

Utilization of Tennessee Workers' Compensation Data for Injury Surveillance and Prevention 2014 - 2016

Technical Report

Construction Industry Research and Policy Center - The University of Tennessee, Knoxville

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1 Introduction

The Tennessee Bureau of Workers' Compensation (BWC), a state agency, administers injury claims on job-related injuries and illnesses¹ incurred by covered private and government workers. Each year BWC receives approximately 100,000 First Report of Injury (FROI) claims through Electronic Data Interchange (EDI) from insurers and self-insured entities. Many claims also have an associated Subsequent Report Of Injury (SROI) to document payments related to the claim.

FROI and SROI databases, used primarily for claims administration, can be analyzed to improve occupational injury surveillance and to prevent future injuries. Though not all-inclusive, they do provide a large sample of work-related injuries in Tennessee since mandates for workers' compensation (WC) coverage apply to more than 90 percent of the private work force. WC systems vary across states but in most covered industries in Tennessee, employers with five or more full-time or part-time employees² are required by law to have WC insurance. Exemptions from coverage include domestic help, farm workers, and employees of common carriers in interstate commerce. In determining the employee count, corporate officers may be exempted. Under T.C.A 50-6-106(6), state government employees are also exempt from the Tennessee workers' compensation law.

Reportable workplace injuries are those that require medical treatment outside of the employer's premises, cause absence from work or permanent impairment, or result in death.³ WC benefits provided are in two categories: Medical and Indemnity. Injuries requiring medical care and having between 0 and 7 days lost-time from work are classified as medical-only. Employees are eligible for indemnity benefits if they have eight or more days away from work due to injury (lost-time claims). Full or partial indemnity benefits are paid if the employee cannot work or only perform restricted work. In Tennessee, full benefits equal to 2/3 of the employee's average weekly wage (based on the previous 52 weeks) are paid beginning on the eighth day of disability, with a maximum payment of 110 percent of the state average weekly wage. Partial benefits may be paid if work restrictions result in decreased income.

The University of Tennessee, Knoxville (UTK)⁴ received and analyzed FROI claims data to expand occupational injury surveillance and to enhance injury prevention. This report utilizes the FROI claims data having dates of injury in 2014-2016.

2 Data

The 2014-2016 data had 328,508 FROI claim transactions. Not all of these transactions represented a unique claim. Initial claims may have been filed with missing or erroneous information that required a corrected submission. In other cases, the initial claim may have been subsequently cancelled or denied in another transaction. For claims with multiple FROI transactions, all claim transactions preceding the last (final) transaction are considered intermediate and only the last transaction is tabulated herein. Figure 1 shows the data structure and indicates there are 294,962 final and 33,546 intermediate FROI transactions. Tennessee uses an industry standard⁵ data structure having 68 FROI data fields. Not all fields were requested by the

¹Illnesses make up a small percentage of claims. Throughout the remainder of this document, the terms injury / injuries are understood to include illness / illnesses.

²For construction and mining, the threshold for providing coverage is one employee.

³<https://lwdsupport.tn.gov/hc/en-us/articles/203082280-What-should-an-employer-do-when-an-employee-reports-an-injury->

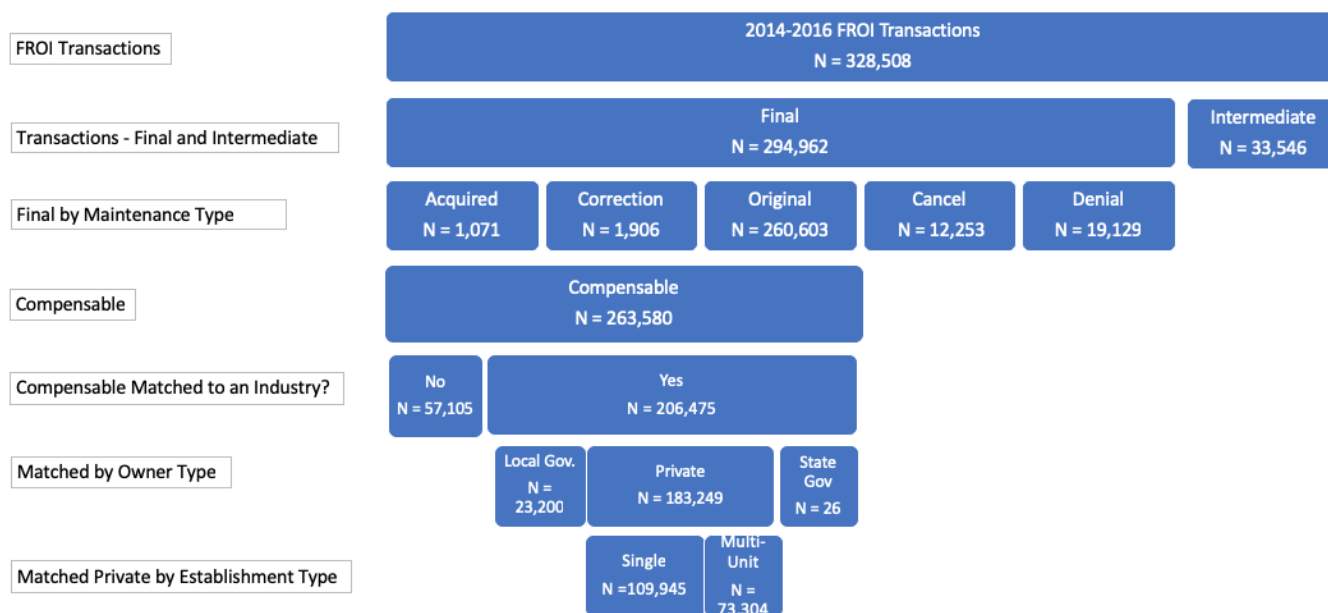
⁴We are funded by a collaborative agreement with the National Institute of Occupational Safety and Health (NIOSH) Grant Number: 5U6-OH10896-03. We thank Ms. Abbie Hudgens, Workers' Compensation Administrator - Tennessee Department of Labor and Workforce Development for providing the data and Dr. Martha Jones of Vanderbilt University for her guidance.

⁵International Association of Industrial Accident Boards and Commissions (IAIABC) Release 1.

investigators because of privacy concerns or lack of need. The FROI data received had 40 fields plus a short narrative of the injury circumstances. As an additional privacy safeguard, employee and employer identifiers were masked. Basic data validity checks performed on the FROI data are shown in the Appendix.

The SROI data available to us were initially incomplete, but subsequently a proxy measure was used to differentiate between medical-only and indemnity (i.e. lost-time) claims.

Figure 1: 2014-2016 FROI Transaction Data Structure



Notes:

1. Where applicable, the figures and tables of this report are captioned with an identifier (e.g. final, compensable, etc.) for the subset of associated data.

Additional private and public employment data came from other sources. The UTK Boyd Center for Business and Economic Research, custodians of the Tennessee Longitudinal Data System, used Tennessee’s Unemployment Insurance (UI) database to provide industry information and employment levels for individual employers. Their experience working with sensitive state data and existing security protocols allowed them to receive the data directly from BWC. Since the claim data included personally identifiable information (PII) and lacked the industry and employment information needed, the Boyd Center ‘matched’ Federal Employer Identification Number (FEIN) fields from the claims information and UI data to ascertain the employer’s six-digit North American Industry Classification System (NAICS) code and its monthly employment levels during the quarter of the reported injury. These elements are critical to the injury rate calculations in this report.

Also critical for rate calculations was the publicly available Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW) information on private sector industry employment. A second public source of data, the American Community Survey (ACS), supplied information on annual hours worked for employees across many but not all NAICS industries. This information allowed many industry rates to be adjusted for worker exposure.

In this report, claims are categorized on several hierarchical levels (see Figure 1). The first and second levels include all transactions, but the second separates these transactions into final and intermediate groups.⁶ The third level categorizes the nature of the final transactions into one of five categories and the fourth aggregates three of the five into a group of ‘compensable’ claims. The fifth level shows the number of claims successfully matched to a specific NAICS industry by the firm’s FEIN. The matched status is important because otherwise the industry and employer size for the claim cannot be established.⁷ At the sixth level, the data includes a code to indicate an employer’s status as private business, local government, or state government.⁸ Finally, employers are designated as either ‘single establishment’ or ‘multi-establishment’. Multi-establishment employers may have several NAICS codes with differing employment at each individual establishment. For these claims, we used an algorithm to assign the NAICS code. This algorithm, originally developed and used by the Ohio Bureau of Workers Compensation, is known as the ‘Ohio Rule’ and classifies employers by NAICS code, for private-industry, multi-location employers. This is also referred to as the 75% hierarchy NAICS selection method. The rules are:

1. Determine the six-digit NAICS code with at least 75 percent of the employees for a given employer across locations.
2. If rule 1 fails, then determine the three-digit NAICS code with at least 75 percent of the employees for a given employer across locations.
3. If rule 2 fails, then determine the NAICS code with the most employees for a given employer.
4. If rule 3 fails, then do not select a NAICS code for this employer.

Of the claimants, approximately 56 percent were male and about 15 percent were employed by self-insured organizations. See Tables 1 through 4 for a detailed tabulation of the annual number and percentage of claims within various groups of Figure 1.

⁶A claim may contain one or more intermediate transactions but, for this report, the final transaction determined compensable status.

⁷The exact, deterministic matching process of using employer FEIN provided matches for 78 percent of the FROI data.

⁸Since it is difficult to assign a single, accurate industry code for government entities, the government/public sector is minimally addressed in this report.

Table 1: 2014-2016 FROI Final Claim Transactions By MTC Code

MTC.code	2014		Year 2015		2016	
	Claims	Pct	Claims	Pct	Claims	Pct
Acquired	598	0.61	292	0.29	181	0.19
Cancel	4402	4.52	4157	4.16	3694	3.79
Correction	641	0.66	625	0.63	640	0.66
Denial	6143	6.31	6438	6.44	6548	6.71
Original	85597	87.90	88484	88.49	86522	88.66
All	97381	100.00	99996	100.01	97585	100.01

Table 2: 2014-2016 FROI Claims By Match Status - Compensable

Match.Status	2014		Year 2015		2016	
	Claims	Pct	Claims	Pct	Claims	Pct
Match	67956	78.26	70262	78.59	68257	78.15
No Match	18880	21.74	19139	21.41	19086	21.85
All	86836	100.00	89401	100.00	87343	100.00

Table 3: 2014-2016 FROI Claims By Owner Type - Matched Compensable

Owner.Desc	2014		Year 2015		2016	
	Claims	Pct	Claims	Pct	Claims	Pct
Local Government	7182	8.27	7756	8.68	8262	9.46
Private Business	60760	69.97	62500	69.91	59989	68.68
State Government	14	0.02	6	0.01	6	0.01
	67956	78.26	70262	78.60	68257	78.15

Notes:

1. Owner type can only be determined for matched claims so percentages reflect the matched portion of compensable claims.

Table 4: 2014-2016 FROI Claims By Owner Type, and Establishment Type - Matched Compensable

Match.Status	Owner.Desc	Establishment.Desc	2014		Year 2015		2016	
			Claims	Pct	Claims	Pct	Claims	Pct
Match	Local Government	Multi-unit Master Record	856	0.99	797	0.89	856	0.98
		Multi-unit Rep. as Single (lack of Data)	260	0.30	230	0.26	232	0.27
		Multi-unit rpt. as single (due to size)	44	0.05	22	0.02	26	0.03
		Single Establishment Unit	6022	6.93	6707	7.50	7148	8.18
	Private Business	Multi-unit Master Record	21551	24.82	21861	24.45	21202	24.27
		Multi-unit Rep. as Single (lack of Data)	1288	1.48	1433	1.60	1465	1.68
		Multi-unit rpt. as single (due to size)	1574	1.81	1318	1.47	1093	1.25
		Single Establishment Unit	36160	41.64	37724	42.20	36061	41.29
		Sub-unit representing several estab.	187	0.22	164	0.18	168	0.19
	State Government*	Multi-unit Master Record	1	0.00	.	.	.	.
		Single Establishment Unit	13	0.01	6	0.01	6	0.01
			67956	78.25	70262	78.58	68257	78.15

Notes:

1. Owner and establishment descriptions can only be determined for matched claims so percentages reflect the matched portion of compensable claims.
2. *Under T.C.A 50-6-106(6), state government employees are exempt from the Tennessee workers' compensation law but some quasi-governmental entities provide coverage for their employees.

Individual tables in this report generally use the largest subset of data possible while maintaining minimal missing observations. To eliminate confusion from using more than one subset of data in the tables, a convention is needed. When referring to the group of matched private employers (i.e. Matched Private data), claims and rates are designated ‘MP.Claims’, ‘Adj.Rate’, and ‘Unadj.Rate’. For claim type, designations include lost-time claims (LT.Claims), medical-only claims (Med.Claims), and a negligible (0.34 percent) number of notification and transfer claims designated as Other.Claims. For other aggregations, the term ‘Claims’ is used as a table heading and a table caption will identify the group.

3 Methodology

This report aggregated injury counts and also calculated injury rates for both industry and size classes. The FROI data included fields for injury cause, body part injured, etc. Though data must be matched to ascertain denominators for rate calculations, this limitation did not apply to pure aggregations. For this reason, all compensable claims (i.e. the largest practical group) were aggregated for tables not requiring industry or size classification rates. Denied claims were analyzed separately.

The aggregation of claims was straightforward but the rate calculations were more complex. Separate adjusted and unadjusted industry rates along with size class rates were calculated using matched private (MP) data.⁹ Rates were calculated for two-, three-, and four-digit NAICS industry classes for comprehensiveness. By convention, these unadjusted rates were calculated as the number of claims per 100 employees or $\text{rate} = (\text{claims} * 100) / \text{base employment}$. Base employment was taken from QCEW private sector data. For the Adj.Rate only, additional calculations provided an industry exposure adjustment.

More explanation is needed to better understand the rate adjustment for worker exposure on an industry-by-industry basis. By convention, 2000 hours is considered one full-time equivalent (FTE) worker. In some industries (e.g. NAICS 71 - Arts, Entertainment, Recreation) workers average less than 2000 hours in a typical year while workers in other industries average more. To compare rates across industries, an adjustment is required for varying time of exposure. Therefore, adjusted rates used 2014-2016 ACS data for average annual hours worked.¹⁰ For example, NAICS 71 had an unadjusted rate of 2.68 injuries per 100 employees and its employees averaged 1630 hours in 2014-2016 ($1630 / 2000 = 0.815$ FTE). This yielded an adjusted injury rate of $2.68 / 0.815 = 3.29$ injuries per 100 FTE. To recap, the equivalent rate for a 2000 hour working exposure was $\text{Unadj.Rate} / \text{ACS.FTEadj}$ which equaled an $\text{Adj.Rate} = 3.29$.

It is extremely important to recognize that we had 78.3 percent matching.¹¹ As a result, industry claim counts and calculated rates in this report are typically understated. Actual industry counts and rates are equal to or greater than calculated counts and rates because more than one in five claims was not matched to an industry. Based on the ratio of matched private claims to the set of total claims, we can determine the overall claim and rate increase though we cannot generalize this result to specific industries. To obtain a factor representing the aggregate increase for all industries, divide 1 by the match proportion of 0.783 to yield a multiplier of 1.28. Individual industries have multipliers of at least 1.0 but these multipliers may be smaller or larger than 1.28.

⁹Employer size classes are 0-4, 5-9, 10-19, 20-49, 50-99, 100-249, 250-499, 500-999, and 1000+ as defined by the QCEW.

¹⁰ACS data are sufficient for exposure adjustments on all two-digit, most three-digit, and about one-half of four-digit NAICS industries.

¹¹Of 263,580 compensable claims, 206,475 (0.783) were deterministically matched to an employer and industry.

4 Discussion

There are many detailed tables in this report. Some provide only aggregations of injuries by dimensions including body part, injury cause, nature, gender, and geographic location of injury occurrence. Others provide both aggregations and rates by industry or firm size. In this preliminary section, we highlight various aspects of the data using visualizations and abbreviated tables as a prelude to the detailed tables to follow.

4.1 Body Part, Cause, and Type

Table 5, claim by body part, indicates that upper and lower extremities include 60 percent of all claims.

Table 5: 2014-2016 FROI Claims By Part of Body (Aggregated) - Compensable

Body.Part	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
HEAD	9291	10.70	9925	11.10	9505	10.88	28721	10.90
LOWER EXTREMITIES	17714	20.40	18370	20.55	18387	21.05	54471	20.67
MULTIPLE BODY PARTS	8639	9.95	9567	10.70	8954	10.25	27160	10.30
NECK	1479	1.70	1390	1.55	1323	1.51	4192	1.59
TRUNK	14873	17.13	14580	16.31	13874	15.88	43327	16.44
UPPER EXTREMITIES	34840	40.12	35569	39.79	35300	40.42	105709	40.11
All	86836	100.00	89401	100.00	87343	99.99	263580	100.01

Similarly, Table 6 shows the number of claims by aggregated injury causes. Figure 2 highlights a few leading causes. Claims for the largest category, Strain or Injury By, number over 23,000 annually and the top three causes contain more than half of all claims.

