

# A Mass Layoff Study Using Administrative Records

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During this time of slow economic growth, it is crucial to study the effects of mass layoffs on the economy and programs helping workers transition from layoffs. It is important to the effectiveness of resource allocation to understand what has happened to the workforce after layoffs occur. Administrative records analysis helps by studying worker transitions after layoffs to understand where program resources should be allocated in future layoffs. Some of the questions that wage records can answer are:

- Where did the workers go?
- Did they make a claim for unemployment insurance?
  - How long were they on unemployment insurance?
- Did they go back to school or a training program?
- Did they stay in the same industry?
  - Are they making more money?
- Did they move out of state?
- Did they leave the workforce?

All these questions can be answered by linking wage records to other administrative data sources such as unemployment claims and school enrollment records. By following worker transitions after a layoff, we can better understand the dynamics of a layoff. Layoff studies using wage record data can help serve as a guide for program requirements for future layoffs. While we cannot project the exact measures that need to be taken, we can make an educated guess as to what program resources should be in place for future layoffs.

This paper will study the effects of mass layoffs on New Mexico workers. Using two case studies, a layoff at a clothes manufacturing company and a retail (grocery) store, some of the above questions will be answered and more questions for future studies will be raised.

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The MLS (Mass Layoff Statistics) program examines the employer and reasons behind the layoff. The LAUS (Local Area Unemployment Statistics) program studies the unemployment rate using claims data. The data analysis done now by these two programs covers employers and claimants; analysis is done to understand why a layoff occurred and to identify the claimants. The question that needs to be asked is what happened to **all** the employees after a layoff, not only the ones who made unemployment claims.

By examining the trends of the affected individuals, there are many questions that can be asked and answered:

1. How many of those workers were long time (continuous) employees?
2. How many of the workers, continuous and not, went on to file claims?
3. How long was the unemployment spell?
4. How many went directly back to work?
5. How many had an extended absence from the job market?
6. How many went back to school, how many left the state, or how many left the market?

This list gets longer every time a wage record committee gets together. There are many questions that can be asked and answered. With a flexible database, based upon wage records, many of these questions and hopefully all other questions about the labor force that may arise can be answered.

## **Methodology**

By using a longitudinally linked database, administrative records can follow an employee over time, through layoffs and churning.<sup>1</sup> The three sets of administrative records that were used for this study were drivers' license data, unemployment insurance claim data, and the foundation, employer wage records.

In New Mexico, Wage record data is collected from an employer at the end of a quarter for unemployment insurance purposes. Wage record data includes SSN, wages, industry classification, and UI number by quarter. After the final collection of employer tax records, a download request is made to obtain this data. Wage record data is set up in a longitudinal database by using a program that follows an individual employee by employer through each quarter.<sup>2</sup> Using this database, a code is assigned to the individual per quarter based on whether an individual was a continuous employee (employed with the same employer for the prior quarter and the next quarter), an entrant, a rehire or a separation. The Wage Record database is the foundation for a longitudinally linked administrative database.

The second component of the administrative database is the drivers' license data. Drivers' license is used to establish gender and date of birth because these two items are not on the wage record files. Drivers' license data is obtained from the New Mexico Taxation and Revenue department once per year. The drivers' license file has the SSN, date of birth, gender, and driver classification,<sup>3</sup> along with several other variables for all drivers in the state. The percentage of wage records that had corresponding drivers' license data was about 90%. Wage records with a corresponding license can also be a measure of residency. As part of a four state

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<sup>1</sup> Churning is defined as normal turnover (job movement) for workers.

<sup>2</sup> William Glover, Senior Analyst, Wyoming Department of Employment – An Introduction to the Wage Records Applications, 1/7/2003 <http://doe.state.wy.us/lmi/staff/WRAP.pdf>

<sup>3</sup> Driver classification is used to distinguish license types, whether it is a truck drivers' license or a special vehicle license (such as limousines).

AAMC,<sup>4</sup> it is assumed that workers who earn wages and have a drivers' license can be classified as a resident of the state.

