter 1997 and 1998, there was an increase in jobs and Social Security Numbers (SSN's) over the year (see the Table, pages 7-8). The number of jobs increased by 2.6 percent and the SSN's increased by 2.2 percent. This is a slow-down in the percent

increase in jobs and SSN's over first quarter which had a 2.7 percent increase in jobs and 2.3 percent in SSN's. The percent increase in total wages is up over the first quarter, with second quarter increasing by 7.3 percent and first quarter by 6.5 percent. The preliminary data for third quarter in 1997 and 1998

shows a loss in the percent increase in jobs (-2.7%) and in SSN's (-1.7%), but an increase in total wages (3.5%).

General Definitions

Total (or Average) Jobs - Total (or average) number of jobs (records).

1992 Participation - The number of individuals who worked in 1992 who also worked in any successive quarter.

Total SSN's - Total number of unique individuals found in this quarter.

One Job - Those individuals who had one and only one job in this quarter.

Two Jobs - Those individuals who had two and only two jobs in this quarter.

Three Jobs - Those individuals who had three and only three jobs in this quarter.

Four or More Jobs - Those individuals who had four or more jobs in this quarter.

Total by Jobs - The sum of all jobs.

Used for checking data entry.

Count of SSN's - The number of individuals by total and by jobs.

Percent of Total SSN's - The row percent of the count of individuals under the count column.

Total Wages - The sum of all wages for each category listed under the job rows.

Percent of Total Wages - The row percent of the total wages.

Mean Wages per Quarter - The average wages per quarter for each category of jobs. Calculated by dividing the total wages by the count of individuals.

Number of Jobs per SSN - The number of jobs per individual. Calculated by taking the total number of jobs divided by the total

number of individuals.

Total Unique SSN's to Date - A running total of unique individuals to date. For example, from first quarter 1992 to third quarter 1998 there were 572,225 individuals.

New SSN's this Quarter (or Year) - The total of unique individuals not found on any other previous quarter (or year) to date.

Percent Change over Previous Year/Quarter - The percent change over the previous year/quarter (for example, the percent change from first quarter 1997 to first quarter 1998).

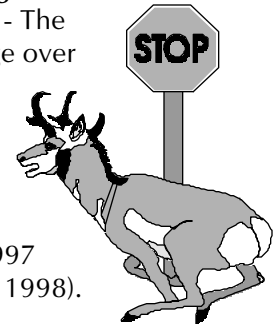


Table: Wyoming Unemployment Insurance Wage Record Summary Statistics (Continued on page 8)

FIRST QUARTER 1997 ... Total Jobs 227,345 ... 1992 Participation 133,637 (50.0%)								
	Count of SSN's	Percent of Total SSN's	Total Wages	Percent of Total Wages	Mean Wages per Quarter	Number of Jobs per SSN	Total Unique SSN's to Date	New SSN's this Quarter
Total SSN's	201,813	100.0%	\$1,102,655,165	100.0%	\$5,464	1.1	492,591	7,403
One Job	179,168	88.8	1,000,168,649	90.7	5,582			
Two Jobs	20,130	10.0	92,256,840	8.4	4,583			
Three Jobs	2,213	1.1	8,986,741	0.8	4,061			
Four or More Jobs	302	0.1	1,242,936	0.1	4,116			
Total by Jobs	201,813		\$1,102,655,165					
								Percent Change over Previous Year/Quarter
								In Jobs 2.4%
								In SSN's 1.7%
								Total Wages 3.6%
SECOND QUARTER 1997 ... Total Jobs 262,380 ... 1992 Participation 138,116 (51.6%)								
	Count of SSN's	Percent of Total SSN's	Total Wages	Percent of Total Wages	Mean Wages per Quarter	Number of Jobs per SSN	Total Unique SSN's to Date	New SSN's this Quarter
Total SSN's	225,244	100.0%	\$1,198,788,308	100.0%	\$5,322	1.2	505,466	12,875
One Job	193,418	85.9	1,062,001,600	88.6	5,491			
Two Jobs	27,383	12.2	119,975,121	10.0	4,381			
Three Jobs	3,786	1.7	14,344,754	1.2	3,789			
Four or More Jobs	657	0.3	2,466,833	0.2	3,755			
Total by Jobs	225,244		\$1,198,788,308					
								Percent Change over Previous Year/Quarter
								In Jobs 1.7%
								In SSN's 1.2%
								Total Wages 5.4%
THIRD QUARTER 1997 ... Total Jobs 275,869 ... 1992 Participation 137,414 (51.4%)								
	Count of SSN's	Percent of Total SSN's	Total Wages	Percent of Total Wages	Mean Wages per Quarter	Number of Jobs per SSN	Total Unique SSN's to Date	New SSN's this Quarter
Total SSN's	234,633	100.0%	\$1,225,202,069	100.0%	\$5,222	1.2	521,498	16,032
One Job	199,851	85.2	1,072,413,464	87.53	5,366			
Two Jobs	29,455	12.6	131,490,843	10.73	4,464			
Three Jobs	4,532	1.9	17,999,178	1.47	3,972			
Four or More Jobs	795	0.3	3,298,585	0.27	4,149			
Total by Jobs	234,633		\$1,225,202,069					
								Percent Change over Previous Year/Quarter
								In Jobs 2.2%
								In SSN's 1.6%
								Total Wages 5.7%

Table: Wyoming Unemployment Insurance Wage Record Summary Statistics (Continued from page 7)

FOURTH QUARTER 1997 ... Total Jobs 253,618 ... 1992 Participation 133,874 (50.1%)								
	Count of SSN's	Percent of Total SSN's	Total Wages	Percent of Total Wages	Mean Wages per Quarter	Number of jobs per SSN	Total Unique SSN's to Date	New SSN's this Quarter
Total SSN's	219,260	100.0%	\$1,300,594,436	100.0%	\$5,932	1.2	531,106	9,608
One Job	189,794	86.6	1,157,993,682	89.0	6,101			
Two Jobs	25,433	11.6	124,166,876	9.5	4,882			
Three Jobs	3,462	1.6	16,165,311	1.2	4,669			
Four or More Jobs	571	0.3	2,268,567	0.2	3,973			
Total by Jobs	219,260		\$1,300,594,436					
							Percent Change over Previous Year/Quarter	
							In Jobs	2.8%
							In SSN's	2.0%
							Total Wages	6.9%
1997 ANNUAL AVERAGES AND TOTALS ... Average Jobs 254,803 ... 1992 Participation 154,376 (57.7%)								
	Count of SSN's	Percent of Total SSN's	Total Wages	Percent of Total Wages	Annual Average Wages	Number of jobs per SSN	Total Unique SSN's to Date	New SSN's this Year
Average SSN's	220,238	100.0%	\$4,827,239,979	100.0%	\$21,918	1.2	531,106	45,918
One Job	190,558	86.5	4,292,577,394	88.9	22,526			
Two Jobs	25,600	11.6	467,889,680	9.7	18,277			
Three Jobs	3,498	1.6	57,495,983	1.2	16,436			
Four or More Jobs	581	0.3	9,276,922	0.2	15,960			
Total by Jobs	220,238		\$4,827,239,979					
							Total SSN's for 1997	287,088
FIRST QUARTER 1998 ... Total Jobs 233,433 ... 1992 Participation 128,786 (48.2%)								
	Count of SSN's	Percent of Total SSN's	Total Wages	Percent of Total Wages	Mean Wages per Quarter	Number of jobs per SSN	Total Unique SSN's to Date	New SSN's this Quarter
Total SSN's	206,464	100.0%	\$1,174,506,672	100.0%	\$5,689	1.1	539,180	8,074
One Job	182,673	88.5	1,061,853,646	90.4	5,813			
Two Jobs	21,087	10.2	101,256,556	8.6	4,802			
Three Jobs	2,380	1.2	10,060,059	0.9	4,227			
Four or More Jobs	324	0.2	1,336,410	0.1	4,125			
Total by Jobs	206,464		\$1,174,506,672					
							Percent Change over Previous Year/Quarter	
							In Jobs	2.7%
							In SSN's	2.3%
							Total Wages	6.5%
SECOND QUARTER 1998 ... Total Jobs 269,161 ... 1992 Participation 131,719 (49.2%)								
	Count of SSN's	Percent of Total SSN's	Total Wages	Percent of Total Wages	Mean Wages per Quarter	Number of jobs per SSN	Total Unique SSN's to Date	New SSN's this Quarter
Total SSN's	230,168	100.0%	\$1,286,045,952	100.0%	\$5,587	1.2	556,819	17,639
One Job	196,825	85.5	1,129,826,179	87.9	5,740			
Two Jobs	28,659	12.5	137,303,629	10.7	4,791			
Three Jobs	4,016	1.7	16,101,081	1.3	4,009			
Four or More Jobs	668	0.3	2,815,062	0.2	4,214			
Total by Jobs	230,168		\$1,286,045,952					
							Percent Change over Previous Year/Quarter	
							In Jobs	2.6%
							In SSN's	2.2%
							Total Wages	7.3%
THIRD QUARTER 1998 ... Total Jobs 268,314 ... 1992 Participation 127,621 (47.7%)								
	Count of SSN's	Percent of Total SSN's	Total Wages	Percent of Total Wages	Mean Wages per Quarter	Number of jobs per SSN	Total Unique SSN's to Date	New SSN's this Quarter
Total SSN's	230,622	100.0%	\$1,268,370,565	100.0%	\$5,500	1.2	572,225	15,406
One Job	198,467	86.1	1,123,962,071	88.6	5,663			
Two Jobs	27,561	12.0	125,947,440	9.9	4,570			
Three Jobs	3,923	1.7	15,670,715	1.2	3,995			
Four or More Jobs	671	0.3	2,790,339	0.2	4,158			
Total by Jobs	230,622		\$1,268,370,565					
							Percent Change over Previous Year/Quarter	
							In Jobs	-2.7%
							In SSN's	-1.7%
							Total Wages	3.5%

1998 Consumer Price Index (CPI) Annual Averages

by: David Bullard, Economist

"As measured by the Consumer Price Index-All Urban Consumers (CPI-U), inflation was 1.6 percent in 1998, lower than it has been for over thirty years."