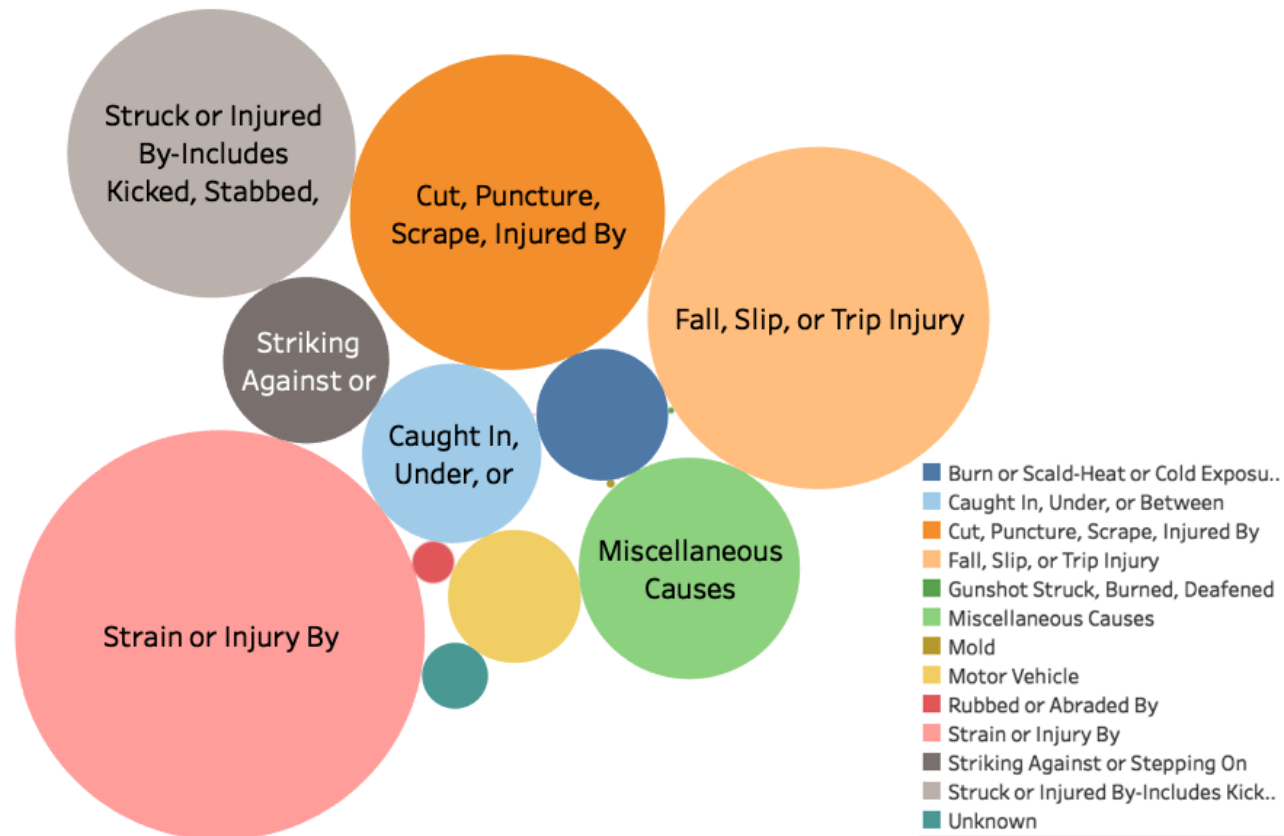
Table 6: 2014-2016 FROI Claims By Cause of Injury (Aggregated)- Compensable

Inj.Cause	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
BURN OR SCALD-HEAT OR COLD EXPOSURE	3204	3.69	3303	3.69	3236	3.70	9743	3.70
CAUGHT IN, UNDER, OR BETWEEN	4294	4.94	4453	4.98	4464	5.11	13211	5.01
CUT, PUNCTURE, SCRAPE, INJURED BY	10118	11.65	10742	12.02	10635	12.18	31495	11.95
FALL, SLIP OR TRIP INJURY	16775	19.32	18857	21.09	16838	19.28	52470	19.91
MISCELLANEOUS CAUSES	7450	8.58	7262	8.12	7100	8.13	21812	8.28
MOTOR VEHICLE	2392	2.75	2584	2.89	2507	2.87	7483	2.84
RUBBED OR ABRADED BY	298	0.34	194	0.22	228	0.26	720	0.27
STRAIN OR INJURY BY	23969	27.60	23296	26.06	23064	26.41	70329	26.68
STRIKING AGAINST OR STEPPING ON	4296	4.95	4307	4.82	4169	4.77	12772	4.85
STRUCK OR INJURED BY-INCLUDES KICKED, STABBED, BIT, ETC.	14027	16.15	14392	16.10	15070	17.25	43489	16.50
All	86823	99.97	89390	99.99	87311	99.96	263524	99.99

Notes:

1. Percentage totals may not equal 100 percent due to rounding error or missing data.
2. Category count totals may not equal overall counts because of missing data.

Figure 2: Cause of Injury By Relative Frequency - Compensable



Most of the claims contained short injury narratives that were mined for key terms to provide additional insight. Figure 3 is a word cloud of those words that appeared most frequently and reinforces the emerging themes of the aggregation tables. In the visualization, we see that slips, strains, and falls were prominent (causes) and the upper extremity body parts (e.g. back, arm, shoulder, etc.) were frequently injured. Appearance of the terms truck and patient suggest that frequent vehicle-related or healthcare injuries occurred. In the cloud, back has the strongest emphasis of any term.

Figure 3: Word Cloud of Injury Narratives



Table 7 reinforces the fact that occupational disease (e.g. silicosis) and cumulative injuries (e.g. loss of hearing) comprise only a small percentage of all claims. For greater detail, refer to Table C3 of the Supplemental Tables section where the number of strains, contusions, lacerations, and other injury categories far exceed those of any disease or cumulative injury.

Table 7: 2014-2016 FROI Claims By Nature of Injury (Aggregated) - Compensable

Inj.Nature	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
MULTIPLE INJURIES	2168	2.50	2508	2.81	2430	2.78	7106	2.70
OCCUPATIONAL DISEASE OR CUMULATIVE INJURY	2358	2.72	2185	2.44	2020	2.31	6563	2.49
SPECIFIC INJURY	82310	94.79	84708	94.75	82893	94.91	249911	94.81
All	86836	100.01	89401	100.00	87343	100.00	263580	100.00

4.2 Firm Size

The injury rates for firm size seem counterintuitive. When looking at the unadjusted claim rate per 100 employees by the size of the firm in Table 8, surprisingly the largest firms had the highest rate. This could have been caused by a concentration of these firms in particularly hazardous industries. In another surprise, the lowest rates occurred for firms with 5-9 and 10-19 employees. This is also unexpected since smaller firms usually have fewer safety resources. One possibility is that smaller firms had lower rates because there were more unreported injuries. Again, remember that these rates reflect matched observations only.

Table 8: 2014-2016 FROI Claims By Firm Size - Matched Private

Firm.Sz.Cat	2014-2016	
	Claims	Unadj.Rate
1000+	56500	4.8983
50-99	18948	3.6971
100-249	26431	3.6259
0-4	11312	2.7083
500-999	16852	1.9919
20-49	18274	1.9820
250-499	20506	1.6894
10-19	8435	1.6373
5-9	5991	0.8372
All	183249	

4.3 Injury Severity

The initial treatment mode is a possible proxy for injury severity. Table 9 indicates the proportions for each treatment mode for all claims. Proportions for individual industries will vary. A visit to a minor clinic occurred for about one-half of all injuries. For more severe (Emergency Evaluation) and less severe (No Medical Treatment) injuries, the two primary treatment modes totaled about 20 percent of the total claims. Nineteen percent of the injuries are shown as missing initial treatment information.¹²

Table 9: 2014-2016 FROI Claims By Initial Treatment Mode - Compensable

Type.Treatment	Claims	Proportion
Minor Clinic	141137	0.535
NA	49860	0.189
No Medical Treatment	28269	0.107
Emergency Evaluation	27088	0.103
Minor Onsite by Employer	15053	0.057
Hospitalization	1608	0.006
Future Major Medical	565	0.002
All	263580	

The proportion of lost-time claims, or claims that resulted in eight or more days away from work, represent another measure of claim severity. Based on the data, the industry average for the proportion of lost-time claims was $(29,788/137,602) = 0.2165$. The range was 0 to 1.0 with the mean and the median equal to 0.21 for NAICS three-digit industries. Industry proportions of lost-time injuries (i.e. LT.Ratio) and rankings are discussed later in this report.

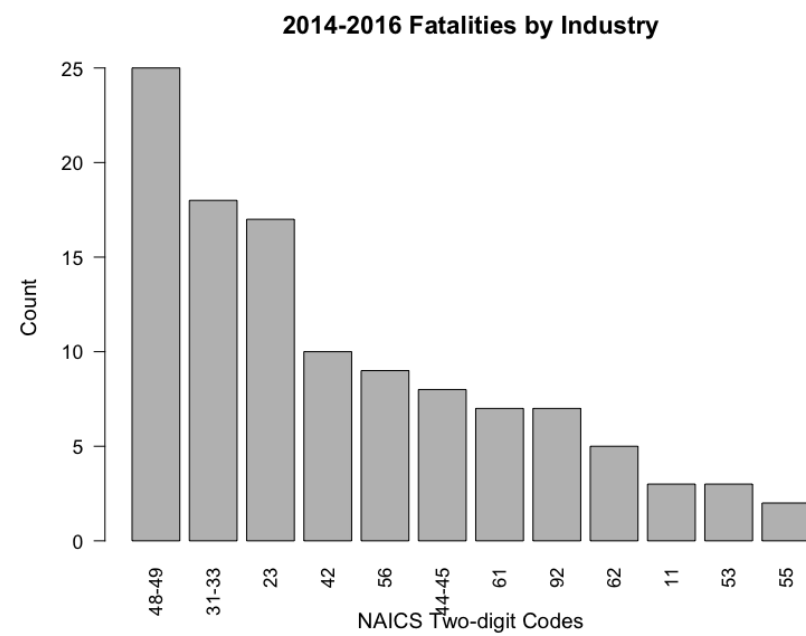
Without doubt, fatalities are the most severe form of injury. There were 145 fatalities in the 2014-2016 claims data with 104 in the private sector.¹³ About three-quarters of fatality victims were male and there were 11 heart attacks. Although workers 55 and over suffered about one-sixth of all injuries,¹⁴ they accounted for about two-fifths of all fatalities. Alarming, 45 fatalities (about one-third) resulted from motor vehicle accidents. Complete information on industry was not available in all cases but Figure 4 indicates that NAICS 48-49 Transportation and Warehousing along with NAICS 31-33 Manufacturing and NAICS 23 Construction accounted for 60 fatalities or about two in five. Four of the nine fatalities from NAICS 56 Administrative and Support were concentrated in the NAICS 5613 Employment Services subgroup.

¹²Note the NA category. Throughout this document, NA denotes missing data.

¹³In 2016, the BLS Census of Fatal Occupational Injuries (CFOI) data captured 112 fatalities in a broader sample of private sector workers that may include volunteers and workers receiving other types of compensation as well as self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and some owners of incorporated businesses or members of partnerships.

¹⁴See Table C5

Figure 4: 2014-2016 FROI Fatality Claims By Industry - Final



In Figure 5, lines are shown to define the median age (50.7 years) and the median job tenure (2.7 years) of fatality victims.¹⁵ The victims median tenure was less than that of the national private workforce (3.7 years - BLS 2016). Short tenure is widely known to be associated with non-fatal workplace injuries as well. Tennessee workers in their first year with a firm, regardless of previous work experience, experience about 40 percent of all workplace injuries. Some industries such as Construction NAICS 23 (45 percent) were higher.¹⁶

Figure 5: 2014-2016 FROI Fatality Claims By Age and Tenure - Final



Note: Employer Tenure is defined as (Date of Death - Hire Date)/365

¹⁵Job tenure refers to time employed with a specific firm, not time in a particular occupation nor cumulative industry experience.

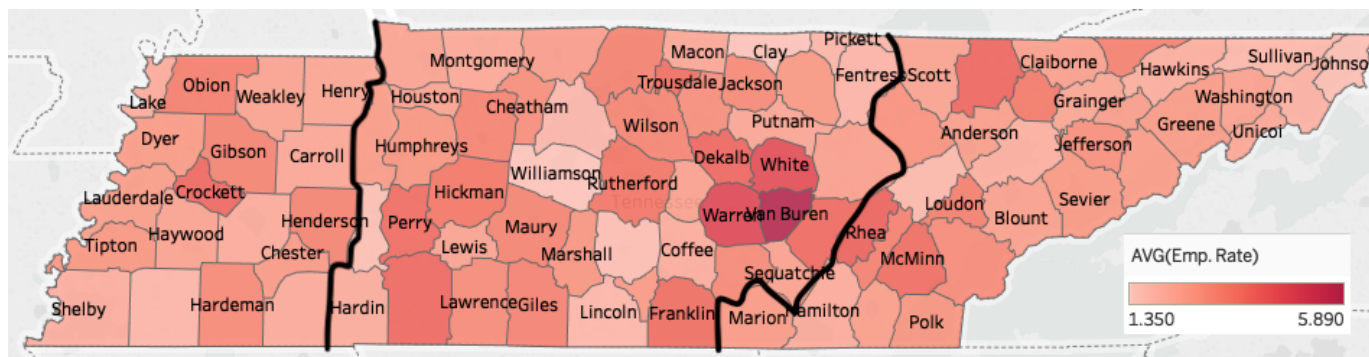
¹⁶The Role of Employee Tenure in Construction Injuries: The Tennessee Case, <http://bit.ly/2VpoacW>

4.4 Geographic Distribution

Figure 6 shows Tennessee's three Grand Divisions (East, Middle, and West) and the counties with the highest claim rates per 100 employees.¹⁷ Among all counties, tiny Van Buren had the highest rate of 5.9 per 100 employees. Among those with more than 10,000 employees, Warren County, a small county with a population of about 40,000, ranked second overall with a rate of 4.7 per 100. For those with more than 100,000 employees, Rutherford was fourteenth overall with a rate of 3.5 per 100. In West Tennessee, Crockett was eighth overall at 3.9. In East Tennessee, Rhea and McMinn were fourth and eleventh at 4.0 and 3.8 respectively. The average for all counties was 2.9 per 100 employees. It must be noted that these are unadjusted rates.

Supplemental Table C7 aggregates claims by the county of the injury site and shows that 90.3 percent of 2014-2016 injuries occurred within state borders. Table C8 shows the same information for the three Grand Divisions of Tennessee. Among the 95 counties, Shelby County led all with 12,282 claims. Table C9 gives totals for in-state and out-of-state injuries along with the grand totals.

Figure 6: 2014-2016 FROI Average Claim Density By County - Matched Private



4.5 Denied vs. Compensable Claims

When comparing denied and compensable claims,¹⁸ we looked at various categorical and numerical dimensions to see if they differed. Table 10 shows selected elements of the distributions of claims by body part, cause, and type of injury. To determine if the denied claims differ in each of these three dimensions, we used the Chi-square goodness of fit test on all of the elements in each dimension. In these tests, the null hypotheses are that the data are consistent with a specified distribution (i.e. the compensable claim distribution). In each case, we rejected the null hypothesis with $p < 0.01$. Therefore, the denied claims were not distributed in the same manner as compensable claims for body part, cause, and type of injury.

¹⁷Based on 2016 county employment from QCEW.

¹⁸Claims may have an intermediate denied status and later become compensable in their final status. This is rare and happened with only 0.8 percent of 'ever-denied' claims. Comparisons in this section between denied and compensable are based upon the final status.

Further comparisons (not shown here) of the categorical variables gender and self-insured status, demonstrated that the denied and compensable percentages for gender were male 53.6 and 56.1 percent respectively, while the self insured status percentages were 10.8 and 16.6 respectively. We concluded that males were denied at a slightly lower rate than females relative to their claim proportions. Also, self insured entities were less likely to submit claims ultimately denied. Using the Chi-square test in the same manner as above, we rejected the null hypothesis ($p < 0.01$) for each case and concluded that the distributions for gender and self-insured status were different for denied claims. The median age and tenure for denied claimants were 42.7 and 1.5 years respectively compared to 40.4 and 1.8 years for compensable claimants.

The 2018 Annual Report for Tennessee BWC noted that FY15/16 had 5,546 claims submitted for alternative dispute resolution. Of that total, 3,511 (63 percent) were resolved and 2,035 were sent to court.

Table 10: 2014-2016 FROI Claims: Comparisons of Denied and Compensable Claims By Selected Body Part, Cause, and Nature

Dimension	Element	Denied (Pct)	Compensable (Pct)
Body.Part	lower back	10.6	10.0
	knee	8.5	7.0
	multiple body parts	7.7	7.2
	shoulder	7.2	6.6
	head	3.9	7.1
Cause	other miscellaneous, noc	13.9	3.4
	strain	13.8	6.1
	lifting	9.9	9.4
	fall on same level	5.7	5.2
	fall, slip, trip, noc	5.1	6.3
Nature	strain	32.7	27.8
	all other specific, noc	13.0	8.1
	contusion	7.6	16.2
	sprain	6.7	7.7

4.6 Critical Industries

A primary goal of this report is to prioritize critical industries. One prioritization method¹⁹ ranks the industries according to claim count (MP.Claims) and the adjusted injury rate (Adj.Rate) then averages those rankings for a composite score called the Prevention Index (Prev.Idx). Lower composite scores and ranks indicate increasing severity with a rank of '1' being the worst possible. Tables 11, 12, and 13 rank Prev.Idx for two-, three-, and four-digit NAICS industries. Since this method uses the Adj.Rate and this rate is not computed for every industry, alternate methods were also used. All methods are subjective and may yield different results.

In Table 11, Transportation and Warehousing NAICS 48-49 stood out as the worst ranking two-digit industry sector according to the prevention index with a relatively high number of claims and adjusted rate. Health Care and Social Assistance NAICS 62 narrowly edged Manufacturing NAICS 31-33 for the most claims.