The claims data that is available comes from the BLS Mass Layoff Statistics (MLS) data extract. The MLS data extract includes: initial claims, continuous claims and final pays. The data file has SSN, name, gender, date of birth, race, initial claim date, continued claim dates, and final pay dates. Because of the magnitude of the claim files, the initial claim date (Cdate) and the final pay date (week ending) were the variables used for the start of a claim and the end of a claim. The magnitude of the administrative records database is already considerable; the decision was made not to complicate it further.

By combining the three data sets, linked by SSN, the longitudinal database can follow an individual from employer to employer or from employer to claimant and back. By using these three data sets, many questions can be answered. By adding additional administrative records, such as college enrollment, more questions can be answered. Following is an example of how these three administrative databases can interact to tell a story.

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<sup>4</sup> LAUS AAMC – Additional Activity to Maintain Currency, the four state group is charged with adding wage record data to administrative data for more analysis.

Ssn	Last Name	F	DOB		year	q	UI #	Wages	SIC	NAICS	turn	FIPS	Claim	Cdate	week end
9999	UNK	J	8/28/1957	M	1997	1	1090078023	3002	5411	445110	E	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1997	2	1090078023	3259	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1997	3	1090078023	3553	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1997	4	1090078023	3754	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1998	1	1090078023	3174	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1998	2	1090078023	3330	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1998	3	1090078023	3768	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1998	4	1090078023	4206	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1999	1	1090078023	2236	5411	445110	X	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1997	1	1090081973	895	5984	454312	X	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1999	1	1090159028	1511	5411	445110	E	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1999	2	1090159028	3261	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1999	3	1090159028	3289	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	1999	4	1090159028	3759	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2000	1	1090159028	4007	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2000	2	1090159028	4440	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2000	3	1090159028	4112	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2000	4	1090159028	3892	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2001	1	1090159028	4225	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2001	2	1090159028	4339	5411	445110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2001	3	1090159028	2964	5411	445110	X	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2002	1	1090170793	1701	5511	441110	E	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2002	2	1090170793	3653	5511	441110	C	35037	The Store	9/2/2001	2/15/2002
9999	UNK	J	8/28/1957	M	2002	3	1090170793	3590	5511	441110	C	35037	The Store	9/2/2001	2/15/2002

The preceding table shows the administrative records of a worker. This worker is a 46 year old man, laid off in 2001 from a store where he had worked continuously for 3 years. Prior to that, he had worked at another grocery store continuously for 2 years. In August of 2001, the company declared bankruptcy and laid-off 2500 people. This man went on to file an unemployment claim against the employer and claimed until early February, when he returned to employment. Because of the difference in wages between the first quarter and the second quarter of 2002, it is assumed that he went back to work after the final claim (week end) occurred. He went to a different industry as a used car salesman, where he is making about \$750 less a quarter than he was in the grocery industry.

The example above shows the way the three databases work together. The last name and first initial, the date of birth and gender of the worker is from the drivers' license database. The year, quarter, UI number, wages, and the industry codes are from the wage record file. The turnover category is assigned by using wage record data. The county, employer claimed against, claim date, and week ending is used from the MLS claims data. Combining these three items, there is an impressive amount of information was developed about this person.

By using the administrative database, following an individual becomes easier. Following a specified group of employees becomes easier to do also. Using administrative records makes it possible to do worker wage progression evaluations, program evaluations, and performance measures. While portions of these analyses were available before, the information is now available to do a complete analysis of all this data.

## **Limitations**

Wage records do have limitations. The first and foremost is the delay of information. Complete New Mexico wage record files are not available for about seven months after the end of a quarter, although 95% of the wage record file is available after four months. A delay for analyzing the data also arises because of turnover calculations. Turnover calculations use three quarters of data to classify the turnover category, the current quarter, the prior quarter and the subsequent quarter. The most reliable data in this study is therefore nine months old.

Other limitations include no occupational data, no weekly wages, hours worked, weeks worked, and no reporting unit. A reporting unit number for each employee would help establish how each county was effected by a layoff. New Mexico also suffers a data limitation of no college enrollment data. Wyoming has done several studies analyzing wage data for college graduates,<sup>5</sup> including studying nurses in the state. Using enrollment data, the Wyoming study demonstrated the “Brain Drain” effect on the workforce: graduates frequently leave the state after college. The inherent limitations of using wage records does not affect the reliability of this data and the applicability of a mass layoff study.