The Bureau of Labor Statistics recently released 1998 annual average data for the Consumer Price Index (CPI). Table 1 shows the percent change over the previous year for all items and for major groups.

As measured by the Consumer Price Index-All Urban Consumers (CPI-U), inflation was 1.6 percent in 1998, lower than it has been for over thirty years. Inflation was lowest in the Transportation group (-1.9%) and highest in Other Goods & Services (+5.7%), the group

which includes tobacco, personal care and other miscellaneous goods and services.

Table 2 presents the annual average CPI index numbers for the same categories shown in Table 1. To calculate the percent change, subtract the previous year's index from the current year, divide that number by the previous year's index, and finally, multiply that by 100.

For example, to find 1998 inflation as measured by the CPI-U:

1. Find the current year's index and subtract the previous year's index, e.g., 1998 CPI-U minus 1997 CPI-U (use Table 2): **163.0-160.5=2.5**

2. Divide this number by the previous year's index, e.g., 2.5 divided by 1997 CPI-U: **2.5/160.5=0.016**

3. Multiply this number by 100, e.g., **0.016*100=1.6** (see Table 1).

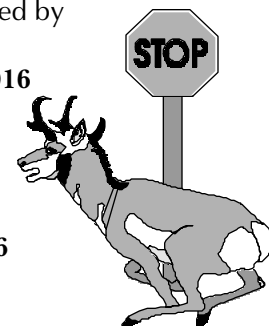


Table 1: Consumer Price Index-All Urban Consumers (CPI-U) Percent Changes, 1990 to 1998

	1990	1991	1992	1993	1994	1995	1996	1997	1998
All Items	5.4%	4.2%	3.0%	3.0%	2.6%	2.8%	3.0%	2.3%	1.6%
Apparel	4.6%	3.7%	2.5%	1.4%	-0.2%	-1.0%	-0.2%	0.9%	0.1%
Education & Communication (Dec. 1997=100)	N/A	N/A	N/A	N/A	3.9%	3.8%	3.4%	3.3%	1.9%
Food & Beverages	5.8%	3.6%	1.4%	2.1%	2.3%	2.8%	3.2%	2.6%	2.2%
Other Goods & Services	7.7%	7.9%	6.8%	5.2%	2.9%	4.2%	4.1%	4.4%	5.7%
Medical Care	9.0%	8.7%	7.4%	5.9%	4.8%	4.5%	3.5%	2.8%	3.2%
Recreation (Dec. 1997=100)	N/A	N/A	N/A	N/A	2.2%	1.9%	3.1%	2.3%	1.5%
Transportation	5.6%	2.7%	2.2%	3.1%	3.0%	3.6%	2.8%	0.9%	-1.9%
Housing	4.5%	4.0%	2.9%	2.7%	2.5%	2.6%	2.9%	2.6%	2.3%

Table 2: Consumer Price Index-All Urban Consumers (CPI-U) Annual Averages, 1989 to 1998

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
All Items	124.0	130.7	136.2	140.3	144.5	148.2	152.4	156.9	160.5	163.0
Apparel	118.6	124.1	128.7	131.9	133.7	133.4	132.0	131.7	132.9	133.0
Education & Communication (Dec. 1997=100)	N/A	N/A	N/A	N/A	85.5	88.8	92.2	95.3	98.4	100.3
Food & Beverages	124.9	132.1	136.8	138.7	141.6	144.9	148.9	153.7	157.7	161.1
Other Goods & Services	147.7	159.0	171.6	183.3	192.9	198.5	206.9	215.4	224.8	237.7
Medical Care	149.3	162.8	177.0	190.1	201.4	211.0	220.5	228.2	234.6	242.1
Recreation (Dec. 1997=100)	N/A	N/A	N/A	N/A	90.7	92.7	94.5	97.4	99.6	101.1
Transportation	114.1	120.5	123.8	126.5	130.4	134.3	139.1	143.0	144.3	141.6
Housing	123.0	128.5	133.6	137.5	141.2	144.8	148.5	152.8	156.8	160.4

Wyoming Statewide Wages

by: Deana Hauf, Economist

The information excerpted in the Table (see pages 10-12) is compiled from a wage survey that is conducted annually by Research and Planning. The Occupational Employment Statistics (OES) wage survey data presented in this release has a fourth quarter 1997 reference period and presents information collected during the 1997 and 1996 surveys. The two years of sample responses for employment and wage data have been combined to produce the current results. The 1996 wage data have been adjusted to the 1997 reference period by using the over-the-year wage change in the most applicable Employment Cost Index series*. The employment estimates from 1996 and 1997 have been

adjusted to the full universe counts for the 1997 survey reference period based on the Covered Employment and Wages program. The estimation methodology has been improved since the 1996 estimates were prepared, so that data from 1997 are not strictly comparable with data from 1996.

The data are also going to be available in more occupational detail and for Wyoming's four regions and two Metropolitan Statistical Areas (MSA's). You can soon find this information on our internet site <http://lmi.state.wy.us/oespub/toc.htm>. The 1996 data for all states can be found at <http://stats.bls.gov/oeshome.htm>. The 1997 national data are available on

the internet at: *<http://www.bls.gov/news.release/ocwage.new.htm>.

General Definitions

Mean Wage - A measure of central tendency. The sum of the values of all observations divided by the number of observations. It is also called the arithmetic average.

Entry Level Wage - Mean of the bottom 25 percent of wages reported (first quartile).

Experienced Level Wage - Mean of the top 75 percent of wages reported (last three quartiles).

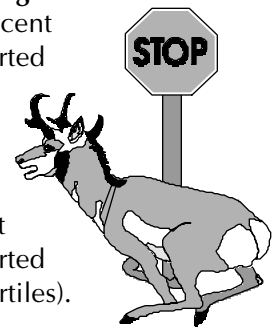


Table: Wyoming Statewide Wages (Continued on page 11)

Occupational Title	Total Employment	Mean Wage	Entry Level	Experienced Level
Total Statewide all Occupations	208,740	\$11.87	\$9.02	\$14.00
Managerial and Administrative Occupations	13,990	\$20.24	\$13.11	\$26.61
Staff and Administrative Specialty Managerial Occupations	2,220	21.09	13.78	27.41
Line and Middle Management Industry Specific Managerial Occupations	3,850	18.30	13.44	23.23
Other Managerial and Administrative Occupations	7,920	20.94	12.75	28.03
Professional, Paraprofessional, and Technical Occupations	40,450	\$15.32	\$12.13	\$17.29
Management Support Occupations	5,180	16.46	11.54	19.61
Accountants, Auditors, and Other Financial Specialists	1,750	17.36	11.79	20.97
Purchasing Agents and Buyers	410	15.60	11.19	19.18
Personnel, Training, Labor Relations Specialists, and Related Workers	440	16.26	11.17	20.61
Other Management Support Workers	2,580	16.02	11.49	18.58
Engineers and Related Occupations	2,920	19.59	14.21	25.16
Engineers	1,470	22.97	17.09	30.34
Architects and Surveying and Mapping Scientists	290	18.24	13.79	21.09
Engineering and Related Technicians and Technologists	1,160	15.64	10.66	19.62
Natural Scientists and Related Workers	1,340	18.59	14.35	22.42
Physical Scientists	200	24.01	18.75	31.58
Life Scientists	500	21.64	18.50	24.48
Physical and Life Science Technicians and Technologists	640	14.51	9.73	17.94
Computer, Mathematical, Operations Research, and Related Occupations	1,150	15.87	12.37	18.67
Computer Scientist and Related Workers	1,100	15.80	12.37	18.54
Mathematical Scientists and Related Workers	50	17.34	12.54	21.66

Table: Wyoming Statewide Wages (Continued from page 10)