Table 11: 2014-2016 FROI Claims: Top Ten Two-Digit NAICS Industries By Prevention Index Rank - Matched Private

Rank	Prev.Idx	Naics	Description	Year	MP.Claims	Claim.Rank	Adj.Rate	Rate.Rank
1	3.0	48-49	Transportation and Warehousing	2014-2016	18957	4	3.94	2
2	3.5	62	Health Care and Social Assistance	2014-2016	30379	1	2.94	6
3	5.5	44-45	Retail Trade	2014-2016	24952	3	2.83	8
4	6.0	56	Administrative and Support and Waste Management and Remediation Services	2014-2016	18902	5	2.90	7
5	6.5	31-33	Manufacturing	2014-2016	29621	2	2.74	11
6	7.5	55	Management of Companies and Enterprises	2014-2016	4287	10	3.17	5
7	8.0	71	Arts, Entertainment, and Recreation	2014-2016	2741	12	3.29	4
8	8.5	23	Construction	2014-2016	10027	8	2.82	9
8	8.5	42	Wholesale Trade	2014-2016	11012	7	2.78	10
10	9.5	22	Utilities	2014-2016	790	18	7.49	1

Notes:

1. Claim.Rank is the ordinal rank of MP.Claims (1 = worst).
2. Rate.Rank is the ordinal rank of Adj.Rate* (1= worst).
3. Prev.Idx = Claim.Rank + Rate.Rank) / 2.

¹⁹This follows the State of Washington's Prevention Index
<http://www.lni.wa.gov/safety/research/pubs/search.asp?SB=S&S=%20prevention%20index>

The three-digit Prev.Idx leaders appear in Table 12. Not surprisingly, three problematic two-digit groups Transportation and Warehousing, Manufacturing, along with Health Care have members represented here. The worst group, Hospitals NAICS 622, had 13,779 claims, and Nursing and Residential Care Facilities NAICS 623, added 7,064 claims. More detailed analysis, not shown in this report, indicated almost one-fifth of hospital injuries were from injuries by hand tools (n=1,370) and trips, slips, or falls (n=1,218). Within hospitals and care facilities, strains from lifting (n=2,270) comprised more than 10 percent of health care injuries. Pushing and pulling (n=1,194) along with other strains (n=1,035) combined with lifting to make physical exertion injuries a major health care concern. Below, NAICS 561 Administrative and Support Services had the most claims (18,205) by a wide margin.

Table 12: 2014-2016 FROI Claims: Top 10 Three-Digit NAICS Industries By Prevention Index Rank - Matched Private

Rank	Prev.Idx	Naics	Description	Year	MP.Claims	Claim.Rank	Adj.Rate	Rate.Rank
1	6.0	622	Hospitals	2014-2016	13779	2	4.40	10
2	8.0	444	Building Material and Garden Equipment and Supplies Dealers	2014-2016	5432	12	6.81	4
2	8.0	492	Couriers and Messengers	2014-2016	5733	9	5.55	7
4	9.5	484	Truck Transportation	2014-2016	8230	4	3.89	15
4	9.5	623	Nursing and Residential Care Facilities	2014-2016	7064	6	4.04	13
6	12.5	336	Transportation Equipment Manufacturing	2014-2016	7955	5	3.53	20
7	16.0	561	Administrative and Support Services	2014-2016	18205	1	2.92	31
8	16.5	337	Furniture and Related Product Manufacturing	2014-2016	1616	27	5.57	6
8	16.5	445	Food and Beverage Stores	2014-2016	4888	14	3.61	19
10	19.0	452	General Merchandise Stores	2014-2016	5499	11	2.99	27

Notes:

1. Claim.Rank is the ordinal rank of MP.Claims (1 = worst).

2. Rate.Rank is the ordinal rank of Adj.Rate* (1= worst).

3. Prev.Idx = Claim.Rank + Rate.Rank) / 2.

*If insufficient American Community Survey (ACS) data exist to calculate exposure adjustments for an industry, it is not ranked here.

Four-digit industries in Table 13 include two from Wholesale Trade (NAICS 42) and three from Retail Trade (NAICS 44-45). However, at the top is Building Material and Supplies Dealers, NAICS 4441, which led all with an Adj.Rate of 7.4 injuries per 100 FTE. It ranked sixth for both injury rate and number of claims. Further investigation shows its leading injury cause as strains from lifting (n=910 or 17.8 percent) while nearly one in three claims types was a strain.²⁰

Table 13 lists the worst ten four-digit industries in terms of their Prevention Index. In addition to those listed, some of the worst were not shown because there was no information to calculate their exposure adjustment factors (FTE.Adj). Therefore, Table 14 is added to provide unadjusted ranks. This table includes previously omitted NAICS 4811 Scheduled Air Transportation and NAICS 7112 Spectator Sports having 2014-2016 unadjusted rates of 12.5 and 10.8 respectively. NAICS 3361 Motor Vehicle Manufacturing had a lower rate of 7.3 but 2,913 claims.

Some of the least injured workers worked in non-manual industries such as NAICS 5412 Accounting, Tax Preparation, Bookkeeping, and Payroll Services which had an unadjusted rate of only 0.4. All unadjusted rates are found in Supplemental Table P11.

Table 13: 2014-2016 FROI Claims: Top 10 Four-Digit NAICS Industries By Prevention Index Rank - Matched Private

Rank	Prev.Idx	Naics	Description	Year	MP.Claims	Claim.Rank	Adj.Rate	Rate.Rank
1	6.0	4441	Building Material and Supplies Dealers	2014-2016	5101	6	7.43	6
2	12.5	5613	Employment Services	2014-2016	11393	2	3.92	23
3	14.5	4451	Grocery Stores	2014-2016	4763	7	3.93	22
4	21.0	5419	Other Professional, Scientific, and Technical Services	2014-2016	1373	27	4.41	15
5	23.0	4251	Wholesale Electronic Markets and Agents and Brokers	2014-2016	1859	18	3.76	28
6	23.5	4533	Used Merchandise Stores	2014-2016	958	42	7.49	5
7	25.5	6243	Vocational Rehabilitation Services	2014-2016	923	43	5.66	8
8	27.5	3261	Plastics Product Manufacturing	2014-2016	1440	25	3.44	30
8	27.5	5617	Services to Buildings and Dwellings	2014-2016	3372	11	2.86	44
10	28.5	4244	Grocery and Related Product Merchant Wholesalers	2014-2016	1452	24	3.22	33

Notes:

1. Claim.Rank is the ordinal rank of MP.Claims (1 = worst).

2. MP.Rank is the ordinal rank of Adj.Rate* (1= worst).

3. Prev.Idx = Claim.Rank + Rate.Rank) / 2.

*If insufficient American Community Survey (ACS) data exists to calculate exposure adjustments for an industry, it is not ranked here.

²⁰We use the term 'strain' for both cause of injury and type of injury. Strain as a cause is an overexertion whereas strain as a type is an overstretching of the musculature.

Table 14: 2014-2016 FROI Claims: Top 25 Four-Digit NAICS Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
1	3325	Hardware Manufacturing	2014-2016	130	873	14.89
2	2122	Metal Ore Mining	2014-2016	169	1174	14.40
3	4811	Scheduled Air Transportation	2014-2016	725	5800	12.50
4	3162	Footwear Manufacturing	2014-2016	86	738	11.65
5	7112	Spectator Sports	2014-2016	644	5990	10.75
6	3369	Other Transportation Equipment Manu- facturing	2014-2016	23	218	10.55
7	1122	Hog and Pig Farming	2014-2016	80	761	10.51
8	3379	Other Furniture Related Product Manu- facturing	2014-2016	203	2005	10.12
9	4851	Urban Transit Systems	2014-2016	522	5295	9.86
10	2211	Electric Power Generation, Transmission and Distribution	2014-2016	708	7219	9.81
11	4871	Scenic and Sightseeing Transportation, Land	2014-2016	43	454	9.47
12	1123	Poultry and Egg Production	2014-2016	67	712	9.41
13	3115	Dairy Product Manufacturing	2014-2016	546	7173	7.61
14	3361	Motor Vehicle Manufacturing	2014-2016	2913	39949	7.29
15	9999	Non-classifiable Establishments	2014-2016	60	831	7.22
16	3372	Office Furniture (including Fixtures) Manufacturing	2014-2016	384	5423	7.08
17	4441	Building Material and Supplies Dealers	2014-2016	5101	72732	7.01
18	4533	Used Merchandise Stores	2014-2016	958	14701	6.52
19	6232	Residential Intellectual and Developmen- tal Disability, Mental Health, and Sub- stance Abuse Facilities	2014-2016	2495	39121	6.38
20	3315	Foundries	2014-2016	515	8468	6.08
21	4248	Beer, Wine, and Distilled Alcoholic Bev- erage Merchant Wholesalers	2014-2016	568	9884	5.75
22	5251	Insurance and Employee Benefit Funds	2014-2016	7	123	5.69
23	6219	Other Ambulatory Health Care Services	2014-2016	1103	19422	5.68
24	6243	Vocational Rehabilitation Services	2014-2016	923	17150	5.38
25	3366	Ship and Boat Building	2014-2016	482	9195	5.24

Another measure developed to identify high priority industries uses the proportion of lost-time claims divided by the total ‘Type Known’ claims (see table notes below). Table 15 ranks the three-digit industries on that basis. NAICS 481 Air Transportation scored worst for industries with more than 10 lost-time claims. Trucking, couriers, and specialty trade contractors were also among the worst in lost-time rank.

Table 15: 2014-2016 FROI Claims: Top 15 Three-Digit NAICS Industries By Lost-Time Rank
Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
1	483	Water Transportation	4	0	0	1.000
1	491	Postal Service	2	0	0	1.000
3	481	Air Transportation	345	231	1	0.598
4	113	Forestry and Logging	49	49	0	0.500
5	517	Telecommunications	130	132	0	0.496
6	324	Petroleum and Coal Products Manufacturing	6	7	0	0.462
7	484	Truck Transportation	2811	3722	27	0.429
8	492	Couriers and Messengers	2172	3070	5	0.414
9	312	Beverage and Tobacco Product Manufacturing	137	232	0	0.371
10	237	Heavy and Civil Engineering Construction	379	690	4	0.353
11	488	Support Activities for Transportation	215	399	2	0.349
12	523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	10	19	0	0.345
13	511	Publishing Industries (except Internet)	37	72	0	0.339
14	213	Support Activities for Mining	6	12	0	0.333
15	238	Specialty Trade Contractors	1564	3162	21	0.329

Notes:

1. Claim type was not a mandatory reporting field. A proxy measure was used to identify 137,602 of 183,249 (75 percent) matched private sector claims as Lost-time, Medical, or Other. These three groups are collectively designated as ‘Type Known.’
2. The Other sub-type denotes notification and transfer claims that are a negligible portion of the total known (0.34 percent).
3. $LT.Ratio = LT.Claims / (LT.Claims + Med.Claims + Other.Claims)$.

Much as the Prev.Idx is defined as the average of two ranks, a more comprehensive Burden Index may be defined as the average of Claim.Rank, Unadj.Rate.Rank, and LT.Rank. Therefore, this index measures claim volume, rate, and severity. The top ten industries are shown in the following two tables. NAICS 48-49 Transportation and Warehousing component industries had three of the top four indices (see Table 16). NAICS 42 Wholesale Trade had three spots in the top ten. NAICS 23 Construction and NAICS 31-33 Manufacturing each had two.

Table 16: 2014-2016 FROI Claims: Top 10 Three-Digit NAICS Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
1	7.333	484	Truck Transportation	2014-2016	11	4	7
2	9.000	492	Couriers and Messengers	2014-2016	10	9	8
3	17.333	238	Specialty Trade Contractors	2014-2016	30	7	15
4	19.000	481	Air Transportation	2014-2016	2	52	3
5	22.000	336	Transportation Equipment Manufacturing	2014-2016	17	5	44
6	24.667	425	Wholesale Electronic Markets and Agents and Brokers	2014-2016	27	26	21
7	25.000	423	Merchant Wholesalers, Durable Goods	2014-2016	33	10	32
8	26.000	237	Heavy and Civil Engineering Construction	2014-2016	36	32	10
9	27.000	321	Wood Product Manufacturing	2014-2016	24	35	22
10	27.333	424	Merchant Wholesalers, Nondurable Goods	2014-2016	40	18	24

Continuing the pattern in the previous table, Table 17 is dominated by four-digit industries within NAICS 48-49 Transportation and Warehousing. These components had four of the top five spots. Two of these four were in NAICS 484 Trucking Transportation with NAICS 4841 General Freight Trucking in the top spot.

Table 17: 2014-2016 FROI Claims: Top 10 Four-Digit NAICS Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
1	23.00	4841	General Freight Trucking	2014-2016	41	4	24
2	23.33	4921	Couriers and Express Delivery Services	2014-2016	35	5	30
3	26.33	4811	Scheduled Air Transportation	2014-2016	11	59	9
4	31.33	3361	Motor Vehicle Manufacturing	2014-2016	22	13	59
5	34.00	4842	Specialized Freight Trucking	2014-2016	47	19	36
6	44.67	4244	Grocery and Related Product Merchant Whole-salers	2014-2016	61	24	49
7	46.33	2381	Foundation, Structure, and Building Exterior Contractors	2014-2016	76	29	34
8	56.00	4251	Wholesale Electronic Markets and Agents and Brokers	2014-2016	73	18	77
9	57.33	3211	Sawmills and Wood Preservation	2014-2016	40	100	32
10	59.00	2382	Building Equipment Contractors	2014-2016	85	10	82

Burden.Rank for all industries is shown in Supplemental Tables T2 and T4.

5 Observations and Recommendations

Several observations come from a thorough review of the body part, cause, and nature of injury tables. For body part, it is apparent that upper extremities were the most frequently injured region of the body with fingers and hands being especially vulnerable. In the trunk region, lower back injuries were prominent and comprised almost 10 percent of all claims. Better use of personal protective equipment (e.g. gloves), automation, and better ergonomics have the potential to reduce injuries to these body parts.

For cause of injury, strains (i.e. overexertion) and falls were the culprit for about 2 in 5 injuries. Strains from lifting were the largest single cause and comprised about 10 percent of all claims. It is likely that strains from lifting and lower back injuries are highly correlated. Work procedures to keep exertion levels at a manageable level may be beneficial. Falls on same level are about 5 percent and might be reduced by cleaning up spills promptly and maintaining uncluttered workspaces.

For nature or type of injury, strains (i.e. over-stretching of the musculature), lacerations and contusions were more than one-half of all injuries. Strains alone were more than one-quarter.

Miscellaneous observations come from other tabulated dimensions and portions of the report. Here are a few:

- Firms with 1000+ employees had higher claim rates than smaller firms.
- More than one-half of all claims were treated at a minor clinic.
- Truck Transportation was particularly hazardous in terms of its claim rate (3.9) and ratio of lost-time claims (0.429).
- West Tennessee counties generally had lighter claim density.
- About 10 percent of claims were initially denied.
- Denied claims differed statistically from compensable ones in every dimension examined (e.g. body part, cause, gender, etc.).
- ACS PUMS information (i.e. exposure adjustment) was not available for one-half of all four-digit industries.

Numerous tables of industry claim aggregations, employment, claim rates, and rankings by various criteria are provided. Annual and summary tabulations are available at the two-, three-, and four-digit industry level. In general terms, health care, manufacturing, and transportation are sectors of concern throughout. Health care and manufacturing each had about 30,000 claims in 2014-2016.

At the three-digit level, Administration and Support Services NAICS 561 had the highest claim count every year with Hospitals NAICS 622 second. Air Transportation NAICS 481 had the second-highest rate and a proportion of lost-time claims that was almost triple the average. At the four-digit level, some notables included Scheduled Air Transportation NAICS 4811 with an unadjusted rate of 12.5, Motor Vehicle Manufacturing NAICS 3361 at 7.3, and Building Material and Supplies Dealers at 7.0. When considering the total burden of claim count, claim rate, and the proportion of lost-time claims, the top five consisted of four transportation industries and Motor Vehicle Manufacturing NAICS 3361. Health care was not represented in the most burdensome industries. Hospitals and other health care industries had a lesser total burden because their proportion of lost-time claims was about one-half of the average.

Policy makers can use the Prevention Index and Burden Index rankings to track problematic industries and determine how to allocate limited resources. Industry associations and firms within those industries can use these rates and rankings for benchmarking.

6 Limitations

Data are almost always limited to some extent by quality and completeness, and these data are no exception. It is important to recognize these inherent limitations. In compiling this report, the research team did not have direct access to the raw data but relied on two intermediaries for downloading, matching WC claims to UI data, and data cleaning. Upon receiving and analyzing the data, we noted some quality issues and some elements were missing entirely. For example, there were no FROI observations with the standard MTC code ‘Change’. Other elements were missing to a lesser extent. For example, the proxy for SROI claim type was not present for about one-quarter of matched observations.

Other data shortcomings were systemic. The matching of FROI observations to a specific industry and firm size is always an issue when utilizing workers’ compensation data. We obtained a credible match proportion of 0.783 but this result means that industry rate calculations are a ‘floor’ only. The true rate cannot be determined because the industry distribution of the unmatched FROI observations is unknown. The accuracy of self-reported data may also have a systemic bias because employees may be afraid to report injuries and employers have an incentive not to report. In these data, there were observations for date of birth and date of hire known to be erroneous. In other cases, the NAICS industry code and occupation title associated with the claim did not seem compatible.

In summary, the unmatched claims did not appear in industry claim counts so industry rates in this report are generally understated. Extremely high and low rates for smaller industries should be viewed with caution. However, if the data errors and ‘missingness’ are randomly occurring, conclusions on this imperfect data remain valid.