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<sup>5</sup> Sara Saulcy, Wyoming Department of Employment – Connecting Business and the Wyoming Community College System: A Study of Employment Outcomes of 2001 Graduates from Wyoming Community Colleges, 4/2003  
<http://doe.state.wy.us/lmi/CollegeReport2003.pdf>

## Case Studies

Two large companies in New Mexico recently went out of business: a grocery store chain and a clothes manufacturing company. The grocery store laid-off over 3000 employees from its peak employment in the year 2000, affecting employees in large and small New Mexico counties. The manufacturing company had approximately 900 employees at its peak in 1998. They were based in one of the fastest growing counties in New Mexico.

### Manufacturing

The manufacturing company employed approximately 900 workers in 1998 when they started laying off workers. Finally, the business shut its' doors in March of 1999. Many of the workers from this manufacturing company probably didn't have a secondary education or extensive experience. When the manufacturing company went out of business, where did the employees go? Are they financially more stable or less? There were approximately 825 people working for the company in 1998 quarter 3, the last quarter of substantial employment. It is possible that the pay for this quarter includes severance packages, reduced hours, and/or fewer weeks worked in the quarter.

In the workforce of this manufacturing company, about a third of the workers were men. Of the peak employment at 900 employees, less than one hundred of those employees filed claims against the company. Average duration of unemployment claims was approximately one quarter. The majority of workers returned to the job market, approximately 100 of the employees left the market.<sup>6</sup>

Most of the workers in this study transferred to a different industry after their layoff. Industries that acquired the majority of former workers were retail trade, employee

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<sup>6</sup> These had not returned to the job market after 12 months. The next question to ask is did these workers leave the state, go to school, or did they drop out of the job market?

leasing(business services), and leisure and hospitality (Table 1). The transition for these employees into these industries hurt their pocket book. The workers who made more money switched to the information industry (Table 2).