Occupational Title	Total Employment	Mean Wage	Entry Level	Experienced Level
Professional, Paraprofessional, and Technical Occupations				
Social Scientists and Other Social, Recreational, and Religious Occupations	2,970	11.63	9.28	13.57
Social Scientists, Including Urban and Regional Planners	290	20.98	16.90	24.26
Other Social Science Related Workers	2,660	10.57	8.47	12.32
Religious Workers	20	16.77	5.74	24.64
Law and Related Occupations	810	19.08	14.49	21.50
Lawyers and Related Workers	560	22.66	16.80	25.55
Legal Assistants and Technicians, Except Clerical	250	11.07	9.34	12.42
Teachers, Educators, Librarians, and Related Occupations	15,730	13.55	11.16	15.77
Teachers-College, Junior College, University, Professional School, or Technical Institute	2,210	15.30	12.15	17.52
Other Teachers and Instructors	10,730	14.26	11.78	16.65
Librarians, Archivists, Curators, and Other Education Related Workers	2,790	9.40	7.97	10.96
Health Practitioners, Technologists, Technicians, and Related Health Occupations	8,170	17.48	14.81	15.29
Health Diagnosing and Treating Practitioners	770	42.45	38.65	N.A.
Therapists	400	22.29	18.37	25.27
Health Care Maintenance and Treating Workers	5,270	14.72	12.30	17.14
Other Health Professionals, Paraprofessionals, and Technicians	1,730	13.67	11.05	15.77
Writers, Artists, Entertainers, Athletes, and Related Occupations	1,040	9.69	7.35	10.90
Other Professional, Paraprofessional, and Technical Occupations	1,140	15.92	10.87	20.32
Sales and Related Occupations	22,590	\$8.58	\$6.36	\$9.79
First Line Supervisors and Manager/Supervisors	2,890	12.45	8.31	14.30
First Line Supervisors and Manager/Supervisors-Sales and Related Workers	2,890	12.45	8.31	14.30
Sales Occupations, Service	1,130	11.92	8.03	13.93
Merchandise, Products, and Other Sales and Sales-Related Occupations	18,570	7.78	5.95	8.84
Clerical and Administrative Support Occupations	30,300	\$9.69	\$7.31	\$11.19
First Line Supervisors & Manager/Supervisors-Clerical and Administrative	2,320	13.32	9.27	15.52
Industry Specific Clerical and Administrative Support Occupations	4,970	8.10	6.52	9.29
Banking, Security, Finance, and Credit Workers	1,550	8.13	6.79	9.29
Insurance Workers	400	9.91	7.97	11.33
Investigative and Related Workers, Except Insurance	470	10.91	6.95	12.16
Municipal and Related Workers	200	10.93	7.79	13.91
Lodging and Travel Workers	1,010	6.88	5.91	7.80
Other Industry Specific Workers	1,340	7.05	5.89	8.12
Secretarial and General Office Occupations	16,410	9.03	6.93	10.33
Secretaries	5,430	9.39	7.47	10.69
Other Secretarial Related and General Office Workers	10,980	8.85	6.67	10.15
Electronic Data Processing and Other Office Machine Occupations	770	9.02	7.18	10.28
Communications, Mail and Message Distributing Occupations	940	11.68	10.20	13.05
Communications Equipment Operators	250	7.77	6.40	8.84
Mail and Message Distribution Workers	690	13.10	11.58	14.58
Material Recording, Scheduling, Dispatching, and Distributing Occupations	2,990	12.11	8.03	15.41
Other Clerical and Administrative Support Occupations	1,900	10.66	7.71	11.09
Service Occupations	40,830	\$7.17	\$6.07	\$8.03
First Line Supervisors and Manager/Supervisors-Service	1,660	11.73	8.45	13.76
Protective Service Occupations	3,350	11.28	9.28	12.64
Food and Beverage Preparation and Service Occupations	20,550	6.10	5.50	6.62
Health Service and Related Occupations	3,630	7.82	6.59	8.89

Table: Wyoming Statewide Wages (Continued from page 11)

Occupational Title	Total Employment	Mean Wage	Entry Level	Experienced Level
Service Occupations				
Cleaning and Building Service Occupations	7,860	7.03	5.64	8.06
Personal Service Occupations	2,910	6.66	5.69	7.71
Other Service Occupations	870	8.47	5.58	9.84
Agricultural, Forestry, Fishing, and Related Occupations				
First Line Supervisors	80	14.42	10.45	16.27
Timber Cutting and Logging Occupations-See Material Moving, Next Division	140	13.81	11.40	15.81
Other Agricultural, Forestry, Fishing, and Related Occupations	2,900	8.50	6.57	9.88
Production, Construction, Operating, Maintenance, and Material Handling Occupations				
First Line Supervisors and Manager/Supervisors-Production, Construction, Maintenance, and Related	4,420	20.01	13.88	26.25
Inspectors and Related Occupations	290	12.97	10.08	15.36
Mechanics, Installers, and Repairers	9,730	14.13	10.51	17.18
Machinery and Related Mechanics, Installers, and Repairers	3,910	13.07	8.59	16.61
Mobile Equipment Mechanics, Installers, and Repairers	3,140	13.67	10.78	16.17
Communications Equipment Mechanics, Installers, and Repairers	330	17.10	16.30	19.67
Other Electrical and Electronic Equipment Mechanics, Installers, & Repairers	950	17.65	14.83	20.50
Other Mechanics, Installers, and Repairers	1,400	15.03	10.94	18.22
Construction Trades and Extractive Occupations, Except Material Moving	13,320	14.20	11.05	16.91
Carpentry and Related Workers	1,840	13.36	11.04	15.35
Electrical and Related Workers	1,430	16.05	12.58	19.28
Masonry and Related Workers	600	12.34	11.19	13.85
Painting and Related Workers	420	10.54	7.77	12.60
Plumbing and Related Workers	630	15.40	11.70	19.61
Floor Related Workers, Except Carpenters	60	10.49	9.21	11.28
Road, Rail, and Related Construction and Maintenance Workers, Except Masonry	730	12.12	10.13	13.83
Other Construction Trades Workers	1,290	11.44	8.95	13.87
Extractive and Related Workers-Including Blasters	6,320	15.16	11.40	18.16
Precision Production Occupations	1,130	12.28	9.14	14.76
Precision Metal Workers	670	12.90	9.80	15.89
Precision Textile, Apparel, and Furnishings Workers	90	10.71	7.49	13.96
Precision Printing Workers	90	8.30	6.22	9.45
Other Precision Workers	280	12.57	9.06	14.03
Machine Setters, Set-up Operators, Operators and Tenders	2,320	11.09	7.79	14.27
Metal Fabrication and Related Machine Setters, Operators and Other Related Workers	180	13.70	10.21	18.37
Woodworking Machine Setters, Operators, and Related Workers	300	9.59	7.24	11.99
Printing, Binding, and Related Workers	180	9.62	7.39	11.81
Textile and Related Setters, Operators, and Related Workers	530	6.91	5.71	7.94
Other Machine Setters, Set-up Operators, Operators and Tenders-Except Metal & Plastic	1,130	13.26	8.59	17.59
Hand Working Occupations, Including Assemblers and Fabricators	3,960	16.51	12.80	19.75
Other Hand Workers, Including Assemblers and Fabricators	1,510	13.22	9.33	15.63
Plant and System Occupations	2,450	18.54	14.94	22.30
Transportation and Material Moving Machines and Vehicle Operators	14,220	12.17	9.00	14.78
Motor Vehicle Operators	9,000	10.54	7.77	12.71
Rail Transportation Workers	80	17.51	13.22	24.26
Air Transportation Workers	120	19.09	14.98	19.56
Other Transportation and Related Workers	540	6.04	5.41	6.12
Material Moving Equipment Operators	4,480	15.91	11.64	19.69

Seasonal Variation of Employment in Wyoming

by: Valerie Davis, Senior Statistician

Seasonal variation¹ in employment is shown in the Map. Youth and others who are interested in summer employment can see that several counties would be good places to work in the summer; Teton and Park Counties, for example. Those individuals who are interested in year-round employment would have a tougher time in finding a county to work in. However, there are counties that show less seasonal variation, like Albany and Laramie.