7 Supplemental Tables

7.1 Claim Aggregations - Compensable

Figure 7: 2014-2016 FROI Claims - Compensable

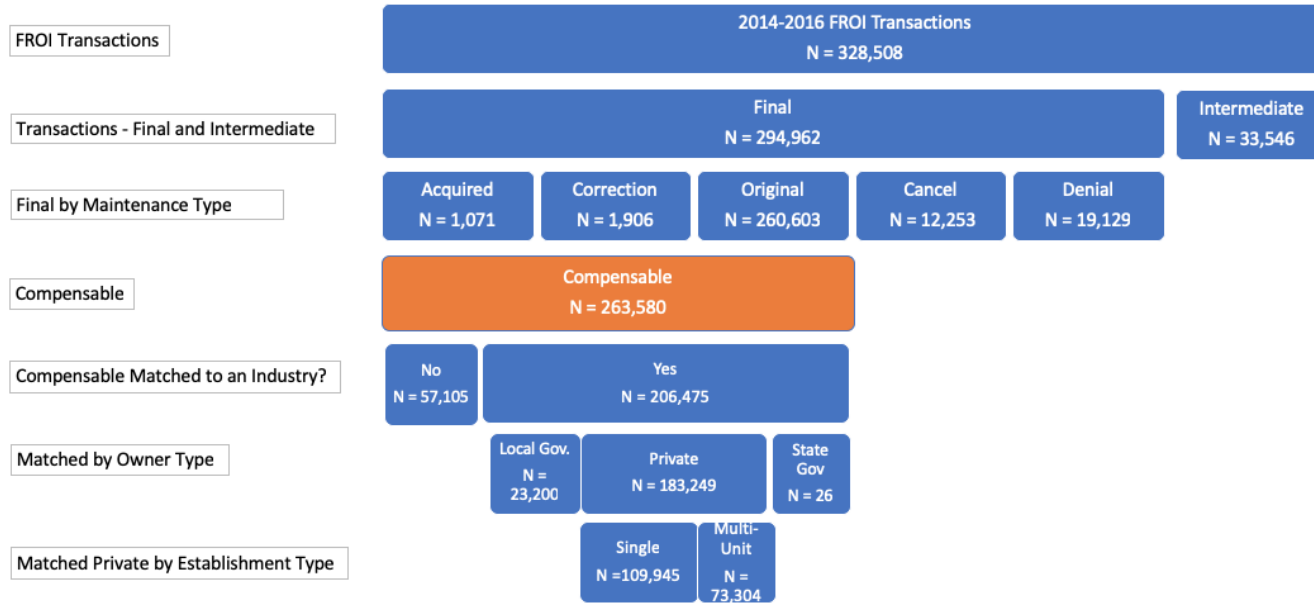


Table C1: 2014-2016 FROI Claims By Part of Body (Detailed) - Compensable

Body.Part	Body.Part.Desc	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
HEAD	brain	162	0.19	174	0.19	202	0.23	538	0.20
	ear(s)	331	0.38	338	0.38	298	0.34	967	0.37
	eye(s)	3408	3.92	3566	3.99	3225	3.69	10199	3.87
	facial bones	289	0.33	301	0.34	306	0.35	896	0.34
	head - soft tissue	1578	1.82	1711	1.91	1886	2.16	5175	1.96
	mouth	347	0.40	378	0.42	364	0.42	1089	0.41
	multiple injuries to head	1637	1.89	1798	2.01	1664	1.91	5099	1.93
	nose	300	0.35	304	0.34	327	0.37	931	0.35
	skull	986	1.14	1122	1.26	988	1.13	3096	1.17
	teeth	253	0.29	233	0.26	245	0.28	731	0.28
	ankle	3458	3.98	3590	4.02	3573	4.09	10621	4.03
	foot	3201	3.69	3421	3.83	3475	3.98	10097	3.83
LOWER EXTREMITIES	great toe	328	0.38	329	0.37	328	0.38	985	0.37
	hip	746	0.86	728	0.81	724	0.83	2198	0.83
	knee	6041	6.96	6096	6.82	6182	7.08	18319	6.95
	lower leg	2152	2.48	2280	2.55	2201	2.52	6633	2.52
	multiple lower extremities	690	0.79	725	0.81	706	0.81	2121	0.80
	toe(s)	540	0.62	544	0.61	560	0.64	1644	0.62
	upper leg	558	0.64	657	0.73	638	0.73	1853	0.70
	artificial appliance	3	0.00	4	0.00	6	0.01	13	0.00
	body as a whole	160	0.18	116	0.13	159	0.18	435	0.17
	body sys. & mult. body sys.	611	0.70	706	0.79	646	0.74	1963	0.74
	insuff. info to pro. iden.uncl	1249	1.44	1389	1.55	1378	1.58	4016	1.52
	multiple body parts	6127	7.06	6619	7.40	6155	7.05	18901	7.17
MULTIPLE BODY PARTS	no physical injury	489	0.56	733	0.82	610	0.70	1832	0.70
	disc - neck	126	0.15	121	0.14	95	0.11	342	0.13
	larynx	13	0.01	10	0.01	13	0.01	36	0.01
	multiple neck injury	596	0.69	542	0.61	454	0.52	1592	0.60
	neck - soft tissue	635	0.73	603	0.67	640	0.73	1878	0.71
	spinal cord - neck	22	0.03	21	0.02	27	0.03	70	0.03
	trachea	11	0.01	6	0.01	9	0.01	26	0.01
	vertebrae	76	0.09	87	0.10	85	0.10	248	0.09
	abdomen including groin	1296	1.49	1193	1.33	1215	1.39	3704	1.41
NECK									
TRUNK									

Table C1: 2014-2016 FROI Claims By Part of Body (Detailed) - Compensable

Body.Part	Body.Part.Desc	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
UPPER EXTREMITIES	buttocks	231	0.27	222	0.25	209	0.24	662	0.25
	chest	1211	1.39	1270	1.42	1196	1.37	3677	1.40
	disc - trunk	101	0.12	112	0.13	115	0.13	328	0.12
	heart	49	0.06	46	0.05	37	0.04	132	0.05
	internal organs	106	0.12	181	0.20	149	0.17	436	0.17
	lower back area (muscles)	9098	10.48	8774	9.81	8374	9.59	26246	9.96
	lumbar / sacral vertebrae	287	0.33	282	0.32	261	0.30	830	0.31
	lungs	371	0.43	358	0.40	384	0.44	1113	0.42
	multiple trunk	632	0.73	591	0.66	569	0.65	1792	0.68
	pelvis	120	0.14	102	0.11	109	0.12	331	0.13
	sacrum and coccyx	95	0.11	91	0.10	52	0.06	238	0.09
	spinal cord - trunk	29	0.03	43	0.05	27	0.03	99	0.04
	upper back area	1247	1.44	1315	1.47	1177	1.35	3739	1.42
	elbow	1764	2.03	1713	1.92	1705	1.95	5182	1.97
	finger(s)	9206	10.60	9243	10.34	9424	10.79	27873	10.57
	hand	6232	7.18	6290	7.04	6246	7.15	18768	7.12
	lower arm	3284	3.78	3398	3.80	3438	3.94	10120	3.84
	multiple upper extremities	1007	1.16	1070	1.20	975	1.12	3052	1.16
	shoulder(s)	5948	6.85	5796	6.48	5770	6.61	17514	6.64
	thumb	2581	2.97	3080	3.45	2708	3.10	8369	3.18
	upper arm	995	1.15	1156	1.29	1255	1.44	3406	1.29
	wrist	3205	3.69	3231	3.61	3258	3.73	9694	3.68
	wrist(s) & hand(s)	618	0.71	592	0.66	521	0.60	1731	0.66
	All	86836	100.02	89401	99.99	87343	100.02	263580	99.97

Notes:

1. Percentage totals may not equal 100 percent due to rounding error or missing data.
2. Category count totals may not equal overall counts because of missing data.

Table C2: 2014-2016 FROI Claims By Cause of Injury (Detailed) - Compensable

Inj.Cause	Inj.Cause.Detailed	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
BURN OR SCALD-HEAT OR COLD EXPOSURE	Abnormal Air Pressure	12	0.01	10	0.01	10	0.01	32	0.01
	Chemicals	549	0.63	567	0.63	523	0.60	1639	0.62
	Cold Objects or Substances	30	0.03	23	0.03	13	0.01	66	0.03
	Contact With, NOC	842	0.97	839	0.94	678	0.78	2359	0.89
	Dust, Gases, Fumes or Vapors	137	0.16	137	0.15	190	0.22	464	0.18
	Electrical Current	144	0.17	158	0.18	155	0.18	457	0.17
	Fire or Flame	96	0.11	82	0.09	95	0.11	273	0.10
	Hot Object or Substances	622	0.72	696	0.78	673	0.77	1991	0.76
	Radiation	2	0.00	5	0.01	4	0.00	11	0.00
	Steam or Hot Fluids	522	0.60	491	0.55	574	0.66	1587	0.60
	Temperature Extremes	144	0.17	194	0.22	238	0.27	576	0.22
	Welding Operations	104	0.12	101	0.11	83	0.10	288	0.11
	CAUGHT IN, UNDER, OR BETWEEN	2054	2.37	2051	2.29	2017	2.31	6122	2.32
	Collapsing Materials (Slides of Earth) _ either man made or natural	61	0.07	60	0.07	93	0.11	214	0.08
CUT, PUNCTURE, SCRAPE, INJURED BY	Machine or Machinery	944	1.09	851	0.95	885	1.01	2680	1.02
	Object Handled	1235	1.42	1491	1.67	1469	1.68	4195	1.59
	Broken Glass	596	0.69	625	0.70	581	0.67	1802	0.68
	Cut, Puncture, Scrape, NOC	3861	4.45	4108	4.60	4196	4.80	12165	4.62
	Hand Tool, Utensil; Not Powered	2349	2.71	2600	2.91	2503	2.87	7452	2.83
	Object Being Lifted or Handled	2566	2.95	2642	2.96	2621	3.00	7829	2.97
FALL, SLIP OR TRIP IN- JURY	Powered Hand Tool, Appliance	746	0.86	767	0.86	734	0.84	2247	0.85
	Fall, Slip, Trip, NOC	5423	6.25	5713	6.39	5512	6.31	16648	6.32
	From Different Level (Elevation) _ off _ either man made or natural	1750	2.02	1791	2.00	1833	2.10	5374	2.04
	From Ladder or Scaffolding	787	0.91	851	0.95	760	0.87	2398	0.91
	From Liquid or Grease Spills	1261	1.45	1398	1.56	1287	1.47	3946	1.50
	Into Openings _ shafts, excavations, floor openings, etc.	242	0.28	279	0.31	273	0.31	794	0.30

Table C2: 2014-2016 FROI Claims By Cause of Injury (Detailed) - Compensable

Inj.Cause	Inj.Cause.Detailed	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
MISCELLANEOUS CAUSES	On Ice or Snow	1353	1.56	2446	2.74	766	0.88	4565	1.73
	On Same Level	4265	4.91	4654	5.21	4730	5.42	13649	5.18
	On Stairs	879	1.01	907	1.01	902	1.03	2688	1.02
	Slipped, Did Not Fall	815	0.94	818	0.91	775	0.89	2408	0.91
	Absorption, Ingestion or Inhalation, NOC	893	1.03	843	0.94	832	0.95	2568	0.97
	Cumulative, NOC _ all other	418	0.48	382	0.43	365	0.42	1165	0.44
	Foreign Matter (Body) in Eye(s)	1874	2.16	1968	2.20	1770	2.03	5612	2.13
	Other _ Miscellaneous, NOC	3257	3.75	2912	3.26	2909	3.33	9078	3.44
	Other Than Physical Cause of Injury	626	0.72	639	0.71	670	0.77	1935	0.73
	Person in Act of a Crime _ robbery or criminal assault	382	0.44	518	0.58	554	0.63	1454	0.55
MOTOR VEHICLE	Collision or Sideswipe with Another Vehicle _ both vehicles in motion	1059	1.22	1219	1.36	1156	1.32	3434	1.30
	Collision with a Fixed Object _ standing vehicle or stationary object	192	0.22	174	0.19	160	0.18	526	0.20
	Crash of Airplane	5	0.01	2	0.00	.	.	7	0.00
	Crash of Rail Vehicle	17	0.02	17	0.02	21	0.02	55	0.02
	Crash of Water Vehicle	8	0.01	9	0.01	7	0.01	24	0.01
	Motor Vehicle, NOC	881	1.01	946	1.06	956	1.09	2783	1.06
	Vehicle Upset _ overturned or jack-knifed	230	0.26	217	0.24	207	0.24	654	0.25
	RUBBED OR ABRADED BY	181	0.21	102	0.11	128	0.15	411	0.16
	Repetitive Motion _ callous, blister, etc.	117	0.13	92	0.10	100	0.11	309	0.12
	Rubbed or Abraded, NOC	86	0.10	55	0.06	34	0.04	175	0.07
STRAIN OR INJURY BY	Continual Noise	879	1.01	868	0.97	973	1.11	2720	1.03
	Holding or Carrying	186	0.21	169	0.19	161	0.18	516	0.20
	Jumping	8575	9.87	8158	9.13	7955	9.11	24688	9.37
	Lifting	3997	4.60	3813	4.27	3743	4.29	11553	4.38
	Pushing or Pulling	948	1.09	930	1.04	890	1.02	2768	1.05

Table C2: 2014-2016 FROI Claims By Cause of Injury (Detailed) - Compensable

Inj.Cause	Inj.Cause.Detailed	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
STRIKING AGAINST OR STEPPING ON	Repetitive Motion _ carpal tunnel syndrome	1406	1.62	1457	1.63	1368	1.57	4231	1.61
	Strain or Injury By, NOC	5239	6.03	5342	5.98	5370	6.15	15951	6.05
	Twisting	1923	2.21	1875	2.10	1929	2.21	5727	2.17
	Using Tool or Machinery	668	0.77	582	0.65	589	0.67	1839	0.70
	Welding or Throwing	62	0.07	47	0.05	52	0.06	161	0.06
	Moving Parts of Machine	148	0.17	109	0.12	128	0.15	385	0.15
	Object Being Lifted or Handled	574	0.66	574	0.64	551	0.63	1699	0.64
	Sanding, Scraping, Cleaning Operation	20	0.02	18	0.02	15	0.02	53	0.02
	Stationary Object	2035	2.34	2205	2.47	2080	2.38	6320	2.40
	Stepping on Sharp Object	425	0.49	379	0.42	414	0.47	1218	0.46
STRUCK OR INJURED BY-INCLUDES KICKED, STABBED, BIT, ETC.	Striking Against or Stepping On, NOC	1094	1.26	1022	1.14	981	1.12	3097	1.17
	Animal or Insect	2053	2.36	2136	2.39	2123	2.43	6312	2.39
	Explosion or Flare Back	27	0.03	35	0.04	24	0.03	86	0.03
	Falling or Flying Object	3602	4.15	3711	4.15	3771	4.32	11084	4.21
	Fellow Worker, Patient	1796	2.07	1669	1.87	1752	2.01	5217	1.98
	Hand Tool or Machine in Use	732	0.84	708	0.79	718	0.82	2158	0.82
	Motor Vehicle	585	0.67	579	0.65	658	0.75	1822	0.69
	Moving Parts of Machine	265	0.31	275	0.31	265	0.30	805	0.31
	Object Being Lifted or Handled	2391	2.75	2486	2.78	2591	2.97	7468	2.83
	Object Handled by Others	391	0.45	468	0.52	480	0.55	1339	0.51
	Struck or Injured, NOC _ includes kicked, stabbed, bit, etc.	2185	2.52	2325	2.60	2688	3.08	7198	2.73
	All	86823	99.97	89390	99.98	87311	99.97	263524	99.97

Notes:

1. Percentage totals may not equal 100 percent due to rounding error or missing data.
2. Category count totals may not equal overall counts because of missing data.

Table C3: 2014-2016 FROI Claims By Nature of Injury (Detailed) - Compensable

Inj.Nature	Inj.Nature.Desc	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
MULTIPLE INJURIES	multiple injuries (physical and psychological)	75	0.09	90	0.10	92	0.11	257	0.10
OCCUPATIONAL DISEASE OR CUMULATIVE INJURY	multiple physical injuries only	2093	2.41	2418	2.70	2338	2.68	6849	2.60
	aids	22	0.03	35	0.04	25	0.03	82	0.03
	all other cumulative injury, noc	472	0.54	364	0.41	319	0.37	1155	0.44
	all other occupational disease injury, noc	210	0.24	214	0.24	142	0.16	566	0.21
	asbestosis	4	0.00	5	0.01	40	0.05	49	0.02
	black lung	1	0.00	1	0.00	1	0.00	3	0.00
	cancer	1	0.00	4	0.00	.	.	5	0.00
	carpal tunnel syndrome	279	0.32	244	0.27	197	0.23	720	0.27
	contagious disease	433	0.50	416	0.47	313	0.36	1162	0.44
	dermatitis	479	0.55	465	0.52	516	0.59	1460	0.55
	dust disease, noc	6	0.01	7	0.01	7	0.01	20	0.01
	hepatitis c	7	0.01	5	0.01	4	0.00	16	0.01
	loss of hearing	57	0.07	60	0.07	38	0.04	155	0.06
	mental disorder	9	0.01	5	0.01	23	0.03	37	0.01
	mental stress	52	0.06	64	0.07	76	0.09	192	0.07
	poisoning - chemical,(other than metals)	40	0.05	35	0.04	55	0.06	130	0.05
	poisoning - metal	1	0.00	1	0.00	2	0.00	4	0.00
	radiation	3	0.00	2	0.00	2	0.00	7	0.00
	respiratory disorders	279	0.32	252	0.28	259	0.30	790	0.30
	silicosis	2	0.00	2	0.00	.	.	4	0.00
	vdt - related diseases	1	0.00	4	0.00	1	0.00	6	0.00
SPECIFIC INJURY	all other specific injuries noc	6949	8.00	7103	7.95	7185	8.23	21237	8.06
	amputation	172	0.20	166	0.19	157	0.18	495	0.19
	angina pectoris	24	0.03	24	0.03	19	0.02	67	0.03
	asphyxiation	12	0.01	12	0.01	10	0.01	34	0.01
	burn	1920	2.21	1984	2.22	2013	2.30	5917	2.24
	concussion	438	0.50	497	0.56	531	0.61	1466	0.56
	contusion	13707	15.78	14775	16.53	14312	16.39	42794	16.24

Table C3: 2014-2016 FROI Claims By Nature of Injury (Detailed) - Compensable

Inj.Nature	Inj.Nature.Desc	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
	crushing	904	1.04	902	1.01	847	0.97	2653	1.01
	dislocation	371	0.43	331	0.37	346	0.40	1048	0.40
	electric shock	121	0.14	121	0.14	122	0.14	364	0.14
	enucleation	5	0.01	2	0.00	3	0.00	10	0.00
	foreign body	2244	2.58	2382	2.66	2238	2.56	6864	2.60
	fracture	3342	3.85	3472	3.88	3373	3.86	10187	3.86
	freezing	30	0.03	13	0.01	7	0.01	50	0.02
	hearing loss or impairment	103	0.12	89	0.10	58	0.07	250	0.09
	heat prostration	193	0.22	229	0.26	276	0.32	698	0.26
	hernia	303	0.35	283	0.32	266	0.30	852	0.32
	infection	387	0.45	289	0.32	307	0.35	983	0.37
	inflammation	2055	2.37	2138	2.39	2143	2.45	6336	2.40
	laceration	11821	13.61	12439	13.91	12301	14.08	36561	13.87
	myocardial infarction	31	0.04	17	0.02	15	0.02	63	0.02
	no physical injury	818	0.94	1090	1.22	890	1.02	2798	1.06
	poisoning - general	188	0.22	92	0.10	160	0.18	440	0.17
	puncture	4274	4.92	4477	5.01	4472	5.12	13223	5.02
	rupture	74	0.09	95	0.11	77	0.09	246	0.09
	severance	48	0.06	48	0.05	47	0.05	143	0.05
	sprain	6949	8.00	6807	7.61	6436	7.37	20192	7.66
	strain	24618	28.35	24619	27.54	24066	27.55	73303	27.81
	syncope	177	0.20	180	0.20	179	0.20	536	0.20
	vascular	9	0.01	13	0.01	11	0.01	33	0.01
	vision loss	23	0.03	19	0.02	26	0.03	68	0.03
	All	86836	100.00	89401	100.00	87343	100.00	263580	99.96

Notes:

1. Percentage totals may not equal 100 percent due to rounding error or missing data.
2. Category count totals may not equal overall counts because of missing data.