**Table 1** **Where the Workers Went**

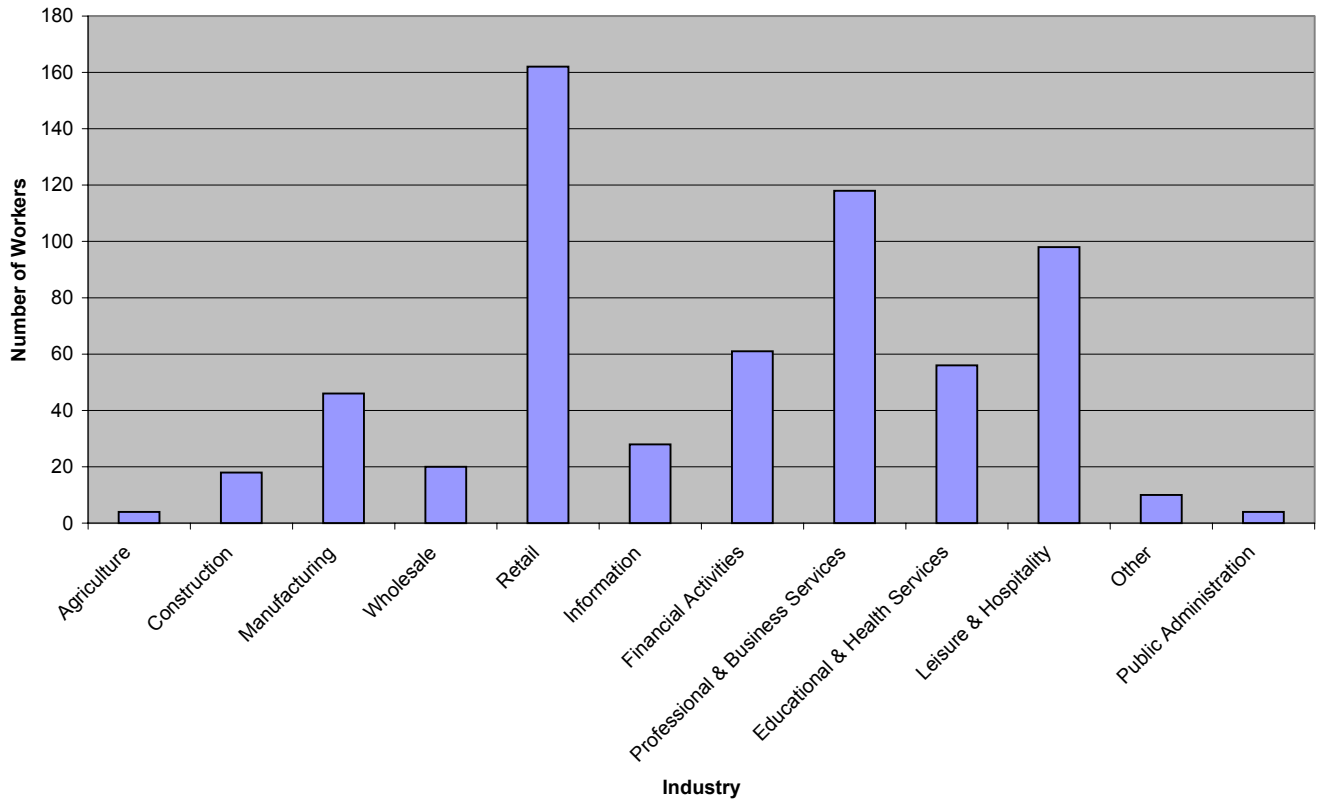
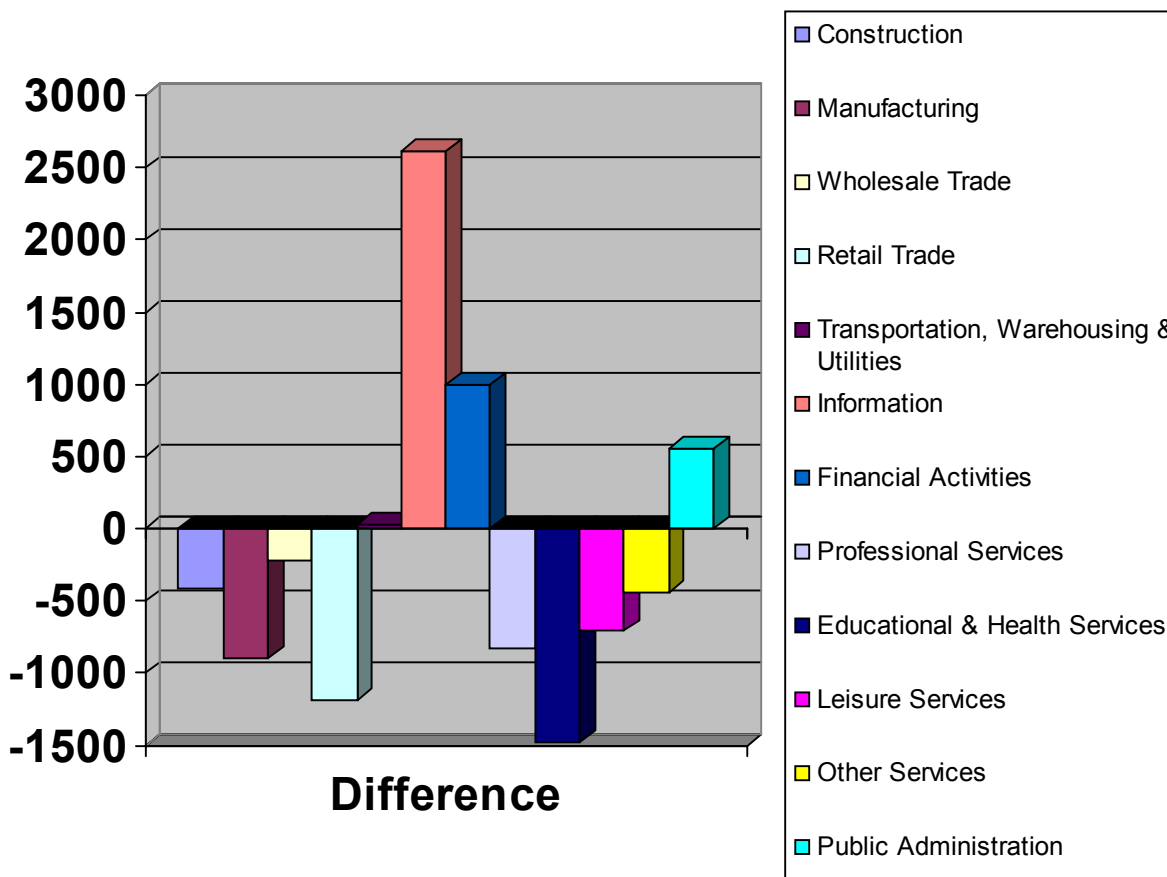