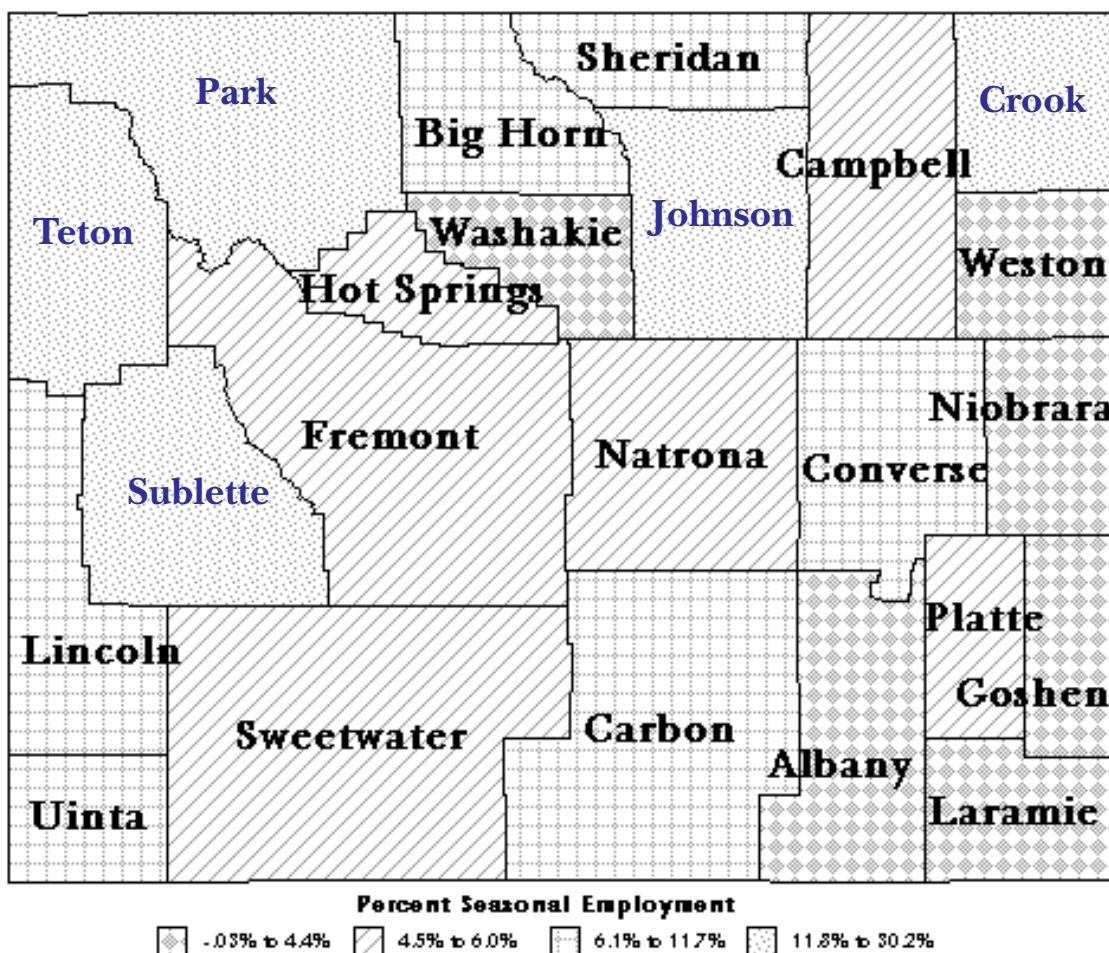
Further information, such as the major industries in each county, can be obtained from the new publication, *Wyoming 1997 Annual Covered Employment and Wages*. Call Research & Planning at (307) 473-3807 for a copy. The Internet version is already available at: <http://lmi.state.wy.us/97202pub/97toc.htm>.

1 Seasonal percent change (variation) was calculated by subtracting first quarter 1997 data

(the first quarter of the year generally shows the least employment over the year) from third quarter 1997 data (the third quarter of the year generally shows the most employment over the year), then dividing that result by third quarter 1997 employment and finally multiplying by 100.



Map: Percent of Seasonal Employment Change by County, 97Q1 from 97Q3



Counties in colored text are those that have the highest percent change in employment.

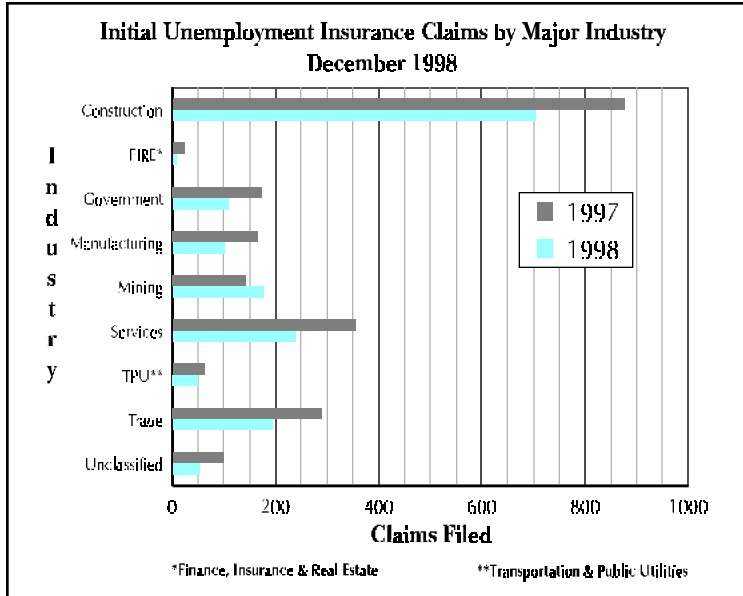
Source: *Wyoming 1997 Annual Covered Employment and Wages*.

Map created on Atlas Geographic Information Systems (GIS) by ©Environmental Systems Research Institute, Incorporated (ESRI).

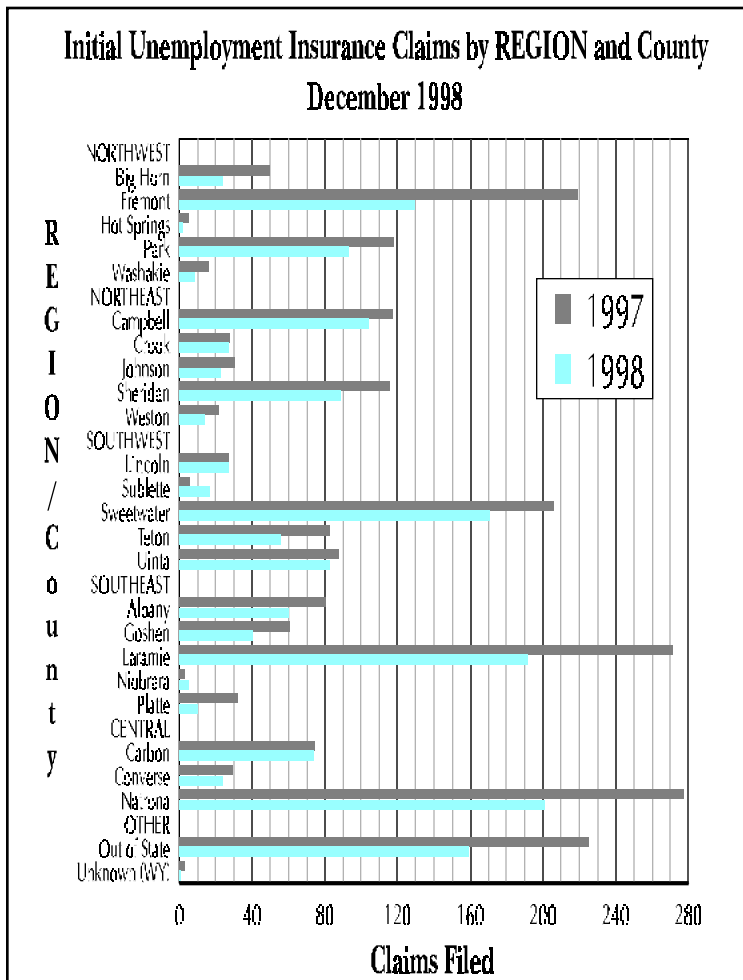
Wyoming Normalized Unemployment Insurance Statistics: Initial Claims

data produced by: Krista R. Shinkle, Senior Statistician

"Wyoming statewide initial Unemployment Insurance claims decreased in over-the-year comparisons in every major industry except Mining (up 22.4%) from December 1997 to 1998."



	CLAIMS FILED			Percent Change Claims Filed	
	DEC 98	NOV 98	DEC 97	DEC 98	DEC 97
WYOMING STATEWIDE					
TOTAL CLAIMS FILED	1,634	1,556	2,191	5.0	-25.4
TOTAL GOODS PRODUCING	979	699	1,188	40.1	-17.6
Manufacturing	101	60	167	68.3	-39.5
Mining	175	163	143	7.4	22.4
Oil & Gas Extraction	161	135	133	19.3	21.1
Construction	703	476	878	47.7	-19.9
TOTAL SERVICE PRODUCING	602	797	903	-24.5	-33.3
Transportation & Public Utilities	50	56	62	-10.7	-19.4
Transportation	43	52	55	-17.3	-21.8
Communications & Public Utilities	6	4	6	50.0	0.0
Trade	195	259	289	-24.7	-32.5
Wholesale Trade	25	22	29	13.6	-13.8
Retail Trade	170	237	260	-28.3	-34.6
Finance, Insurance & Real Estate	9	27	24	-66.7	-62.5
Services	239	329	355	-27.4	-32.7
Personal & Business Services	71	78	94	-9.0	-24.5
Health Services	19	19	27	0.0	-29.6
Government	109	126	173	-13.5	-37.0
Local Government	37	42	52	-11.9	-28.8
Local Education	4	9	5	-55.6	-20.0
UNCLASSIFIED	53	60	100	-11.7	-47.0