Table C4: 2014-2016 FROI Claims By Market Share - Compensable

Self.Ins	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
Insured	72174	83.12	74852	83.73	72748	83.29	219774	83.38
Self-Insured	14662	16.88	14549	16.27	14595	16.71	43806	16.62
All	86836	100.00	89401	100.00	87343	100.00	263580	100.00

Notes:

1. Totals may not equal 100 percent due to rounding error or missing data.
2. Category count totals may not equal overall counts because of missing data.

Table C5: 2014-2016 FROI Claims By Age Group At Injury - Compensable

Age.Cat	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
14-15	36	0.04	32	0.04	19	0.02	87	0.03
16-19	2838	3.27	3051	3.41	3211	3.68	9100	3.45
20-24	10180	11.72	10535	11.78	10320	11.82	31035	11.77
25-34	20146	23.20	20936	23.42	20471	23.44	61553	23.35
35-44	18827	21.68	18732	20.95	17998	20.61	55557	21.08
45-54	19360	22.29	19745	22.09	18968	21.72	58073	22.03
55-64	12722	14.65	13319	14.90	13199	15.11	39240	14.89
65-84	2522	2.90	2833	3.17	2997	3.43	8352	3.17
85+	92	0.11	132	0.15	81	0.09	305	0.12
All	86723	99.86	89315	99.91	87264	99.92	263302	99.89

Notes:

1. Percentage totals may not equal 100 percent due to rounding error or missing data.
2. Category count totals may not equal overall counts because of missing data.
3. Ages were determined using TransformedDOB (DN0052- See Appendix) that includes actual year and month with day of month assumed as the 15th.

Table C6: 2014-2016 FROI Claims By Gender - Compensable

Gender	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
Female	36572	42.12	38194	42.72	37710	43.17	112476	42.67
Male	49504	57.01	50700	56.71	49011	56.11	149215	56.61
Unknown	760	0.88	507	0.57	622	0.71	1889	0.72
All	86836	100.01	89401	100.00	87343	99.99	263580	100.00

Table C7: 2014-2016 FROI Claims By Tennessee County - Compensable

County	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
Anderson	1143	1.32	1150	1.29	1211	1.39	3504	1.33
Bedford	551	0.63	527	0.59	527	0.60	1605	0.61
Benton	124	0.14	133	0.15	101	0.12	358	0.14
Bledsoe	56	0.06	81	0.09	56	0.06	193	0.07
Blount	1383	1.59	1577	1.76	1498	1.72	4458	1.69
Bradley	1335	1.54	1404	1.57	1339	1.53	4078	1.55
Campbell	391	0.45	411	0.46	408	0.47	1210	0.46
Cannon	60	0.07	68	0.08	62	0.07	190	0.07
Carroll	216	0.25	227	0.25	210	0.24	653	0.25
Carter	285	0.33	292	0.33	309	0.35	886	0.34
Cheatham	312	0.36	317	0.35	273	0.31	902	0.34
Chester	119	0.14	151	0.17	148	0.17	418	0.16
Claiborne	274	0.32	260	0.29	275	0.31	809	0.31
Clay	65	0.07	40	0.04	44	0.05	149	0.06
Cocke	283	0.33	233	0.26	237	0.27	753	0.29
Coffee	835	0.96	736	0.82	696	0.80	2267	0.86
Crockett	128	0.15	132	0.15	159	0.18	419	0.16
Cumberland	529	0.61	575	0.64	551	0.63	1655	0.63
Davidson	10177	11.72	10571	11.82	10859	12.43	31607	11.99
Decatur	69	0.08	85	0.10	72	0.08	226	0.09
Dekalb	285	0.33	279	0.31	294	0.34	858	0.33
Dickson	650	0.75	714	0.80	706	0.81	2070	0.79
Dyer	454	0.52	443	0.50	436	0.50	1333	0.51
Fayette	236	0.27	247	0.28	212	0.24	695	0.26
Fentress	116	0.13	121	0.14	123	0.14	360	0.14
Franklin	452	0.52	498	0.56	522	0.60	1472	0.56
Gibson	512	0.59	505	0.56	556	0.64	1573	0.60
Giles	331	0.38	423	0.47	474	0.54	1228	0.47
Grainger	114	0.13	101	0.11	89	0.10	304	0.12
Greene	891	1.03	878	0.98	828	0.95	2597	0.99
Grundy	81	0.09	104	0.12	64	0.07	249	0.09
Hamblen	893	1.03	949	1.06	938	1.07	2780	1.05
Hamilton	4901	5.64	4776	5.34	4678	5.36	14355	5.45

Table C7: 2014-2016 FROI Claims By Tennessee County - Compensable

County	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
Hancock	21	0.02	23	0.03	25	0.03	69	0.03
Hardeman	269	0.31	337	0.38	307	0.35	913	0.35
Hardin	218	0.25	178	0.20	229	0.26	625	0.24
Hawkins	405	0.47	312	0.35	402	0.46	1119	0.42
Haywood	129	0.15	163	0.18	184	0.21	476	0.18
Henderson	290	0.33	300	0.34	289	0.33	879	0.33
Henry	295	0.34	326	0.36	289	0.33	910	0.35
Hickman	131	0.15	141	0.16	116	0.13	388	0.15
Houston	56	0.06	52	0.06	68	0.08	176	0.07
Humphreys	181	0.21	223	0.25	213	0.24	617	0.23
Jackson	41	0.05	52	0.06	45	0.05	138	0.05
Jefferson	487	0.56	501	0.56	484	0.55	1472	0.56
Johnson	100	0.12	140	0.16	101	0.12	341	0.13
Knox	5918	6.82	6094	6.82	5768	6.60	17780	6.75
Lake	37	0.04	28	0.03	43	0.05	108	0.04
Lauderdale	196	0.23	193	0.22	184	0.21	573	0.22
Lawrence	404	0.47	413	0.46	453	0.52	1270	0.48
Lewis	62	0.07	84	0.09	98	0.11	244	0.09
Lincoln	370	0.43	430	0.48	431	0.49	1231	0.47
Loudon	545	0.63	590	0.66	641	0.73	1776	0.67
Macon	197	0.23	171	0.19	165	0.19	533	0.20
Madison	1373	1.58	1446	1.62	1483	1.70	4302	1.63
Marion	242	0.28	268	0.30	278	0.32	788	0.30
Marshall	430	0.50	420	0.47	411	0.47	1261	0.48
Maury	1168	1.35	1218	1.36	1518	1.74	3904	1.48
McMinn	811	0.93	774	0.87	727	0.83	2312	0.88
McNairy	159	0.18	151	0.17	152	0.17	462	0.18
Meigs	56	0.06	73	0.08	67	0.08	196	0.07
Monroe	584	0.67	534	0.60	510	0.58	1628	0.62
Montgomery	1519	1.75	1421	1.59	1354	1.55	4294	1.63
Moore	47	0.05	46	0.05	36	0.04	129	0.05
Morgan	89	0.10	106	0.12	60	0.07	255	0.10

Table C7: 2014-2016 FROI Claims By Tennessee County - Compensable

County	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
Obion	455	0.52	482	0.54	361	0.41	1298	0.49
Overton	204	0.23	190	0.21	210	0.24	604	0.23
Perry	88	0.10	102	0.11	88	0.10	278	0.11
Pickett	27	0.03	30	0.03	36	0.04	93	0.04
Polk	80	0.09	76	0.09	78	0.09	234	0.09
Putnam	941	1.08	1034	1.16	943	1.08	2918	1.11
Rhea	518	0.60	499	0.56	459	0.53	1476	0.56
Roane	397	0.46	443	0.50	376	0.43	1216	0.46
Robertson	843	0.97	1003	1.12	926	1.06	2772	1.05
Rutherford	4766	5.49	4921	5.50	4624	5.29	14311	5.43
Scott	181	0.21	178	0.20	177	0.20	536	0.20
Sequatchie	78	0.09	115	0.13	101	0.12	294	0.11
Sevier	1497	1.72	1547	1.73	1500	1.72	4544	1.72
Shelby	10871	12.52	11484	12.85	11337	12.98	33692	12.78
Smith	207	0.24	185	0.21	173	0.20	565	0.21
Stewart	67	0.08	91	0.10	73	0.08	231	0.09
Sullivan	1664	1.92	1673	1.87	1609	1.84	4946	1.88
Sumner	1994	2.30	2054	2.30	2000	2.29	6048	2.29
Tipton	332	0.38	356	0.40	378	0.43	1066	0.40
Trousdale	61	0.07	100	0.11	87	0.10	248	0.09
Unicoi	178	0.20	181	0.20	173	0.20	532	0.20
Union	72	0.08	84	0.09	100	0.11	256	0.10
Van Buren	32	0.04	38	0.04	37	0.04	107	0.04
Warren	637	0.73	718	0.80	560	0.64	1915	0.73
Washington	1716	1.98	1606	1.80	1588	1.82	4910	1.86
Wayne	169	0.19	207	0.23	214	0.25	590	0.22
Weakley	306	0.35	338	0.38	365	0.42	1009	0.38
White	347	0.40	367	0.41	372	0.43	1086	0.41
Williamson	2244	2.58	2798	3.13	2787	3.19	7829	2.97
Wilson	1636	1.88	1663	1.86	1723	1.97	5022	1.91
All	77689	89.45	80779	90.37	79541	91.03	238009	90.35

Notes:

1. Injury counts include only injuries occurring within Tennessee borders. Percentages represent the summary counts as a percentage of all data with non-missing location information. Data validity checks indicated a three-year combined total of 28 missing observations for DN0033 PSTL_INJ_SITE - See Appendix. Therefore, many injuries occurred in other states.
2. Injury locations were reported by zip code. Since zip codes may span two or more counties, manual mapping to the *predominate* county was performed. Therefore, county injury counts should be viewed as estimates.

Table C8: 2014-2016 FROI Claims By Grand Division of Tennessee - Compensable

Grand.Division	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
EAST	28604	32.94	29029	32.47	28111	32.18	85744	32.53
MIDDLE	32298	37.19	34050	38.09	33935	38.85	100283	38.05
WEST	16787	19.33	17700	19.80	17495	20.03	51982	19.72
All	77689	89.46	80779	90.36	79541	91.06	238009	90.30

Notes:

1. Injury counts above include only injuries occurring within Tennessee borders. Many injuries occurred in other states. See Table C9.
2. Injury locations were reported by zip code. Since zip codes may span two or more counties/Grand Divisions, manual mapping to the *predominate* county/Grand Division was performed. Therefore, all injury counts should be viewed as estimates.

Table C9: 2014-2016 FROI Claims By Geography (Inside/Outside the State of Tennessee) - Compensable

State	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
Out-of-State	9139	10.52	8616	9.64	7797	8.93	25552	9.69
Tennessee	77689	89.47	80779	90.36	79541	91.07	238009	90.30
All	86828	99.99	89395	100.00	87338	100.00	263561	99.99

Notes:

1. In 2014-2016, there were only 19 compensable claims (less than 0.01 percent) for which the location of injury was not available.

7.2 Claim Aggregations - Denied

Figure 8: 2014-2016 FROI Claims - Denied

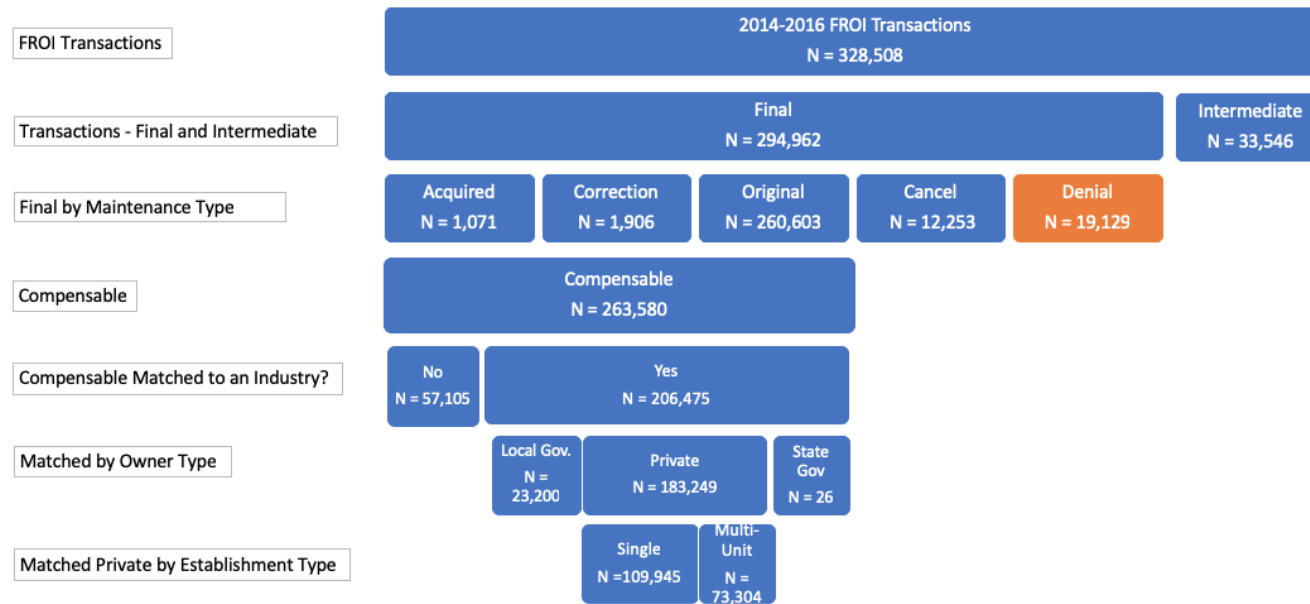


Table D1: 2014-2016 FROI Claims By Part of Body (Detailed) - Denied

Body.Part	Body.Part.Desc	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
HEAD	brain	61	0.99	91	1.41	116	1.77	268	1.40
	ear(s)	105	1.71	57	0.89	78	1.19	240	1.25
	eye(s)	72	1.17	96	1.49	91	1.39	259	1.35
	facial bones	16	0.26	16	0.25	14	0.21	46	0.24
	head - soft tissue	64	1.04	90	1.40	88	1.34	242	1.27
	mouth	18	0.29	17	0.26	28	0.43	63	0.33
	multiple injuries to head	111	1.81	132	2.05	123	1.88	366	1.91
	nose	16	0.26	16	0.25	18	0.27	50	0.26
	skull	61	0.99	70	1.09	76	1.16	207	1.08
	teeth	14	0.23	21	0.33	21	0.32	56	0.29
LOWER EXTREMITIES	ankle	202	3.29	245	3.81	216	3.30	663	3.47
	foot	199	3.24	214	3.32	250	3.82	663	3.47
	great toe	10	0.16	6	0.09	9	0.14	25	0.13
	hip	71	1.16	72	1.12	78	1.19	221	1.16
	knee	491	7.99	567	8.81	573	8.75	1631	8.53
	lower leg	112	1.82	105	1.63	117	1.79	334	1.75
	multiple lower extremities	46	0.75	51	0.79	52	0.79	149	0.78
	toe(s)	16	0.26	20	0.31	21	0.32	57	0.30
	upper leg	36	0.59	37	0.57	36	0.55	109	0.57
	artificial appliance	1	0.02	.	.	1	0.02	2	0.01
MULTIPLE BODY PARTS	body as a whole	18	0.29	28	0.43	41	0.63	87	0.45
	body sys. & mult. body sys.	187	3.04	172	2.67	204	3.12	563	2.94
	insuff. info to pro. iden.uncl	166	2.70	212	3.29	199	3.04	577	3.02
	multiple body parts	473	7.70	444	6.90	551	8.41	1468	7.67
	no physical injury	242	3.94	313	4.86	293	4.47	848	4.43
	disc - neck	21	0.34	10	0.16	15	0.23	46	0.24
NECK	larynx	3	0.05	.	.	2	0.03	5	0.03
	multiple neck injury	44	0.72	39	0.61	39	0.60	122	0.64
	neck - soft tissue	62	1.01	47	0.73	50	0.76	159	0.83
	spinal cord - neck	.	.	2	0.03	3	0.05	5	0.03
	trachea	2	0.03	2	0.03	5	0.08	9	0.05
	vertebrae	19	0.31	14	0.22	6	0.09	39	0.20
TRUNK	abdomen including groin	225	3.66	213	3.31	221	3.38	659	3.45