Table 2

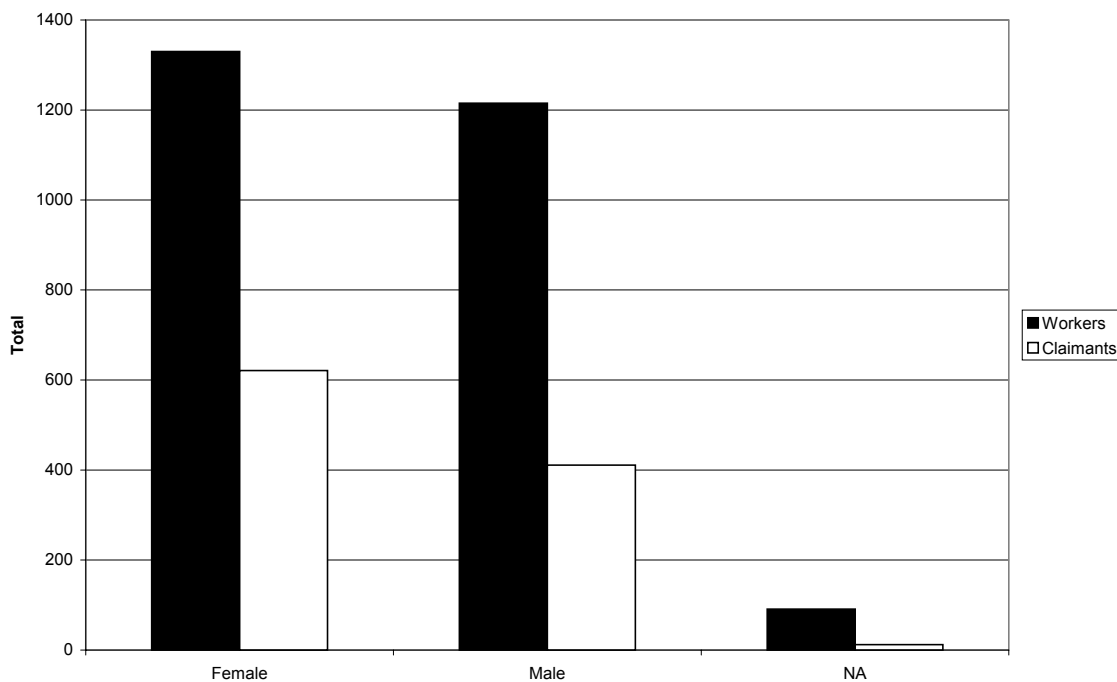


Grocery Store (Retail)

The grocery store company had approximately 3,400 employees and approximately 50 stores in various New Mexico counties in 2000. Soon after that, financial difficulties caused the eventual bankruptcy of the business and gradual layoffs during the next year. In August of 2001, the company declared bankruptcy and laid-off the rest of the workforce, approximately 2,500 people. More than half of the worksites and employment were acquired by other grocery store chains within the first couple of months, which are shown by the data. For purposes of compressing the data (keeping the dataset small), this study uses 2001 quarter 3 employment and quarter 2 wages.

There are more women in this industry than men. Almost half of the women who were laid-off claimed unemployment insurance, only a third of the men made unemployment claims. (Table 3) The average unemployment claim for this company was less than a quarter. The short duration of claims was aided by the quick ownership change over that most of the worksites underwent. Many employees filed claims for just the period of transition from store to store. Table 4 shows how the quick transformation helped over half of the workers remain in the same industry. Table 5 shows that the majority of these workers also were restored to approximately the same income level they had previously.<sup>7</sup>