	DEC 98	NOV 98	DEC 97	DEC 98	DEC 97
LARAMIE COUNTY					
TOTAL CLAIMS FILED	190	186	270	2.2	-29.6
TOTAL GOODS PRODUCING	127	89	173	42.7	-26.6
Manufacturing	12	8	22	50.0	-45.5
Mining	10	0	16	N/A	-37.5
Oil & Gas Extraction	9	0	16	N/A	-43.8
Construction	105	81	135	29.6	-22.2
TOTAL SERVICE PRODUCING	59	86	93	-31.4	-36.6
Transportation & Public Utilities	6	14	9	-57.1	-33.3
Transportation	4	13	6	-69.2	-33.3
Communications & Public Utilities	2	1	2	100.0	0.0
Trade	19	31	32	-38.7	-40.6
Wholesale Trade	2	0	5	N/A	-60.0
Retail Trade	17	31	27	-45.2	-37.0
Finance, Insurance & Real Estate	0	4	4	-100.0	-100.0
Services	24	29	36	-17.2	-33.3
Personal & Business Services	8	6	14	33.3	-42.9
Health Services	8	3	3	166.7	166.7
Government	10	8	12	25.0	-16.7
Local Government	3	3	1	0.0	200.0
Local Education	0	0	0	N/A	N/A
UNCLASSIFIED	4	11	4	-63.6	0.0

	DEC 98	NOV 98	DEC 97	DEC 98	DEC 97
NATRONA COUNTY					
TOTAL CLAIMS FILED	201	169	277	18.9	-27.4
TOTAL GOODS PRODUCING	130	94	175	38.3	-25.7
Manufacturing	12	13	18	-7.7	-33.3
Mining	14	23	21	-39.1	-33.3
Oil & Gas Extraction	12	16	17	-25.0	-29.4
Construction	104	58	136	79.3	-23.5
TOTAL SERVICE PRODUCING	61	71	93	-14.1	-34.4
Transportation & Public Utilities	9	3	10	200.0	-10.0
Transportation	9	2	8	350.0	12.5
Communications & Public Utilities	0	1	2	-100.0	-100.0
Trade	27	27	38	0.0	-28.9
Wholesale Trade	4	4	8	0.0	-50.0
Retail Trade	23	23	30	0.0	-23.3
Finance, Insurance & Real Estate	1	4	2	-75.0	-50.0
Services	18	28	41	-35.7	-56.1
Personal & Business Services	6	10	13	-40.0	-53.8
Health Services	4	5	10	-20.0	-60.0
Government	6	9	2	-33.3	200.0
Local Government	3	6	1	-50.0	200.0
Local Education	1	2	0	-50.0	0.0
UNCLASSIFIED	10	4	9	150.0	11.1

Wyoming Normalized Unemployment Insurance Statistics: Continued Claims

data produced by: Krista R. Shinkle, Senior Statistician

"Wyoming statewide continued Unemployment Insurance claims decreased in over-the-year comparisons in every major industry except Mining (up 118.5%) and Finance, Insurance & Real Estate (no change) from December 1997 to 1998."

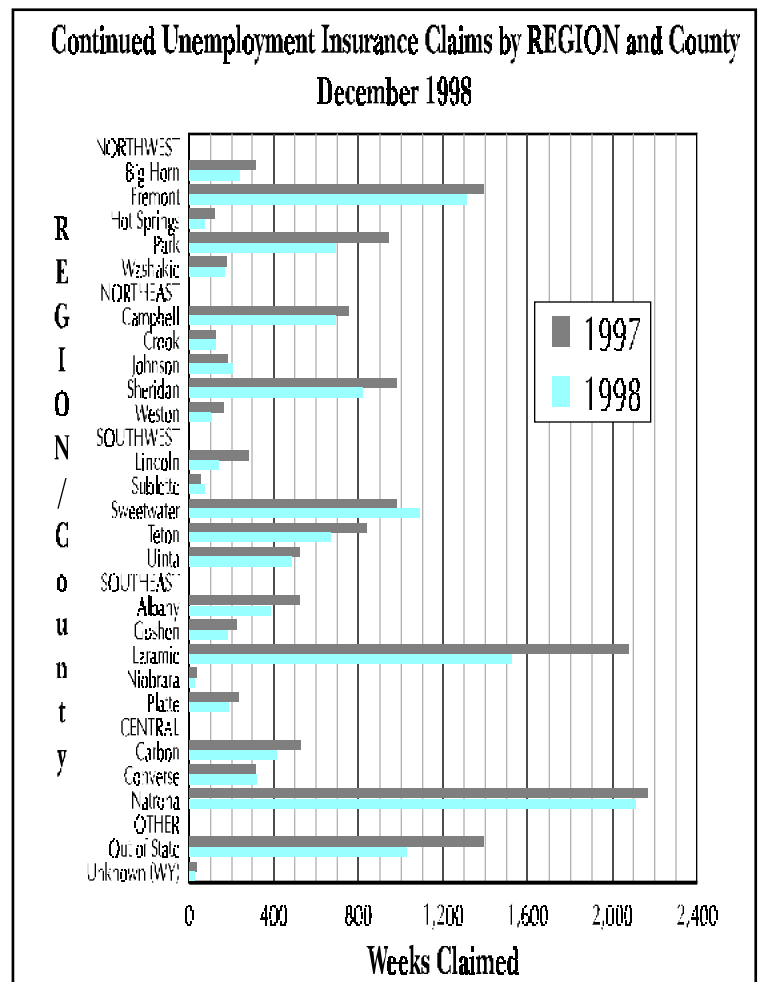
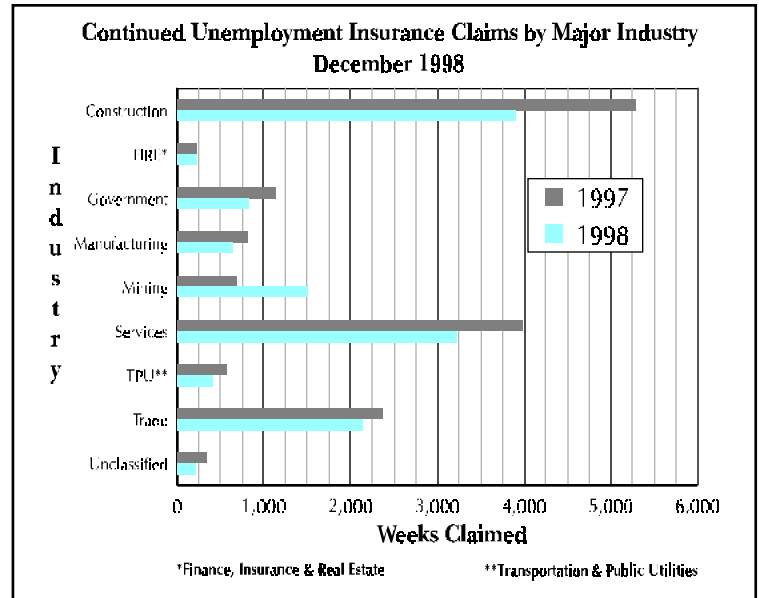
	WEEKS CLAIMED			Percent Change Weeks Claimed	
	DEC 98	NOV 98	DEC 97	NOV 98	DEC 97
	DEC 98	NOV 98	DEC 97	DEC 98	DEC 97
WYOMING STATEWIDE					
TOTAL WEEKS CLAIMED	13,134	9,665	15,416	35.9	-14.8
TOTAL UNIQUE CLAIMANTS	4,374	3,398	4,646	28.7	-5.9
TOTAL GOODS PRODUCING	6,063	4,101	6,792	47.8	-10.7
Manufacturing	651	457	815	42.5	-20.1
Mining	1,503	1,304	688	15.3	118.5
Oil & Gas Extraction	1,300	1,137	601	14.3	116.3
Construction	3,909	2,340	5,289	67.1	-26.1
TOTAL SERVICE PRODUCING	6,851	5,416	8,290	26.5	-17.4
Transportation & Public Utilities	419	291	568	44.0	-26.2
Transportation	343	231	356	48.5	-3.7
Communications & Public Utilities	76	61	212	24.6	-64.2
Trade	2,144	1,604	2,364	33.7	-9.3
Wholesale Trade	302	303	315	-0.3	-4.1
Retail Trade	1,842	1,301	2,049	41.6	-10.1
Finance, Insurance & Real Estate	229	188	229	21.8	0.0
Services	3,231	2,602	3,984	24.2	-18.9
Personal & Business Services	877	685	1,025	28.0	-14.4
Health Services	312	291	300	7.2	4.0
Government	828	731	1,145	13.3	-27.7
Local Government	416	363	604	14.6	-31.1
Local Education	108	131	186	-17.6	-41.9
UNCLASSIFIED	220	148	334	48.6	-34.1

LARAMIE COUNTY

TOTAL WEEKS CLAIMED	1,529	1,095	2,081	39.6	-26.5
TOTAL UNIQUE CLAIMANTS	496	386	659	28.5	-24.7
TOTAL GOODS PRODUCING	762	493	1,170	54.6	-34.9
Manufacturing	74	42	86	76.2	-14.0
Mining	24	22	31	9.1	-22.6
Oil & Gas Extraction	24	22	31	9.1	-22.6
Construction	664	429	1,053	54.8	-36.9
TOTAL SERVICE PRODUCING	735	578	896	27.2	-18.0
Transportation & Public Utilities	60	43	99	39.5	-39.4
Transportation	50	32	62	56.3	-19.4
Communications & Public Utilities	10	11	37	-9.1	-73.0
Trade	290	137	280	111.7	3.6
Wholesale Trade	27	26	43	3.8	-37.2
Retail Trade	263	111	237	136.9	11.0
Finance, Insurance & Real Estate	39	38	40	2.6	-2.5
Services	278	273	356	1.8	-21.9
Personal & Business Services	97	131	163	-26.0	-40.5
Health Services	52	38	22	36.8	136.4
Government	68	87	121	-21.8	-43.8
Local Government	32	39	56	-17.9	-42.9
Local Education	9	9	24	0.0	-62.5
UNCLASSIFIED	32	24	15	33.3	113.3