Table D1: 2014-2016 FROI Claims By Part of Body (Detailed) - Denied

Body.Part	Body.Part.Desc	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
UPPER EXTREMITIES	buttocks	13	0.21	16	0.25	19	0.29	48	0.25
	chest	156	2.54	133	2.07	124	1.89	413	2.16
	disc - trunk	14	0.23	23	0.36	12	0.18	49	0.26
	heart	86	1.40	87	1.35	101	1.54	274	1.43
	internal organs	63	1.03	74	1.15	56	0.86	193	1.01
	lower back area (muscles)	697	11.35	676	10.50	654	9.99	2027	10.60
	lumbar / sacral vertebrae	46	0.75	25	0.39	35	0.53	106	0.55
	lungs	73	1.19	80	1.24	75	1.15	228	1.19
	multiple trunk	41	0.67	51	0.79	47	0.72	139	0.73
	pelvis	7	0.11	15	0.23	7	0.11	29	0.15
	sacrum and coccyx	3	0.05	5	0.08	5	0.08	13	0.07
	spinal cord - trunk	5	0.08	7	0.11	2	0.03	14	0.07
	upper back area	91	1.48	96	1.49	92	1.41	279	1.46
	elbow	89	1.45	106	1.65	109	1.66	304	1.59
	finger(s)	163	2.65	196	3.04	166	2.54	525	2.74
	hand	215	3.50	280	4.35	246	3.76	741	3.87
	lower arm	133	2.17	133	2.07	140	2.14	406	2.12
	multiple upper extremities	71	1.16	78	1.21	78	1.19	227	1.19
	shoulder(s)	475	7.73	462	7.18	443	6.77	1380	7.21
	thumb	57	0.93	57	0.89	68	1.04	182	0.95
	upper arm	64	1.04	72	1.12	69	1.05	205	1.07
	wrist	299	4.87	261	4.05	278	4.25	838	4.38
	wrist(s) & hand(s)	98	1.60	86	1.34	87	1.33	271	1.42
	All	6143	100.01	6438	100.02	6548	100.03	19129	100.00

Table D2: 2014-2016 FROI Claims By Cause of Injury (Detailed)- Denied

Inj.Cause	Inj.Cause.Detailed	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
BURN OR SCALD-HEAT OR COLD EXPOSURE	Chemicals	27	0.44	23	0.36	25	0.38	75	0.39
	Cold Objects or Substances	1	0.02	1	0.02	2	0.03	4	0.02
	Contact With, NOC	36	0.59	22	0.34	25	0.38	83	0.43
	Dust, Gases, Fumes or Vapors	23	0.37	21	0.33	25	0.38	69	0.36
	Electrical Current	2	0.03	4	0.06	7	0.11	13	0.07
	Fire or Flame	4	0.07	6	0.09	4	0.06	14	0.07
	Hot Object or Substances	8	0.13	10	0.16	13	0.20	31	0.16
	Radiation	.	.	1	0.02	.	.	1	0.01
	Steam or Hot Fluids	8	0.13	12	0.19	13	0.20	33	0.17
	Temperature Extremes	15	0.24	17	0.26	38	0.58	70	0.37
CAUGHT IN, UNDER, OR BETWEEN	Welding Operations	2	0.03	4	0.06	2	0.03	8	0.04
	Caught In, Under, or Between, NOC	35	0.57	35	0.54	44	0.67	114	0.60
	Collapsing Materials (Slides of Earth) - either man made or natural	.	.	3	0.05	2	0.03	5	0.03
	Machine or Machinery	19	0.31	32	0.50	31	0.47	82	0.43
	Object Handled	23	0.37	20	0.31	21	0.32	64	0.33
	Broken Glass	4	0.07	16	0.25	5	0.08	25	0.13
	Cut, Puncture, Scrape, NOC	49	0.80	69	1.07	60	0.92	178	0.93
	Hand Tool, Utensil; Not Powered	42	0.68	44	0.68	25	0.38	111	0.58
	Object Being Lifted or Handled	29	0.47	30	0.47	34	0.52	93	0.49
	Powered Hand Tool, Appliance	21	0.34	24	0.37	20	0.31	65	0.34
FALL, SLIP OR TRIP IN- JURY	Fall, Slip, Trip, NOC	316	5.14	323	5.02	331	5.05	970	5.07
	From Different Level (Elevation) - off - either man made or natural	82	1.33	86	1.34	84	1.28	252	1.32
	From Ladder or Scaffolding	46	0.75	49	0.76	42	0.64	137	0.72
	From Liquid or Grease Spills	31	0.50	55	0.85	47	0.72	133	0.70
	Into Openings - shafts, excavations, floor openings, etc.	14	0.23	11	0.17	10	0.15	35	0.18
	On Ice or Snow	33	0.54	57	0.89	19	0.29	109	0.57

Table D2: 2014-2016 FROI Claims By Cause of Injury (Detailed)- Denied

Inj.Cause	Inj.Cause.Detailed	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
MISCELLANEOUS CAUSES	On Same Level	309	5.03	346	5.37	429	6.55	1084	5.67
	On Stairs	48	0.78	71	1.10	87	1.33	206	1.08
	Slipped, Did Not Fall	44	0.72	33	0.51	50	0.76	127	0.66
	Absorption, Ingestion or Inhalation, NOC	92	1.50	94	1.46	122	1.86	308	1.61
	Cumulative, NOC _ all other	238	3.87	264	4.10	234	3.57	736	3.85
	Foreign Matter (Body) in Eye(s)	29	0.47	49	0.76	38	0.58	116	0.61
	Other _ Miscellaneous, NOC	876	14.26	935	14.52	855	13.06	2666	13.94
	Other Than Physical Cause of Injury	323	5.26	344	5.34	409	6.25	1076	5.62
MOTOR VEHICLE	Person in Act of a Crime _ robbery or criminal assault	34	0.55	32	0.50	39	0.60	105	0.55
	Collision or Sideswipe with Another Vehicle _ both vehicles in motion	70	1.14	64	0.99	60	0.92	194	1.01
	Collision with a Fixed Object _ standing vehicle or stationary object	14	0.23	14	0.22	16	0.24	44	0.23
	Crash of Airplane	1	0.02	.	.	.	.	1	0.01
	Crash of Rail Vehicle	.	.	5	0.08	3	0.05	8	0.04
	Motor Vehicle, NOC	57	0.93	55	0.85	67	1.02	179	0.94
	Vehicle Upset _ overturned or jack-knifed	11	0.18	17	0.26	14	0.21	42	0.22
	RUBBED OR ABRADED BY	39	0.63	34	0.53	34	0.52	107	0.56
STRAIN OR INJURY BY	Repetitive Motion _ callous, blister, etc.	9	0.15	8	0.12	3	0.05	20	0.10
	Rubbed or Abraded, NOC	44	0.72	13	0.20	16	0.24	73	0.38
	Continual Noise	56	0.91	56	0.87	47	0.72	159	0.83
	Holding or Carrying	11	0.18	15	0.23	10	0.15	36	0.19
	Jumping	623	10.14	625	9.71	637	9.73	1885	9.85
	Lifting	281	4.57	243	3.77	269	4.11	793	4.15
	Pushing or Pulling	67	1.09	73	1.13	83	1.27	223	1.17
	Reaching	375	6.10	402	6.24	385	5.88	1162	6.07
	Repetitive Motion _ carpal tunnel syndrome								
	Strain or Injury By, NOC	850	13.84	885	13.75	902	13.78	2637	13.79

Table D2: 2014-2016 FROI Claims By Cause of Injury (Detailed)- Denied

Inj.Cause	Inj.Cause.Detailed	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
STRIKING AGAINST OR STEPPING ON	Twisting	148	2.41	166	2.58	189	2.89	503	2.63
	Using Tool or Machinery	47	0.77	38	0.59	40	0.61	125	0.65
	Wielding or Throwing	5	0.08	3	0.05	7	0.11	15	0.08
	Moving Parts of Machine	2	0.03	3	0.05	5	0.08	10	0.05
	Object Being Lifted or Handled	20	0.33	13	0.20	29	0.44	62	0.32
	Sanding, Scraping, Cleaning Operation	.	.	3	0.05	3	0.05	6	0.03
	Stationary Object	69	1.12	79	1.23	69	1.05	217	1.13
	Stepping on Sharp Object	7	0.11	15	0.23	17	0.26	39	0.20
	Striking Against or Stepping On, NOC	49	0.80	32	0.50	30	0.46	111	0.58
	Animal or Insect	96	1.56	95	1.48	90	1.37	281	1.47
STRUCK OR INJURED BY-INCLUDES KICKED, STABBED, BIT, ETC.	Explosion or Flare Back	2	0.03	1	0.02	5	0.08	8	0.04
	Falling or Flying Object	83	1.35	89	1.38	77	1.18	249	1.30
	Fellow Worker, Patient	63	1.03	59	0.92	42	0.64	164	0.86
	Hand Tool or Machine in Use	12	0.20	17	0.26	21	0.32	50	0.26
	Motor Vehicle	21	0.34	31	0.48	21	0.32	73	0.38
	Moving Parts of Machine	4	0.07	7	0.11	12	0.18	23	0.12
	Object Being Lifted or Handled	51	0.83	45	0.70	71	1.08	167	0.87
	Object Handled by Others	12	0.20	15	0.23	15	0.23	42	0.22
	Struck or Injured, NOC - includes kicked, stabbed, bit, etc.	70	1.14	73	1.13	61	0.93	204	1.07
	All	6132	99.82	6436	99.96	6542	99.91	19110	99.90

Notes:

1. Percentage totals may not equal 100 percent due to rounding error or missing data.
2. Category count totals may not equal overall counts because of missing data.

Table D3: 2014-2016 FROI Claims By Nature of Injury (Detailed) - Denied

Inj.Nature	Inj.Nature.Desc	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
MULTIPLE INJURIES	multiple injuries (physical and psychological)	11	0.18	9	0.14	20	0.31	40	0.21
OCCUPATIONAL DISEASE OR CUMULATIVE INJURY	multiple physical injuries only	140	2.28	142	2.21	164	2.50	446	2.33
	all other cumulative injury, noc	151	2.46	136	2.11	128	1.95	415	2.17
SPECIFIC INJURY	all other occupational disease injury, noc	12	0.20	20	0.31	22	0.34	54	0.28
	asbestosis	5	0.08	1	0.02	6	0.09	12	0.06
	black lung	1	0.02	.	.	.	.	1	0.01
	cancer	7	0.11	7	0.11	4	0.06	18	0.09
	carpal tunnel syndrome	152	2.47	132	2.05	103	1.57	387	2.02
	contagious disease	10	0.16	14	0.22	4	0.06	28	0.15
	dermatitis	48	0.78	55	0.85	68	1.04	171	0.89
	dust disease, noc	4	0.07	3	0.05	.	.	7	0.04
	loss of hearing	33	0.54	23	0.36	19	0.29	75	0.39
	mental disorder	13	0.21	11	0.17	15	0.23	39	0.20
	mental stress	66	1.07	63	0.98	75	1.15	204	1.07
	poisoning - chemical,(other than metals)	2	0.03	4	0.06	3	0.05	9	0.05
	radiation	.	.	.	.	1	0.02	1	0.01
	respiratory disorders	63	1.03	63	0.98	50	0.76	176	0.92
	all other specific injuries noc	795	12.94	892	13.86	798	12.19	2485	12.99
	amputation	7	0.11	12	0.19	13	0.20	32	0.17
	angina pectoris	35	0.57	34	0.53	35	0.53	104	0.54
	asphyxiation	2	0.03	2	0.03	3	0.05	7	0.04
	burn	28	0.46	42	0.65	36	0.55	106	0.55
	concussion	35	0.57	26	0.40	35	0.53	96	0.50
	contusion	426	6.93	499	7.75	527	8.05	1452	7.59
	crushing	18	0.29	14	0.22	16	0.24	48	0.25
	dislocation	53	0.86	48	0.75	38	0.58	139	0.73
	electric shock	2	0.03	5	0.08	6	0.09	13	0.07
	enucleation	2	0.03	.	.	.	.	2	0.01
	foreign body	32	0.52	53	0.82	52	0.79	137	0.72

Table D3: 2014-2016 FROI Claims By Nature of Injury (Detailed) - Denied

Inj.Nature	Inj.Nature.Desc	Year							
		2014		2015		2016		All Years	
		Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
	fracture	207	3.37	222	3.45	236	3.60	665	3.48
	freezing	.	.	3	0.05	1	0.02	4	0.02
	hearing loss or impairment	55	0.90	23	0.36	40	0.61	118	0.62
	heat prostration	31	0.50	27	0.42	38	0.58	96	0.50
	hernia	107	1.74	97	1.51	101	1.54	305	1.59
	infection	61	0.99	57	0.89	56	0.86	174	0.91
	inflammation	247	4.02	281	4.36	306	4.67	834	4.36
	laceration	214	3.48	241	3.74	208	3.18	663	3.47
	myocardial infarction	55	0.90	57	0.89	66	1.01	178	0.93
	no physical injury	286	4.66	311	4.83	303	4.63	900	4.70
	poisoning - general	17	0.28	14	0.22	18	0.27	49	0.26
	puncture	56	0.91	67	1.04	65	0.99	188	0.98
	rupture	19	0.31	22	0.34	15	0.23	56	0.29
	severance	3	0.05	1	0.02	4	0.06	8	0.04
	sprain	432	7.03	420	6.52	436	6.66	1288	6.73
	strain	2034	33.11	2051	31.86	2165	33.06	6250	32.67
	syncope	156	2.54	210	3.26	216	3.30	582	3.04
	vascular	7	0.11	21	0.33	31	0.47	59	0.31
	vision loss	3	0.05	3	0.05	2	0.03	8	0.04
	All	6143	99.98	6438	100.04	6548	99.99	19129	99.99

Notes:

1. Percentage totals may not equal 100 percent due to rounding error or missing data.

Table D4: 2014-2016 FROI Claims By Market Share - Denied

Self.Ins	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
Insured	5466	88.98	5795	90.01	5806	88.67	17067	89.22
Self-Insured	677	11.02	643	9.99	742	11.33	2062	10.78
All	6143	100.00	6438	100.00	6548	100.00	19129	100.00

Table D5: 2014-2016 FROI Claims By Age Group At Injury - Denied

Age.Cat	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
14-15	1	0.02	5	0.08	3	0.05	9	0.05
16-19	157	2.56	213	3.31	225	3.44	595	3.11
20-24	664	10.81	754	11.71	718	10.97	2136	11.17
25-34	1183	19.26	1294	20.10	1270	19.40	3747	19.59
35-44	1329	21.63	1297	20.15	1331	20.33	3957	20.69
45-54	1508	24.55	1537	23.87	1545	23.59	4590	23.99
55-64	1076	17.52	1059	16.45	1188	18.14	3323	17.37
65-84	211	3.43	266	4.13	256	3.91	733	3.83
85+	7	0.11	7	0.11	7	0.11	21	0.11
All	6136	99.89	6432	99.91	6543	99.94	19111	99.91

Notes:

1. Percentage totals may not equal 100 percent due to rounding error or missing data.
2. Category count totals may not equal overall counts because of missing data.
3. Ages were determined using TransformedDOB (DN0052- See Appendix) that includes actual year and month with day of month assumed as the 15th.