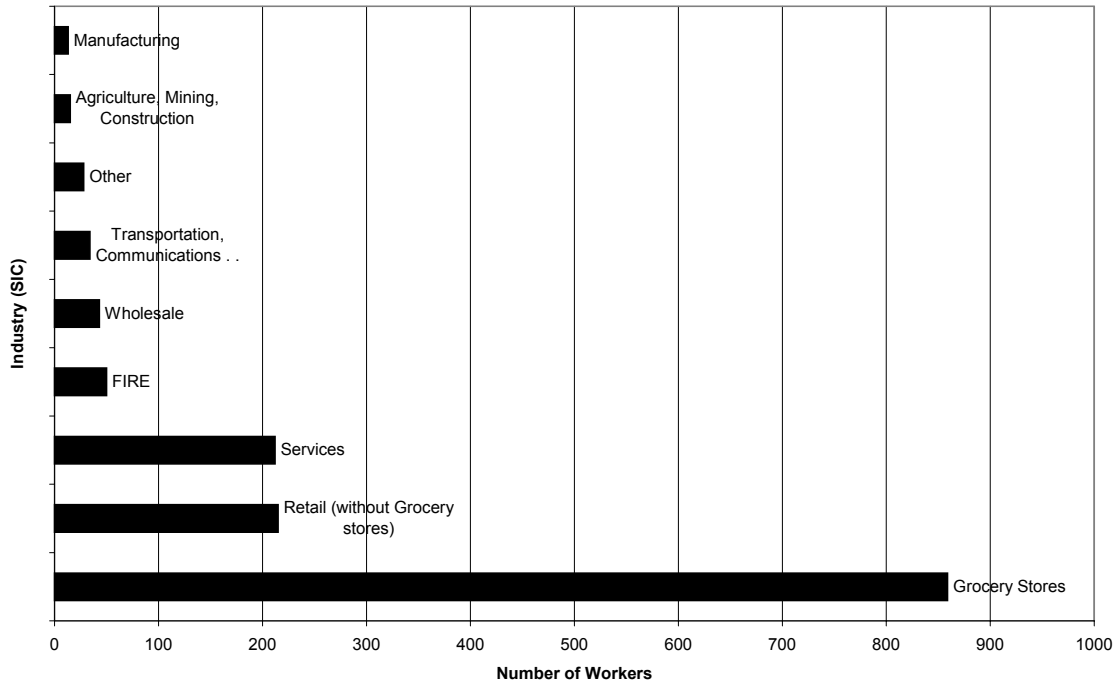
**Table 3: Workers and Claimants by Gender (Grocery Store)**



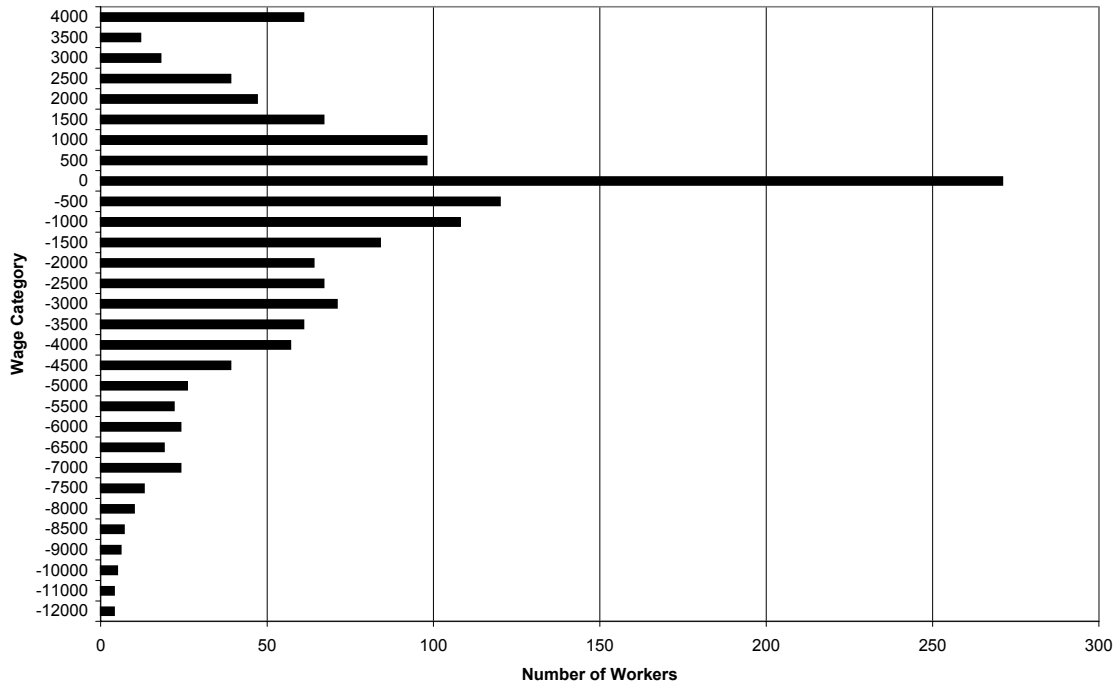
<sup>7</sup> The wage difference is between -\$500 and \$500.