NATRONA COUNTY

TOTAL WEEKS CLAIMED	2,113	1,584	2,169	33.4	-2.6
TOTAL UNIQUE CLAIMANTS	678	524	647	29.4	4.8
TOTAL GOODS PRODUCING	1,012	647	1,000	56.4	1.2
Manufacturing	100	67	58	49.3	72.4
Mining	320	264	149	21.2	114.8
Oil & Gas Extraction	262	228	115	14.9	127.8
Construction	592	316	793	87.3	-25.3
TOTAL SERVICE PRODUCING	1,064	920	1,132	15.7	-6.0
Transportation & Public Utilities	57	28	83	103.6	-31.3
Transportation	51	25	28	104.0	82.1
Communications & Public Utilities	6	3	55	100.0	-89.1
Trade	390	342	314	14.0	24.2
Wholesale Trade	94	90	48	4.4	95.8
Retail Trade	296	252	266	17.5	11.3
Finance, Insurance & Real Estate	50	43	55	16.3	-9.1
Services	460	402	607	14.4	-24.2
Personal & Business Services	148	119	211	24.4	-29.9
Health Services	87	83	115	4.8	-24.3
Government	107	105	73	1.9	46.6
Local Government	78	66	53	18.2	47.2
Local Education	30	27	3	11.1	900.0
UNCLASSIFIED	37	17	37	117.6	0.0

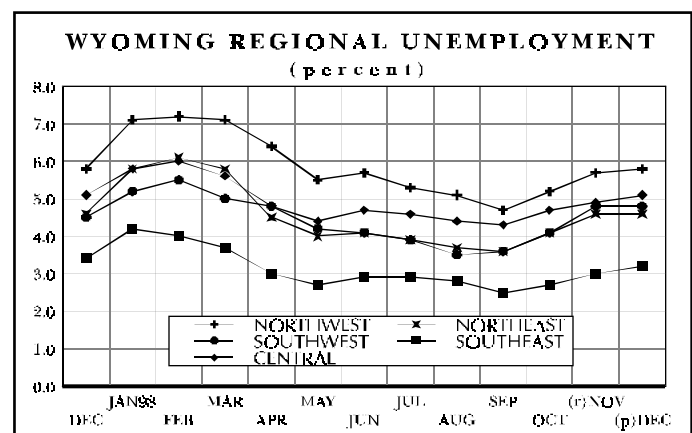
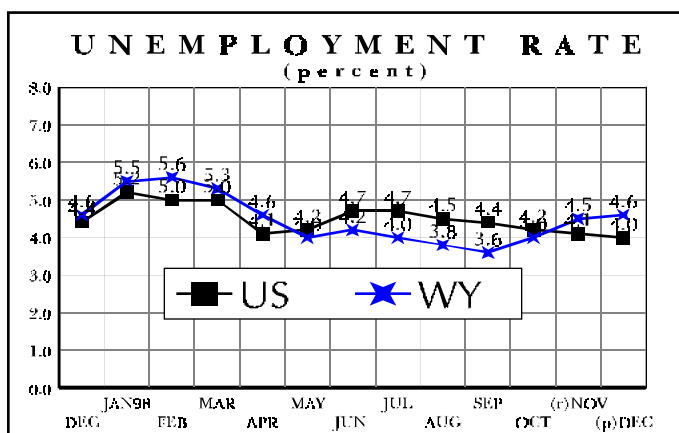


Wyoming Economic Indicators

"Wyoming's total civilian labor force increased 1.0 percent from December 1997 to 1998; the total number of employed and unemployed also rose by 1.0 percent for the same time period."

	December 1998 ----- (p) -----	November 1998 ----- (r) -----	December 1997 ----- (b) -----	Percent Change Month	Year
Wyoming Total Civilian Labor Force (1)	255,728	257,736	253,078	-0.8	1.0
Unemployed	11,639	11,494	11,521	1.3	1.0
Employed	244,089	246,242	241,557	-0.9	1.0
Wyoming Unemployment Rate/Seas. Adj.	4.6%/4.5%	4.5%/4.8%	4.6%/4.5%	N/A	N/A
U.S. Unemployment Rate/Seas. Adj.	4.0%/4.3%	4.1%/4.4%	4.4%/4.7%	N/A	N/A
U.S. Multiple Jobholders	8,220,000	8,307,000	8,108,000	-1.0	1.4
As a percent of all workers	6.2%	6.3%	6.2%	N/A	N/A
U.S. Discouraged Workers	358,000	310,000	345,000	15.5	3.8
U.S. Part Time for Economic Reasons	3,455,000	3,159,000	3,869,000	9.4	-10.7
Hours & Earnings for Production Workers					
Wyoming Mining					
Average Weekly Earnings	\$856.32	\$859.84	\$844.67	-0.4	1.4
Average Weekly Hours	44.3	44.9	47.4	-0.9	-3.8
U.S. Mining					
Average Weekly Earnings	\$757.34	\$760.35	\$746.70	-0.4	1.4
Average Weekly Hours	43.5	43.9	45.2	-0.9	-3.8
Wyoming Manufacturing					
Average Weekly Earnings	\$603.17	\$618.10	\$601.15	-2.4	0.3
Average Weekly Hours	40.4	41.4	40.4	-2.4	0.0
U.S. Manufacturing					
Average Weekly Earnings	\$583.19	\$572.56	\$579.21	1.9	0.7
Average Weekly Hours	42.6	42.1	43.0	1.2	-0.9
Wyoming Unemployment Insurance					
Weeks Compensated (2)	16,199	9,040	15,016	79.2	7.9
Benefits Paid	\$2,864,181	\$1,583,126	\$2,522,610	80.9	13.5
Average Weekly Benefit Payment	\$176.81	\$175.12	\$167.99	1.0	5.3
State Insured Covered Jobs (1)	204,120	205,252	204,008	-0.6	0.1
Insured Unemployment Rate	1.8%	1.3%	1.7%	N/A	N/A
Consumer Price Index (U) for All U.S. Urban Consumers (1982 to 1984 = 100)					
All Items	163.9	164.0	161.3	-0.1	1.6
Food & Beverages	162.7	162.5	159.1	0.1	2.3
Housing	161.3	161.3	157.7	0.0	2.3
Apparel	130.7	135.0	131.6	-3.2	-0.7
Transportation	140.7	141.5	143.2	-0.6	-1.7
Medical Care	245.2	244.7	237.1	0.2	3.4
Recreation (Dec. 1997=100)	101.2	101.3	100.0	-0.1	1.2
Education & Communication (Dec. 1997=100)	100.7	101.0	100.0	-0.3	0.7
Other Goods & Services	250.3	240.5	230.1	4.1	8.8
Producer Prices (1982 to 1984 = 100)					
All Commodities	122.7	123.5	126.8	-0.6	-3.2

(p) Preliminary. (r) Revised. (b) Benchmarked.
 (1) Local Area Unemployment Statistics Program estimates. (2) Not Normalized.



Wyoming County Unemployment Rates

data produced by: David Bullard, Economist

"Wyoming's unemployment rate (not seasonally adjusted) was 4.6 percent for December 1998. The Southeast Region had the lowest unemployment rate in the state (3.2%) and the Northwest Region had the highest (5.8%)."