Table D6: 2014-2016 FROI Claims By Gender - Denied

Gender	Year							
	2014		2015		2016		All Years	
	Claims	Pct	Claims	Pct	Claims	Pct	Claims	Pct
Female	2819	45.89	2996	46.54	3062	46.76	8877	46.41
Male	3291	53.57	3413	53.01	3442	52.57	10146	53.04
Unknown	33	0.54	29	0.45	44	0.67	106	0.55
All	6143	100.00	6438	100.00	6548	100.00	19129	100.00

Table D7: 2014-2016 FROI Claims NAICS Three-Digit Annual Claim and Rate Rank - Denied

Naics	Description	Claim.Rank Year			UnadjRate.Rank Year		
		2014	2015	2016	2014	2015	2016
111	Crop Production	62.5	63.0	65.5	39	44	43
112	Animal Production and Aquaculture	76.5	79.0	77.5	73	75	53
113	Forestry and Logging	0.0	79.0	72.5	0	66	17
115	Support Activities for Agriculture and Forestry	0.0	74.5	77.5	0	37	34
212	Mining (except Oil and Gas)	52.5	61.5	69.5	5	17	48
213	Support Activities for Mining	76.5	0.0	0.0	14	0	0
221	Utilities	69.0	67.0	65.5	57	51	32
236	Construction of Buildings	26.5	27.5	35.0	38	45	55
237	Heavy and Civil Engineering Construction	31.0	41.5	43.0	21	43	44
238	Specialty Trade Contractors	8.0	10.0	9.0	30	36	29
311	Food Manufacturing	17.0	19.0	15.0	18	20	21
312	Beverage and Tobacco Product Manufacturing	59.0	58.5	51.0	33	33	24
313	Textile Mills	71.0	64.0	77.5	67	40	79
314	Textile Product Mills	67.0	67.0	62.0	22	26	12
315	Apparel Manufacturing	60.0	67.0	62.0	27	61	35
316	Leather and Allied Product Manufacturing	73.5	79.0	81.5	3	30	33
321	Wood Product Manufacturing	37.0	36.0	34.0	17	16	19
322	Paper Manufacturing	46.0	38.0	49.0	47	28	63
323	Printing and Related Support Activities	50.5	58.5	56.5	36	62	56
325	Chemical Manufacturing	41.0	31.0	29.5	61	52	45
326	Plastics and Rubber Products Manufacturing	25.0	23.0	21.5	26	19	23
327	Nonmetallic Mineral Product Manufacturing	35.0	43.0	31.5	19	29	20
331	Primary Metal Manufacturing	41.0	38.0	29.5	16	14	10
332	Fabricated Metal Product Manufacturing	21.0	20.0	17.0	31	23	25
333	Machinery Manufacturing	32.0	34.0	33.0	51	56	49
334	Computer and Electronic Product Manufacturing	65.5	72.0	72.5	49	77	76
335	Electrical Equipment, Appliance, and Component Manufacturing	38.5	44.0	40.0	45	64	46
336	Transportation Equipment Manufacturing	3.5	3.0	2.0	8	5	5
337	Furniture and Related Product Manufacturing	41.0	24.0	39.0	12	4	13
339	Miscellaneous Manufacturing	43.5	40.0	47.5	43	41	59
423	Merchant Wholesalers, Durable Goods	12.0	12.0	13.0	40	35	40
424	Merchant Wholesalers, Nondurable Goods	20.0	17.0	19.0	41	24	38

Table D7: 2014-2016 FROI Claims NAICS Three-Digit Annual Claim and Rate Rank - Denied

Naics	Description	Claim.Rank Year			UnadjRate.Rank Year		
		2014	2015	2016	2014	2015	2016
425	Wholesale Electronic Markets and Agents and Brokers	26.5	26.0	20.0	25	15	7
441	Motor Vehicle and Parts Dealers	28.5	29.0	37.5	64	69	73
442	Furniture and Home Furnishings Stores	62.5	56.0	58.5	66	54	62
443	Electronics and Appliance Stores	52.5	60.0	53.0	48	73	57
444	Building Material and Garden Equipment and Supplies Dealers	16.0	14.5	16.0	10	8	15
445	Food and Beverage Stores	13.0	18.0	14.0	29	50	37
446	Health and Personal Care Stores	22.5	27.5	24.0	28	31	30
447	Gasoline Stations	47.5	38.0	36.0	65	57	50
448	Clothing and Clothing Accessories Stores	56.5	54.0	51.0	76	78	74
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	56.5	46.5	47.5	60	47	47
452	General Merchandise Stores	3.5	6.0	6.0	11	12	22
453	Miscellaneous Store Retailers	30.0	35.0	21.5	24	32	14
454	Nonstore Retailers	50.5	61.5	44.0	32	70	26
481	Air Transportation	47.5	50.0	60.0	2	2	8
484	Truck Transportation	5.0	5.0	5.0	6	6	9
485	Transit and Ground Passenger Transportation	56.5	56.0	51.0	34	34	28
486	Pipeline Transportation	0.0	79.0	0.0	0	18	0
487	Scenic and Sightseeing Transportation	76.5	79.0	77.5	9	9	11
488	Support Activities for Transportation	45.0	45.0	55.0	37	42	66
492	Couriers and Messengers	7.0	7.0	8.0	4	3	6
493	Warehousing and Storage	6.0	4.0	4.0	1	1	4
511	Publishing Industries (except Internet)	65.5	53.0	68.0	72	46	77
512	Motion Picture and Sound Recording Industries	71.0	70.0	58.5	78	80	64
515	Broadcasting (except Internet)	62.5	72.0	62.0	52	79	54
517	Telecommunications	43.5	32.5	37.5	44	21	27
518	Data Processing, Hosting, and Related Services	73.5	0.0	77.5	77	0	81
519	Other Information Services	0.0	74.5	0.0	0	11	0
521	Monetary Authorities-Central Bank	0.0	0.0	81.5	0	0	1
522	Credit Intermediation and Related Activities	28.5	32.5	31.5	71	76	72

Table D7: 2014-2016 FROI Claims NAICS Three-Digit Annual Claim and Rate Rank - Denied

Naics	Description	Claim.Rank Year			UnadjRate.Rank Year		
		2014	2015	2016	2014	2015	2016
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	68.0	72.0	69.5	75	81	80
524	Insurance Carriers and Related Activities	24.0	21.0	25.5	56	48	61
531	Real Estate	33.0	30.0	27.0	46	49	36
532	Rental and Leasing Services	54.0	41.5	41.0	55	25	31
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	76.5	0.0	72.5	20	0	3
541	Professional, Scientific, and Technical Services	10.0	11.0	12.0	63	68	69
551	Management of Companies and Enterprises	14.0	14.5	10.0	13	22	18
561	Administrative and Support Services	1.0	1.0	1.0	15	10	16
562	Waste Management and Remediation Services	35.0	51.5	54.0	7	27	39
611	Educational Services	22.5	25.0	28.0	59	65	70
621	Ambulatory Health Care Services	15.0	9.0	11.0	70	67	67
622	Hospitals	9.0	8.0	7.0	50	39	41
623	Nursing and Residential Care Facilities	11.0	13.0	18.0	35	38	58
624	Social Assistance	19.0	22.0	23.0	42	55	60
711	Performing Arts, Spectator Sports, and Related Industries	62.5	56.0	65.5	68	58	75
712	Museums, Historical Sites, and Similar Institutions	71.0	134.0	65.5	69	119	42
713	Amusement, Gambling, and Recreation Industries	56.5	51.5	56.5	74	72	78
721	Accommodation	18.0	16.0	25.5	23	13	51
722	Food Services and Drinking Places	2.0	2.0	3.0	58	53	65
811	Repair and Maintenance	38.5	48.0	45.5	54	71	68
812	Personal and Laundry Services	35.0	49.0	45.5	53	74	71
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	49.0	46.5	42.0	62	63	52
814	Private Households	0.0	79.0	77.5	0	82	82
All							

Table D8: 2016 FROI Claims NAICS Three-Digit By Average Claim and Rate Rank - Denied

Rank	Score	Naics	Description	Year	Claims	Unadj.Rate	Claim.Rank	UnadjRate.Rank
1	3.50	336	Transportation Equipment Manufacturing	2016	394	0.548	2.0	5
2	4.00	493	Warehousing and Storage	2016	259	0.759	4.0	4
3	7.00	484	Truck Transportation	2016	219	0.373	5.0	9
4	7.00	492	Couriers and Messengers	2016	179	0.469	8.0	6
5	8.50	561	Administrative and Support Services	2016	688	0.314	1.0	16
6	13.50	425	Wholesale Electronic Markets and Agents and Brokers	2016	66	0.393	20.0	7
7	14.00	452	General Merchandise Stores	2016	196	0.267	6.0	22
8	14.00	551	Management of Companies and Enterprises	2016	137	0.306	10.0	18
9	15.50	444	Building Material and Garden Equipment and Supplies Dealers	2016	91	0.316	16.0	15
10	17.75	453	Miscellaneous Store Retailers	2016	57	0.317	21.5	14
11	18.00	311	Food Manufacturing	2016	96	0.280	15.0	21
12	19.00	238	Specialty Trade Contractors	2016	163	0.218	9.0	29
13	19.75	331	Primary Metal Manufacturing	2016	39	0.371	29.5	10
14	21.00	332	Fabricated Metal Product Manufacturing	2016	84	0.235	17.0	25
15	22.25	326	Plastics and Rubber Products Manufacturing	2016	57	0.248	21.5	23
16	24.00	622	Hospitals	2016	180	0.167	7.0	41
17	25.50	445	Food and Beverage Stores	2016	102	0.187	14.0	37
18	25.75	327	Nonmetallic Mineral Product Manufacturing	2016	38	0.282	31.5	20
19	26.00	337	Furniture and Related Product Manufacturing	2016	30	0.319	39.0	13
20	26.50	321	Wood Product Manufacturing	2016	36	0.299	34.0	19
21	26.50	423	Merchant Wholesalers, Durable Goods	2016	104	0.167	13.0	40
22	27.00	446	Health and Personal Care Stores	2016	52	0.216	24.0	30
23	28.50	424	Merchant Wholesalers, Nondurable Goods	2016	75	0.183	19.0	38
24	31.50	531	Real Estate	2016	47	0.190	27.0	36
25	32.25	517	Telecommunications	2016	31	0.223	37.5	27
26	34.00	481	Air Transportation	2016	9	0.391	60.0	8
27	34.00	722	Food Services and Drinking Places	2016	265	0.107	3.0	65
28	35.00	454	Nonstore Retailers	2016	21	0.226	44.0	26
29	36.00	532	Rental and Leasing Services	2016	28	0.216	41.0	31
30	37.00	314	Textile Product Mills	2016	8	0.325	62.0	12
31	37.25	325	Chemical Manufacturing	2016	39	0.154	29.5	45
32	37.25	999	Non-classifiable Establishments	2016	3	1.395	72.5	2
33	37.50	312	Beverage and Tobacco Product Manufacturing	2016	16	0.244	51.0	24

Table D8: 2016 FROI Claims NAICS Three-Digit By Average Claim and Rate Rank - Denied

Rank	Score	Naics	Description	Year	Claims	Unadj.Rate	Claim.Rank	UnadjRate.Rank
34	37.75	533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	2016	3	0.794	72.5	3
35	38.00	623	Nursing and Residential Care Facilities	2016	80	0.130	18.0	58
36	39.00	621	Ambulatory Health Care Services	2016	132	0.090	11.0	67
37	39.50	485	Transit and Ground Passenger Transportation	2016	16	0.222	51.0	28
38	40.50	541	Professional, Scientific, and Technical Services	2016	111	0.084	12.0	69
39	41.00	333	Machinery Manufacturing	2016	37	0.145	33.0	49
40	41.25	521	Monetary Authorities-Central Bank	2016	1	Inf	81.5	1
41	41.50	624	Social Assistance	2016	55	0.120	23.0	60
42	43.00	335	Electrical Equipment, Appliance, and Component Manufacturing	2016	29	0.153	40.0	46
43	43.00	447	Gasoline Stations	2016	32	0.143	36.0	50
44	43.25	524	Insurance Carriers and Related Activities	2016	51	0.119	25.5	61
45	43.50	237	Heavy and Civil Engineering Construction	2016	24	0.160	43.0	44
46	44.25	487	Scenic and Sightseeing Transportation	2016	2	0.334	77.5	11
47	44.75	113	Forestry and Logging	2016	3	0.311	72.5	17
48	45.00	236	Construction of Buildings	2016	34	0.135	35.0	55
49	46.50	562	Waste Management and Remediation Services	2016	14	0.172	54.0	39
50	47.00	813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	2016	25	0.140	42.0	52
51	47.25	451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	2016	19	0.152	47.5	47
52	48.50	315	Apparel Manufacturing	2016	8	0.192	62.0	35
53	48.75	221	Utilities	2016	7	0.206	65.5	32
54	49.00	611	Educational Services	2016	40	0.084	28.0	70
55	51.75	522	Credit Intermediation and Related Activities	2016	38	0.071	31.5	72
56	53.25	339	Miscellaneous Manufacturing	2016	19	0.123	47.5	59
57	53.75	712	Museums, Historical Sites, and Similar Institutions	2016	7	0.166	65.5	42
58	54.25	111	Crop Production	2016	7	0.163	65.5	43
59	55.00	443	Electronics and Appliance Stores	2016	15	0.130	53.0	57
60	55.25	441	Motor Vehicle and Parts Dealers	2016	31	0.068	37.5	73
61	55.75	115	Support Activities for Agriculture and Forestry	2016	2	0.192	77.5	34
62	56.00	322	Paper Manufacturing	2016	17	0.117	49.0	63

Table D8: 2016 FROI Claims NAICS Three-Digit By Average Claim and Rate Rank - Denied

Rank	Score	Naics	Description	Year	Claims	Unadj.Rate	Claim.Rank	UnadjRate.Rank
63	56.25	323	Printing and Related Support Activities	2016	12	0.130	56.5	56
64	56.75	811	Repair and Maintenance	2016	20	0.084	45.5	68
65	57.25	316	Leather and Allied Product Manufacturing	2016	1	0.196	81.5	33
66	58.00	515	Broadcasting (except Internet)	2016	8	0.136	62.0	54
67	58.25	812	Personal and Laundry Services	2016	20	0.080	45.5	71
68	58.75	212	Mining (except Oil and Gas)	2016	4	0.145	69.5	48
69	60.25	442	Furniture and Home Furnishings Stores	2016	11	0.118	58.5	62
70	60.50	488	Support Activities for Transportation	2016	13	0.105	55.0	66
71	61.25	512	Motion Picture and Sound Recording Industries	2016	11	0.111	58.5	64
72	62.50	448	Clothing and Clothing Accessories Stores	2016	16	0.065	51.0	74
73	65.25	112	Animal Production and Aquaculture	2016	2	0.138	77.5	53
74	70.25	711	Performing Arts, Spectator Sports, and Related Industries	2016	7	0.065	65.5	75
75	72.50	511	Publishing Industries (except Internet)	2016	6	0.063	68.0	77
76	74.25	334	Computer and Electronic Product Manufacturing	2016	3	0.064	72.5	76
77	74.75	523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	2016	4	0.041	69.5	80
78	78.25	313	Textile Mills	2016	2	0.057	77.5	79
79	79.25	518	Data Processing, Hosting, and Related Services	2016	2	0.041	77.5	81
80	79.75	814	Private Households	2016	2	0.028	77.5	82
All					4812			

Notes:

1. Total represents only those denied claims that could be deterministically matched to an industry using the firm's FEIN identifier.

7.3 Claim Aggregations, Rates, and Ranks - Matched Private

Figure 9: 2014-2016 FROI Claims - Matched Private

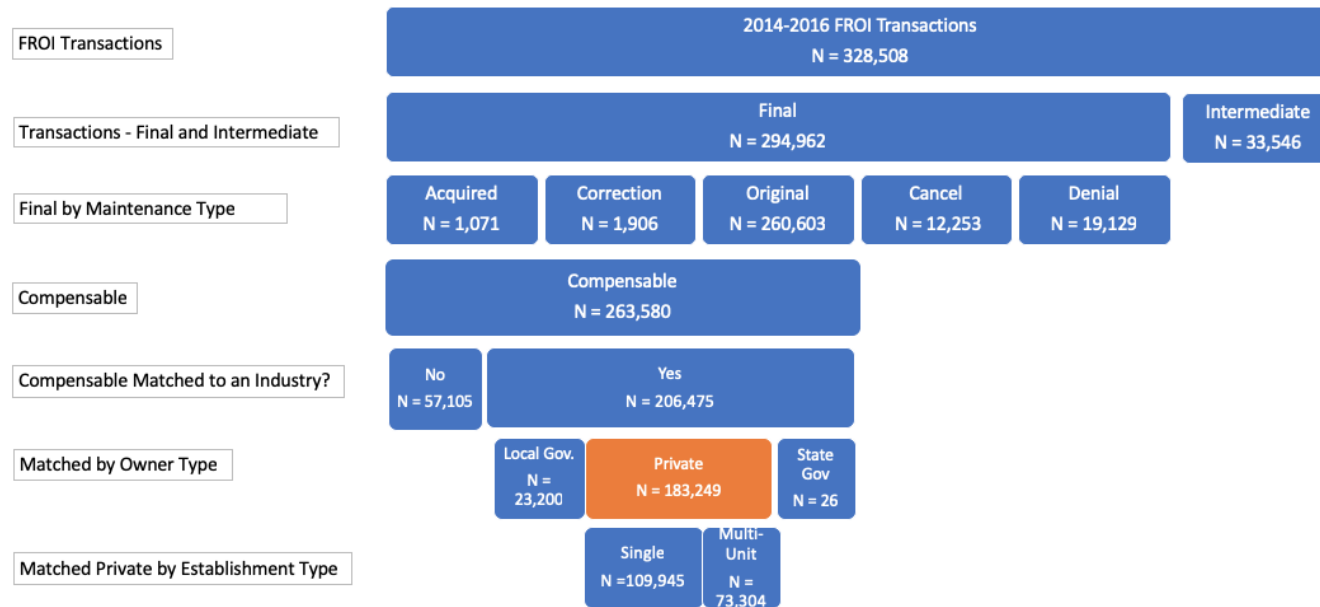


Table P1: 2014-2016 FROI Claims: NAICS Two-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
11	Agriculture, Forestry, Fishing and Hunting	23486	880	1.067	3.5	17	3
21	Mining, Quarrying, and Oil and Gas Extraction	9967	301	1.284	2.4	19	12
22	Utilities	10143	790	1.040	7.5	18	1
23	Construction	334254	10027	1.065	2.8	8	9
31-33	Manufacturing	999790	29621	1.081	2.7	2	11
42	Wholesale Trade	364157	11012	1.088	2.8	7	10
44-45	Retail Trade	980718	24952	0.898	2.8	3	8
48-49	Transportation and Warehousing	445918	18957	1.078	3.9	4	2
51	Information	131540	1163	1.045	0.8	16	18
52	Finance and Insurance	313544	1733	1.035	0.5	15	19
53	Real Estate and Rental and Leasing	109137	2438	0.991	2.3	13	13
54	Professional, Scientific, and Technical Services	379934	5110	1.012	1.3	9	17
55	Management of Companies and Enterprises	124898	4287	1.082	3.2	10	5
56	Administrative and Support and Waste Management and Remediation Services	665330	18902	0.980	2.9	5	7
61	Educational Services	137167	2106	0.896	1.7	14	16
62	Health Care and Social Assistance	1064128	30379	0.970	2.9	1	6
71	Arts, Entertainment, and Recreation	102168	2741	0.815	3.3	12	4
72	Accommodation and Food Services	821400	14298	0.830	2.1	6	14
81	Other Services (except Public Administration)	216833	3492	0.916	1.8	11	15
99	Non-classifiable Establishments	831	60	NA	NA	20	NA
All		7235343	183249				