The employees in this grocery store chain were covered by United Food and Commercial Workers (UCFW) union agreements. The union facilitated the transition and helped some employees retain their seniority, benefits and wage level. Some successors did not honor union agreements and therefore those employees were more affected.

**Table 4: Number of Employees in Other Industries**

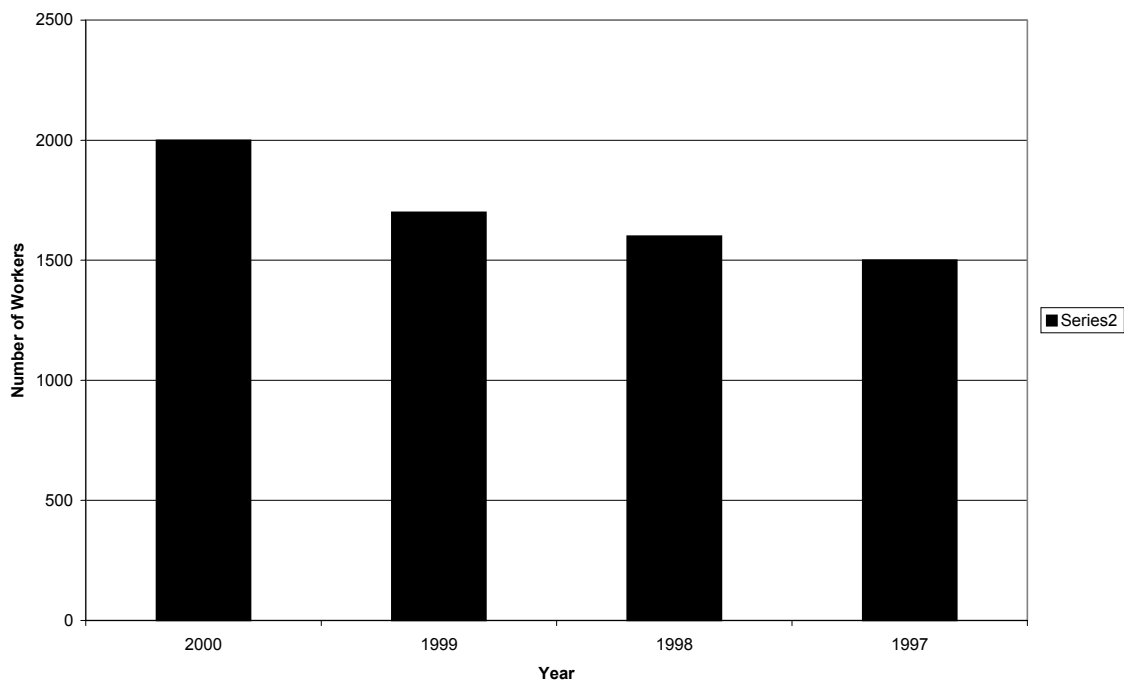


**Table 5: Wage Gain (Grocery Store)**



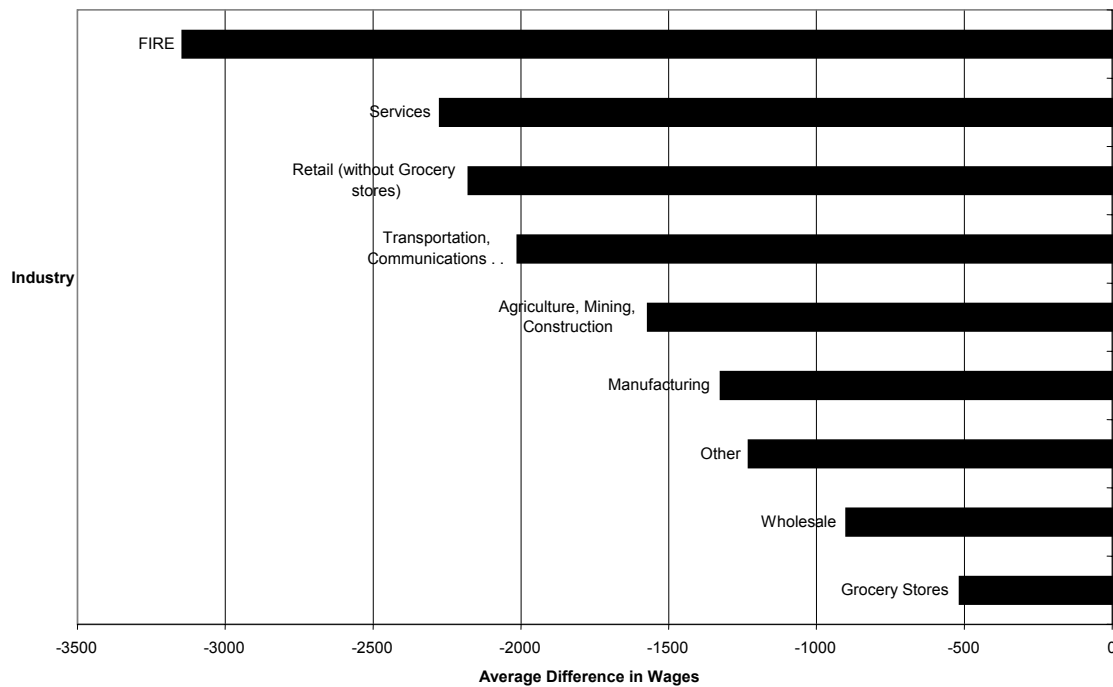
At the time of closure, workers' income level may be a product of their tenure with the company. Table 6 represents continuous employment for the grocery store at the time of closure. Since New Mexico wage record data begins in 1996, and because of turnover methodology, the first year of continuous employment data displayed is 1997. The experience indicated in the table represents only the data available and does not represent the actual seniority of the employees. Approximately 1500 workers had worked for the company for at least 5 years at the time of closure, according to the table. The wage gain/loss may have been a product of their tenure with the company.

**Table 6: Continuous Employment (Grocery Store)**



Many of the employees who remained in the same industry continued at the same income level, other employees weren't as lucky. The people who were hurt by this layoff were the people who chose different industries. The people who chose to switch to FIRE made an average of \$3000 less than those who stayed in the industry. (Table 7) That could be caused by many factors, for example: lack of experience or training pay. That is another topic for future research.