REGION COUNTY	<u>Labor Force</u>			<u>Employed</u>			<u>Unemployed</u>			<u>Unemployment Rates</u>		
	Dec 1998 (p)	Nov 1998 (r)	Dec 1997 (b)	Dec 1998 (p)	Nov 1998 (r)	Dec 1997 (b)	Dec 1998 (p)	Nov 1998 (r)	Dec 1997 (b)	Dec 1998 (p)	Nov 1998 (r)	Dec 1997 (b)
Northwest	43,634	44,699	43,592	41,103	42,147	41,081	2,531	2,552	2,511	5.8	5.7	5.8
Big Horn	6,047	6,267	5,683	5,703	5,940	5,370	344	327	313	5.7	5.2	5.5
Fremont	16,495	16,729	16,923	15,274	15,454	15,706	1,221	1,275	1,217	7.4	7.6	7.2
Hot Springs Park	2,386	2,629	2,434	2,295	2,549	2,331	91	80	103	3.8	3.0	4.2
Washakie	14,138	14,443	13,910	13,502	13,820	13,222	636	623	688	4.5	4.3	4.9
	4,568	4,631	4,642	4,329	4,384	4,452	239	247	190	5.2	5.3	4.1
Northeast	42,263	43,239	41,704	40,324	41,254	39,804	1,939	1,985	1,900	4.6	4.6	4.6
Campbell	18,961	19,345	18,576	18,151	18,462	17,820	810	883	756	4.3	4.6	4.1
Crook	2,882	3,036	2,837	2,736	2,881	2,695	146	155	142	5.1	5.1	5.0
Johnson	3,832	3,967	3,699	3,676	3,822	3,530	156	145	169	4.1	3.7	4.6
Sheridan	13,608	13,858	13,521	12,902	13,189	12,827	706	669	694	5.2	4.8	5.1
Weston	2,980	3,033	3,071	2,859	2,900	2,932	121	133	139	4.1	4.4	4.5
Southwest	51,067	50,154	50,817	48,605	47,763	48,526	2,462	2,391	2,291	4.8	4.8	4.5
Lincoln	6,667	6,781	6,575	6,277	6,480	6,148	390	301	427	5.8	4.4	6.5
Sublette	3,135	3,249	2,959	3,012	3,169	2,893	123	80	66	3.9	2.5	2.2
Sweetwater	21,023	20,529	21,064	19,841	19,489	20,068	1,182	1,040	996	5.6	5.1	4.7
Teton	10,003	9,200	9,782	9,768	8,773	9,510	235	427	272	2.3	4.6	2.8
Uinta	10,239	10,395	10,437	9,707	9,852	9,907	532	543	530	5.2	5.2	5.1
Southeast	69,621	70,289	68,789	67,408	68,167	66,434	2,213	2,122	2,355	3.2	3.0	3.4
Albany	17,598	17,712	17,674	17,271	17,382	17,334	327	330	340	1.9	1.9	1.9
Goshen	6,824	7,246	6,461	6,566	6,999	6,189	258	247	272	3.8	3.4	4.2
Laramie	39,831	39,817	39,374	38,431	38,517	37,837	1,400	1,300	1,537	3.5	3.3	3.9
Niobrara	1,111	1,182	1,126	1,076	1,143	1,096	35	39	30	3.2	3.3	2.7
Platte	4,257	4,332	4,154	4,064	4,126	3,978	193	206	176	4.5	4.8	4.2
Central	49,144	49,354	48,176	46,650	46,912	45,711	2,494	2,442	2,465	5.1	4.9	5.1
Carbon	8,098	8,121	8,143	7,627	7,743	7,700	471	378	443	5.8	4.7	5.4
Converse	6,862	7,138	6,568	6,525	6,774	6,266	337	364	302	4.9	5.1	4.6
Natrona	34,184	34,095	33,465	32,498	32,395	31,745	1,686	1,700	1,720	4.9	5.0	5.1
Statewide	255,728	257,736	253,078	244,089	246,242	241,557	11,639	11,494	11,521	4.6	4.5	4.6
Statewide Seasonally Adjusted										4.5	4.8	4.5
U.S.....										4.0	4.1	4.4
U.S. Seasonally Adjusted.....										4.3	4.4	4.7

Prepared in cooperation with the Bureau of Labor Statistics. Benchmarked 02/98. Run Date 1/99.
Data are not seasonally adjusted except where otherwise specified.

(p) Preliminary. (r) Revised. (b) Benchmarked.

NOTE: The 1997 annual average unemployment rate for Wyoming was estimated at 5.1 percent. A 90 percent confidence interval around this estimate suggests that in 9 out of 10 cases the actual rate would fall between 4.5 and 5.7 percent.

State Unemployment Rates December News

December 1998

(Not Seasonally Adjusted)

by: David Bullard, Economist

"... the seasonal increase in unemployment from November to December was smaller than normally expected."

State	Unemp. Rate
Puerto Rico	11.1
District of Columbia	7.2
New Mexico	6.0
West Virginia	6.0
Alaska	5.9
Montana	5.9
California	5.4
Hawaii	5.4
Oregon	5.3
Arkansas	5.2
Idaho	5.2
New York	5.1
Washington	5.0
Louisiana	4.9
Wyoming	4.6
Texas	4.4
Mississippi	4.3
Oklahoma	4.2
Illinois	4.1
New Jersey	4.1
United States	4.0
Florida	3.8
Kentucky	3.8
Maine	3.8
Ohio	3.8
Pennsylvania	3.8
Arizona	3.6
Georgia	3.6
Rhode Island	3.6
Maryland	3.5
Tennessee	3.5
Michigan	3.4
South Carolina	3.4
Alabama	3.3
Kansas	3.2
Missouri	3.1
Wisconsin	3.1
Colorado	3.0
Indiana	2.9
Connecticut	2.8
Nevada	2.8
Vermont	2.8
Delaware	2.7
Iowa	2.7
Massachusetts	2.7
North Carolina	2.7
North Dakota	2.7
Utah	2.7
Virginia	2.7
New Hampshire	2.6
South Dakota	2.6
Minnesota	2.2
Nebraska	2.1

Nonagricultural employment continues to grow at a faster pace than earlier in the year. The December estimates show over-the-year growth of 2,500 jobs or 1.1 percent. U.S. nonagricultural employment growth appears to have stabilized at 2.3 percent. The six-month moving average of Wyoming employment growth has moved up to just under one percent.

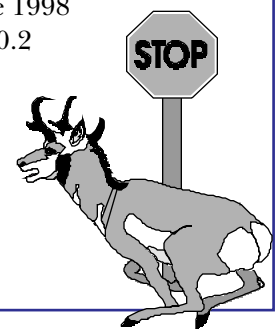
Construction employment was especially high for December (up 4.8% over the year) possibly because of unseasonably warm weather. Business Services, which includes such diverse firms as temporary employment services and

computer related services, had an increase of 400 jobs (6.9%) over the year. The two industries showing over-the-year declines in employment were Electric, Gas & Sanitary Services (down 100 jobs, or 3.1%) and Federal Government (down 300 jobs, or 4.5%).

While the U.S. unemployment rate continued to fall, the Wyoming rate increased slightly in December to 4.6 percent. However, Wyoming's seasonally adjusted unemployment rate fell from 4.8 percent in November to 4.5 percent in December, suggesting that the seasonal increase in unemployment from November to December was smaller than normally expected.

New Population Estimates Released by Census Bureau

The United States' Census Bureau recently released state population estimates for July 1998. In contrast to the 1997 estimates, which showed Wyoming's population declining, the 1998 estimates show a slight increase of 864 residents or 0.2 percent. However, the pattern of negative net domestic migration which we saw in 1997 continued, with 2,204 more people moving out of Wyoming than moving in during the one-year period from July 1997 to July 1998. For more information, visit the Census Bureau (<http://www.census.gov/>).



Coming in Wyoming Labor Force Trends

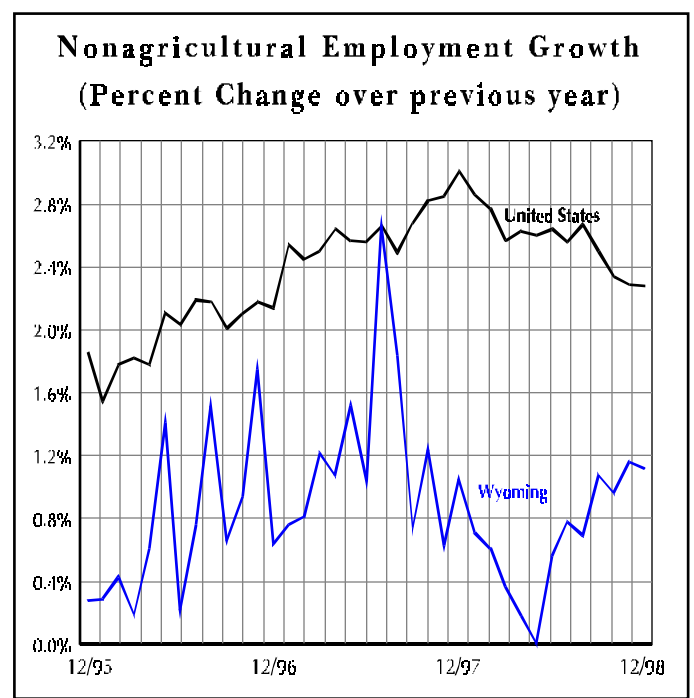
A three-part series analyzing **labor force attachment** in Wyoming. March features individuals who separate from the labor force (i.e., work for a certain time period and then cease to work in Wyoming), April studies individuals who are attached to the Wyoming labor force but have high rates of turnover and May analyzes individuals who are attached to the labor force through one employer.

Wyoming Nonagricultural Wage and Salary Employment¹

data produced by: Gregg Detweiler, Senior Economist

"Total nonagricultural employment increased by 2,500 persons (1.1%) from December 1997 to 1998. Over half of that growth was in Laramie and Natrona Counties (up 700 and 800 persons—2.0% and 2.6%—respectively)."

WYOMING STATEWIDE*	Employment in Thousands			Percent Change Total Employment		LARAMIE COUNTY	Employment in Thousands			Percent Change Total Employment	
	DEC 98(p)	NOV 98(r)	DEC 97	NOV 98	DEC 97		DEC 98(p)	NOV 98(r)	DEC 97	DEC 98	DEC 98
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	226.3	226.2	223.8	0.0	1.1	TOTAL NONAG. WAGE & SALARY EMPLOYMENT	355	359	348	-1.1	2.0
TOTAL GOODS PRODUCING	44.2	44.7	43.2	-1.1	2.3	TOTAL GOODS PRODUCING	3.8	3.8	3.7	0.0	2.7
Mining	17.7	17.5	17.5	1.1	1.1	Mining & Construction	2.1	2.1	2.1	0.0	0.0
Coal Mining	4.6	4.6	4.5	0.0	2.2	Manufacturing	1.7	1.7	1.6	0.0	6.2
Oil & Gas Extraction	9.3	9.1	9.1	2.2	2.2	TOTAL SERVICE PRODUCING	31.8	32.0	31.1	-0.6	2.3
Crude Petrol-Natural Gas	2.7	2.7	2.7	0.0	0.0	Transportation & Public Utilities	2.4	2.4	2.3	0.0	4.3
Oil & Gas Field Services	6.6	6.4	6.4	3.1	3.1	Trade	8.7	8.8	8.7	-1.1	0.0
Nonmetallic Minerals	3.3	3.3	3.2	0.0	3.1	Wholesale Trade	0.8	0.8	0.8	0.0	0.0
Construction	15.3	15.9	14.6	-3.8	4.8	Retail Trade	7.9	8.0	7.9	-1.2	0.0
General Building Contractors	3.9	3.9	3.8	0.0	2.6	Finance, Insurance & Real Estate	2.2	2.2	2.1	0.0	4.8
Heavy Construction	4.0	4.6	3.7	-13.0	8.1	Services	7.4	7.5	7.0	-1.3	5.7
Special Trade Construction	7.4	7.4	7.1	0.0	4.2	Total Government	11.1	11.1	11.0	0.0	0.9
Manufacturing	11.2	11.3	11.1	-0.9	0.9	Federal Government	2.4	2.4	2.4	0.0	0.0
Durable Goods	5.1	5.1	5.1	0.0	0.0	State Government	3.3	3.3	3.3	0.0	0.0
Nondurable Goods	6.1	6.2	6.0	-1.6	1.7	Local Government	5.4	5.4	5.3	0.0	1.9
Printing & Publishing	1.6	1.6	1.6	0.0	0.0						
Petroleum & Coal Products	1.3	1.3	1.2	0.0	8.3						
TOTAL SERVICE PRODUCING	182.1	181.5	180.6	0.3	0.8	NATRONA COUNTY*					
Transportation & Public Utilities	14.1	14.0	14.0	0.7	0.7	TOTAL NONAG. WAGE & SALARY EMPLOYMENT	31.3	31.4	30.5	-0.3	2.6
Transportation	9.0	8.8	8.9	2.3	1.1	TOTAL GOODS PRODUCING	5.8	5.8	5.4	0.0	7.4
Railroad Transportation	2.9	2.9	2.9	0.0	0.0	Manufacturing	1.6	1.6	1.5	0.0	6.7
Trucking & Warehousing	3.7	3.7	3.6	0.0	2.8	Mining	2.2	2.2	2.2	0.0	0.0
Communications	2.1	2.0	1.9	5.0	10.5	Construction	2.0	2.0	1.7	0.0	17.6
Telephone Communications	1.0	0.9	0.9	11.1	11.1	TOTAL SERVICE PRODUCING	25.5	25.6	25.1	-0.4	1.6
Electric, Gas & Sanitary Services	3.1	3.1	3.2	0.0	-3.1	Transportation & Public Utilities	1.7	1.7	1.7	0.0	0.0
Electric Services	2.0	2.0	2.1	0.0	-4.8	Transportation	1.1	1.1	1.1	0.0	0.0
Trade	52.9	52.4	52.4	1.0	1.0	Communications & Public Utilities	0.6	0.6	0.6	0.0	0.0
Wholesale Trade	7.9	7.9	7.8	0.0	1.3	Trade	8.7	8.6	8.5	1.2	2.4
Durable Goods	4.4	4.4	4.3	0.0	2.3	Wholesale Trade	2.4	2.4	2.3	0.0	4.3
Nondurable Goods	3.5	3.5	3.5	0.0	0.0	Retail Trade	6.3	6.2	6.2	1.6	1.6
Retail Trade	45.0	44.5	44.6	1.1	0.9	Finance, Insurance & Real Estate	1.2	1.2	1.2	0.0	0.0
Building Materials & Garden Supply	1.9	1.9	1.9	0.0	0.0	Services	8.3	8.5	8.2	-2.4	1.2
General Merchandise Stores	5.3	5.2	5.2	1.9	1.9	Personal & Business Services	1.7	1.7	1.6	0.0	6.3
Department Stores	4.4	4.3	4.3	2.3	2.3	Health Services	2.8	2.8	2.8	0.0	0.0
Food Stores	5.5	5.5	5.5	0.0	0.0	Government	5.6	5.6	5.5	0.0	1.8
Auto Dealers & Service Stations	7.9	7.9	7.8	0.0	1.3	Local Government	4.2	4.2	4.1	0.0	2.4
Gas Stations	4.2	4.2	4.1	0.0	2.4	Local Education	2.9	2.9	2.9	0.0	0.0
Apparel & Accessory Stores	1.5	1.5	1.5	0.0	0.0						
Furniture & Home Furnishing Stores	1.5	1.5	1.5	0.0	0.0						
Eating & Drinking Places	16.3	16.1	16.2	1.2	0.6						
Miscellaneous Retail	5.1	4.9	5.0	4.1	2.0						
Finance, Insurance & Real Estate	8.4	8.5	8.2	-1.2	2.4						
Depos-Nondepos & Security Brokers	4.0	4.0	3.9	0.0	2.6						
Depository Institutions	3.2	3.2	3.2	0.0	0.0						
Insurance	2.3	2.3	2.3	0.0	0.0						
Services	47.6	47.0	46.9	1.3	1.5						
Hotels & Other Lodging Places	7.1	6.8	7.0	4.4	1.4						
Personal Services	1.9	1.9	1.9	0.0	0.0						
Business Services	6.2	6.3	5.8	-1.6	6.9						
Automotive & Misc. Repair Services	2.8	2.8	2.8	0.0	0.0						
Amusements (Rec Services & Mot. Pics.)	3.3	2.7	3.3	22.2	0.0						
Health Services	10.4	10.4	10.4	0.0	0.0						
Offices of Doctors of Medicine	2.2	2.2	2.1	0.0	4.8						
Legal Services	1.3	1.3	1.2	0.0	8.3						
Social Services	5.3	5.2	5.2	1.9	1.9						
Membership Organizations	3.3	3.4	3.3	-2.9	0.0						
Engineering & Management	3.4	3.4	3.3	0.0	3.0						
Government	59.1	59.6	59.1	-0.8	0.0						
Total Federal Government	6.4	6.5	6.7	-1.5	-4.5						
Department of Defense	0.9	0.9	0.9	0.0	0.0						
Total State Government	13.7	13.7	13.7	0.0	0.0						
State Education	5.6	5.6	5.6	0.0	0.0						
Total Local Government	39.0	39.4	38.7	-1.0	0.8						
Local Hospitals	5.1	5.1	5.1	0.0	0.0						
Local Education	22.0	22.0	21.8	0.0	0.9						



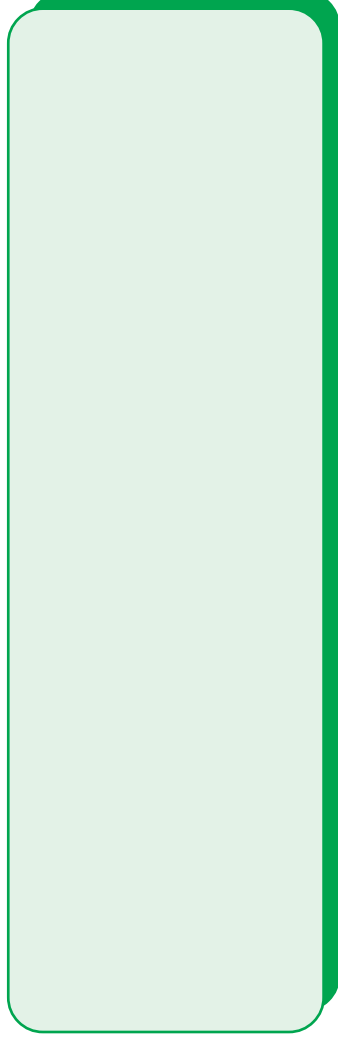
(1) Current Employment Statistics (CES) estimates include all full- and part-time wage and salary workers in nonagricultural establishments who worked or received pay during the week which includes the 12th of the month. Self-employed, domestic services, and personnel of the armed forces are excluded. Data are not seasonally adjusted.

* Published in cooperation with the Bureau of Labor Statistics.

(p) Subject to revision. (r) Revised.

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February 1999 TRENDS:

Wyoming's unemployment rate (seasonally adjusted) decreased 0.3 percent, suggesting that the seasonal increase in unemployment from November to December 1998 was smaller than normally expected (see page 16). Statewide Unemployment Insurance initial claims increased in Mining (22.4%); Mining was the only major industry to show an increase for each month of fourth quarter 1998 (see page 14). Wyoming statewide nonagricultural employment increased 1.1 percent from December 1997 to 1998, and Laramie and Natrona Counties showed employment growth as well (2.0% and 2.6%, respectively; see page 19). -- **Gayle C. Edlin**

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