**Table 7: Average Wage Loss by Industry**



## **Conclusion**

Analysis of the administrative record database has answered some questions of immediate concern. The grocery store case study demonstrates that many of the affected workers were continuous employees, and it also shows that they were able to maintain their income level. Nearly 40 percent of the affected workers became claimants, but their unemployment spell was relatively short. Finding another job in the grocery industry was relatively easy because other grocery store chains were prepared to take over the majority of the worksites. Approximately 200 people, however, are still absent from the administrative record database for the subsequent period. That represents workers who have enrolled in school or other training opportunities, migrated from the state or left the job market entirely. New Mexico, because of data restrictions, cannot classify the 200 absent workers, it is an achievable goal.

The manufacturing company case study was less revealing. The high turnover in the industry, the limited opportunities in the local area, and the relative inexperience of the laid-off workforce limited their opportunities for subsequent employment. This case study shows that training might improve the employment opportunities for these workers by enabling workers to switch industries and maintain or improve their income.

Further research into layoffs using more administrative data sets and more resources can provide answers to these questions in greater detail. With an augmented administrative data set, New Mexico could follow individuals from school to work, and determine whether workers left the industry, left the state or left the market. Furthermore, the additional information collected can serve as a basis for evaluating the effectiveness of existing training programs. That evaluation can affect the allocation of limited resources by directing programs toward workers who would most benefit from training.