Table P2: 2014-2016 FROI Claims: NAICS Two-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
11	Agriculture, Forestry, Fishing and Hunting	7893	7833	7760	358	269	253
21	Mining, Quarrying, and Oil and Gas Extraction	3439	3463	3065	125	107	69
22	Utilities	3381	3365	3397	284	278	228
23	Construction	106512	112795	114947	3297	3557	3173
31-33	Manufacturing	324837	332381	342572	9796	10013	9812
42	Wholesale Trade	123208	121056	119893	3749	3780	3483
44-45	Retail Trade	321012	325869	333837	8130	8139	8683
48-49	Transportation and Warehousing	140703	148611	156604	6379	6576	6002
51	Information	43263	43448	44829	379	385	399
52	Finance and Insurance	102506	104466	106572	573	601	559
53	Real Estate and Rental and Leasing	34491	36500	38146	821	830	787
54	Professional, Scientific, and Technical Services	119990	128009	131935	1542	1753	1815
55	Management of Companies and Enterprises	38000	42152	44746	1420	1436	1431
56	Administrative and Support and Waste Management and Remediation Services	215285	222880	227165	6320	6581	6001
61	Educational Services	44195	45418	47554	648	674	784
62	Health Care and Social Assistance	346041	355827	362260	10252	10557	9570
71	Arts, Entertainment, and Recreation	32314	34287	35567	816	961	964
72	Accommodation and Food Services	263975	273535	283890	4698	4763	4837
81	Other Services (except Public Administration)	70977	72073	73783	1153	1217	1122
99	Non-classifiable Establishments	346	270	215	20	23	17
All		2342368	2414238	2478737	60760	62500	59989

Table P3: 2014-2016 FROI Claims: NAICS Two-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	2015	2016	2014	2015	2016
11	Agriculture, Forestry, Fishing and Hunting	17	18	17	2	4	4
21	Mining, Quarrying, and Oil and Gas Extraction	19	19	19	7	12	15
22	Utilities	18	17	18	1	1	1
23	Construction	8	8	8	9	8	11
31-33	Manufacturing	2	2	1	11	10	10
42	Wholesale Trade	7	7	7	12	9	8
44-45	Retail Trade	3	3	3	10	11	6
48-49	Transportation and Warehousing	4	5	4	3	2	2
51	Information	16	16	16	18	18	18
52	Finance and Insurance	15	15	15	19	19	19
53	Real Estate and Rental and Leasing	12	13	13	13	13	12
54	Professional, Scientific, and Technical Services	9	9	9	17	17	17
55	Management of Companies and Enterprises	10	10	10	4	5	5
56	Administrative and Support and Waste Management and Remediation Services	5	4	5	8	7	9
61	Educational Services	14	14	14	16	16	14
62	Health Care and Social Assistance	1	1	2	6	6	7
71	Arts, Entertainment, and Recreation	13	12	12	5	3	3
72	Accommodation and Food Services	6	6	6	14	14	13
81	Other Services (except Public Administration)	11	11	11	15	15	16
99	Non-classifiable Establishments	20	20	20	NA	NA	NA
All							

Table P4: 2014-2016 FROI Claims: NAICS Three-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
111	Crop Production	12926	450	1.034	3.37	58.0	22
112	Animal Production and Aquaculture	4295	236	1.124	4.89	69.0	8
113	Forestry and Logging	2932	117	1.015	3.93	73.0	13
115	Support Activities for Agriculture and Forestry	3298	77	1.183	1.97	75.0	53
211	Oil and Gas Extraction	114	4	1.444	2.43	89.0	42
212	Mining (except Oil and Gas)	8879	266	1.211	2.47	68.0	40
213	Support Activities for Mining	974	31	1.697	1.88	79.0	54
221	Utilities	10143	790	1.039	7.49	51.0	3
236	Construction of Buildings	76303	1940	NA	NA	25.0	NA
237	Heavy and Civil Engineering Construction	44342	1328	NA	NA	32.0	NA
238	Specialty Trade Contractors	213610	6759	NA	NA	7.0	NA
311	Food Manufacturing	100138	3166	1.059	2.99	19.0	28
312	Beverage and Tobacco Product Manufacturing	17955	470	1.084	2.41	57.0	43
313	Textile Mills	10339	268	1.080	2.40	67.0	44
314	Textile Product Mills	7451	205	1.011	2.72	70.0	35
315	Apparel Manufacturing	12350	357	0.990	2.92	64.0	30
316	Leather and Allied Product Manufacturing	1401	93	1.019	6.52	74.0	5
321	Wood Product Manufacturing	34826	1214	1.041	3.35	35.0	23
322	Paper Manufacturing	43730	816	1.112	1.68	48.0	59
323	Printing and Related Support Activities	27907	429	1.045	1.47	60.0	62
324	Petroleum and Coal Products Manufacturing	3270	20	1.096	0.56	80.5	76
325	Chemical Manufacturing	76017	1091	1.085	1.32	39.0	67
326	Plastics and Rubber Products Manufacturing	65621	2113	1.085	2.97	23.0	29
327	Nonmetallic Mineral Product Manufacturing	38016	1346	1.060	3.34	31.0	25
331	Primary Metal Manufacturing	30925	1286	1.102	3.77	33.0	17
332	Fabricated Metal Product Manufacturing	105024	3808	1.085	3.34	16.0	24
333	Machinery Manufacturing	76502	1420	1.090	1.70	30.0	58
334	Computer and Electronic Product Manufacturing	14720	151	1.041	0.99	72.0	70
335	Electrical Equipment, Appliance, and Component Manufacturing	58058	965	1.079	1.54	41.0	60
336	Transportation Equipment Manufacturing	202387	7955	1.112	3.53	5.0	20
337	Furniture and Related Product Manufacturing	27457	1616	1.057	5.57	27.0	6
339	Miscellaneous Manufacturing	45699	832	1.067	1.71	46.0	57
423	Merchant Wholesalers, Durable Goods	187636	5662	1.090	2.77	10.0	33

Table P4: 2014-2016 FROI Claims: NAICS Three-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
424	Merchant Wholesalers, Nondurable Goods	122348	3491	1.099	2.60	18.0	39
425	Wholesale Electronic Markets and Agents and Brokers	54171	1859	0.914	3.76	26.0	18
441	Motor Vehicle and Parts Dealers	132217	2924	1.060	2.09	20.0	49
442	Furniture and Home Furnishings Stores	27369	725	0.957	2.77	53.0	34
443	Electronics and Appliance Stores	34320	365	1.001	1.06	63.0	69
444	Building Material and Garden Equipment and Supplies Dealers	83219	5432	0.958	6.81	12.0	4
445	Food and Beverage Stores	160980	4888	0.842	3.61	14.0	19
446	Health and Personal Care Stores	70503	893	0.918	1.38	43.0	65
447	Gasoline Stations	66486	940	0.967	1.46	42.0	63
448	Clothing and Clothing Accessories Stores	73277	442	0.750	0.80	59.0	71
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	36264	677	0.793	2.35	55.0	45
452	General Merchandise Stores	215962	5499	0.851	2.99	11.0	27
453	Miscellaneous Store Retailers	52633	1587	0.872	3.46	28.0	21
454	Nonstore Retailers	27492	580	0.977	2.16	56.0	48
481	Air Transportation	6966	743	1.033	10.33	52.0	2
483	Water Transportation	7461	7	1.529	0.06	87.0	81
484	Truck Transportation	173112	8230	1.223	3.89	4.0	14
485	Transit and Ground Passenger Transportation	20814	799	0.931	4.12	50.0	11
486	Pipeline Transportation	1158	6	1.142	0.45	88.0	78
487	Scenic and Sightseeing Transportation	1140	45	0.950	4.15	78.0	10
488	Support Activities for Transportation	36247	808	1.096	2.03	49.0	51
491	Postal Service	0	12	0.960	Inf	83.0	1
492	Couriers and Messengers	110439	5733	0.936	5.55	9.0	7
493	Warehousing and Storage	88044	2574	1.006	2.91	21.0	32
511	Publishing Industries (except Internet)	28206	171	1.052	0.58	71.0	74
512	Motion Picture and Sound Recording Industries	25891	280	1.005	1.08	66.0	68
515	Broadcasting (except Internet)	17608	373	1.067	1.99	62.0	52
517	Telecommunications	43270	313	1.051	0.69	65.0	72
518	Data Processing, Hosting, and Related Services	14639	16	1.058	0.10	82.0	80
519	Other Information Services	1928	10	0.921	0.56	84.5	75

Table P4: 2014-2016 FROI Claims: NAICS Three-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
521	Monetary Authorities-Central Bank	187	3	NA	NA	90.0	NA
522	Credit Intermediation and Related Activities	159087	826	1.039	0.50	47.0	77
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	28669	48	NA	NA	77.0	NA
524	Insurance Carriers and Related Activities	124801	848	1.040	0.65	45.0	73
525	Funds, Trusts, and Other Financial Vehicles	132	8	NA	NA	86.0	NA
531	Real Estate	72061	1537	0.981	2.17	29.0	47
532	Rental and Leasing Services	35941	891	1.002	2.47	44.0	41
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	1136	10	NA	NA	84.5	NA
541	Professional, Scientific, and Technical Services	379934	5110	1.012	1.33	13.0	66
551	Management of Companies and Enterprises	124898	4287	NA	NA	15.0	NA
561	Administrative and Support Services	641616	18205	0.973	2.92	1.0	31
562	Waste Management and Remediation Services	23714	697	1.095	2.68	54.0	37
611	Educational Services	137167	2106	0.896	1.71	24.0	55
621	Ambulatory Health Care Services	430547	5892	0.978	1.40	8.0	64
622	Hospitals	313153	13779	1.001	4.40	2.0	9
623	Nursing and Residential Care Facilities	184101	7064	0.951	4.03	6.0	12
624	Social Assistance	136327	3644	0.869	3.08	17.0	26
711	Performing Arts, Spectator Sports, and Related Industries	31235	1115	0.927	3.85	38.0	15
712	Museums, Historical Sites, and Similar Institutions	12078	424	0.911	3.85	61.0	16
713	Amusement, Gambling, and Recreation Industries	58856	1202	0.754	2.71	36.0	36
721	Accommodation	104755	2196	0.935	2.24	22.0	46
722	Food Services and Drinking Places	716647	12102	0.816	2.07	3.0	50
811	Repair and Maintenance	68855	1242	1.053	1.71	34.0	56
812	Personal and Laundry Services	73915	1032	0.916	1.52	40.0	61
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	53520	1198	0.849	2.64	37.0	38
814	Private Households	20543	20	0.741	0.13	80.5	79
999	Non-classifiable Establishments	831	60	NA	NA	76.0	NA
All		7234115	183249				

Table P5: 2014-2016 FROI Claims: NAICS Three-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
111	Crop Production	4409	4227	4290	193	119	138
112	Animal Production and Aquaculture	1386	1458	1451	91	86	59
113	Forestry and Logging	949	1019	964	46	38	33
115	Support Activities for Agriculture and Forestry	1140	1118	1040	28	26	23
211	Oil and Gas Extraction	50	0	0	4	0	0
212	Mining (except Oil and Gas)	3031	3098	2750	107	92	67
213	Support Activities for Mining	358	325	291	14	15	2
221	Utilities	3381	3365	3397	284	278	228
236	Construction of Buildings	24393	26815	25095	625	736	579
237	Heavy and Civil Engineering Construction	14685	14676	14981	481	442	405
238	Specialty Trade Contractors	67434	71304	74872	2191	2379	2189
311	Food Manufacturing	32659	33216	34263	1047	1060	1059
312	Beverage and Tobacco Product Manufacturing	5464	5934	6557	181	151	138
313	Textile Mills	3432	3406	3501	107	76	85
314	Textile Product Mills	2556	2435	2460	73	70	62
315	Apparel Manufacturing	3994	4195	4161	117	125	115
316	Leather and Allied Product Manufacturing	361	529	511	18	40	35
321	Wood Product Manufacturing	11219	11549	12058	410	385	419
322	Paper Manufacturing	14617	14595	14518	302	250	264
323	Printing and Related Support Activities	9465	9237	9205	141	137	151
324	Petroleum and Coal Products Manufacturing	1110	1067	1093	6	9	5
325	Chemical Manufacturing	25242	25401	25374	390	330	371
326	Plastics and Rubber Products Manufacturing	20755	21848	23018	706	746	661
327	Nonmetallic Mineral Product Manufacturing	11910	12627	13479	466	479	401
331	Primary Metal Manufacturing	10068	10341	10516	354	451	481
332	Fabricated Metal Product Manufacturing	34413	34879	35732	1308	1364	1136
333	Machinery Manufacturing	25588	25348	25566	422	485	513
334	Computer and Electronic Product Manufacturing	5056	4940	4724	64	43	44
335	Electrical Equipment, Appliance, and Component Manufacturing	19355	19708	18995	344	307	314
336	Transportation Equipment Manufacturing	63798	66658	71931	2479	2718	2758
337	Furniture and Related Product Manufacturing	9036	9009	9412	558	519	539
339	Miscellaneous Manufacturing	14740	15459	15500	303	268	261

Table P5: 2014-2016 FROI Claims: NAICS Three-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
423	Merchant Wholesalers, Durable Goods	62863	62612	62161	1938	1918	1806
424	Merchant Wholesalers, Nondurable Goods	40534	40868	40946	1138	1242	1111
425	Wholesale Electronic Markets and Agents and Brokers	19810	17575	16786	673	620	566
441	Motor Vehicle and Parts Dealers	42604	44006	45607	917	1015	992
442	Furniture and Home Furnishings Stores	8825	9193	9351	224	234	267
443	Electronics and Appliance Stores	11250	11545	11525	117	125	123
444	Building Material and Garden Equipment and Supplies Dealers	27062	27395	28762	1791	1743	1898
445	Food and Beverage Stores	53199	53355	54426	1645	1560	1683
446	Health and Personal Care Stores	23068	23405	24030	324	288	281
447	Gasoline Stations	21923	22107	22456	305	282	353
448	Clothing and Clothing Accessories Stores	24555	24276	24446	151	142	149
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	11399	12340	12525	193	239	245
452	General Merchandise Stores	71141	71378	73443	1835	1860	1804
453	Miscellaneous Store Retailers	17092	17558	17983	433	441	713
454	Nonstore Retailers	8896	9311	9285	195	210	175
481	Air Transportation	2393	2272	2301	255	249	239
483	Water Transportation	2504	2531	2426	3	1	3
484	Truck Transportation	56536	57828	58748	2905	2809	2516
485	Transit and Ground Passenger Transportation	6506	7113	7195	250	266	283
486	Pipeline Transportation	378	392	388	1	3	2
487	Scenic and Sightseeing Transportation	263	279	598	27	12	6
488	Support Activities for Transportation	11634	12243	12370	285	258	265
491	Postal Service	0	0	0	1	3	8
492	Couriers and Messengers	35576	36696	38167	1880	2123	1730
493	Warehousing and Storage	24911	29011	34122	772	852	950
511	Publishing Industries (except Internet)	9443	9236	9527	70	45	56
512	Motion Picture and Sound Recording Industries	7762	8216	9913	70	110	100
515	Broadcasting (except Internet)	5904	5839	5865	131	131	111
517	Telecommunications	14809	14589	13872	97	91	125

Table P5: 2014-2016 FROI Claims: NAICS Three-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
518	Data Processing, Hosting, and Related Services	4770	4932	4937	8	5	3
519	Other Information Services	576	637	715	3	3	4
521	Monetary Authorities-Central Bank	0	0	0	0	2	1
522	Credit Intermediation and Related Activities	52640	52982	53465	242	295	289
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	9342	9617	9710	17	16	15
524	Insurance Carriers and Related Activities	40205	41618	42978	308	287	253
525	Funds, Trusts, and Other Financial Vehicles	132	0	0	6	1	1
531	Real Estate	23214	24052	24795	500	540	497
532	Rental and Leasing Services	10899	12069	12973	320	285	286
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	379	379	378	1	5	4
541	Professional, Scientific, and Technical Services	119990	128009	131935	1542	1753	1815
551	Management of Companies and Enterprises	38000	42152	44746	1420	1436	1431
561	Administrative and Support Services	207736	214843	219037	6111	6333	5761
562	Waste Management and Remediation Services	7549	8037	8128	209	248	240
611	Educational Services	44195	45418	47554	648	674	784
621	Ambulatory Health Care Services	139879	144014	146654	1902	2071	1919
622	Hospitals	100551	104702	107900	4611	4840	4328
623	Nursing and Residential Care Facilities	60730	61636	61735	2529	2344	2191
624	Social Assistance	44881	45475	45971	1210	1302	1132
711	Performing Arts, Spectator Sports, and Related Industries	9978	10531	10726	331	400	384
712	Museums, Historical Sites, and Similar Institutions	3746	4110	4222	137	146	141
713	Amusement, Gambling, and Recreation Industries	18590	19646	20620	348	415	439
721	Accommodation	33796	35004	35955	750	716	730
722	Food Services and Drinking Places	230180	238531	247936	3948	4047	4107
811	Repair and Maintenance	22099	23053	23703	375	430	437
812	Personal and Laundry Services	24288	24529	25098	332	354	346
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	17903	17714	17903	442	424	332

Table P5: 2014-2016 FROI Claims: NAICS Three-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
814	Private Households	6687	6777	7079	4	9	7
999	Non-classifiable Establishments	346	270	215	20	23	17
All		2342175	2413692	2477997	60760	62500	59989

Table P6: 2014-2016 FROI Claims: NAICS Three-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	2015	2016	2014	2015	2016
111	Crop Production	56.5	65.0	60.5	15	40	21
112	Animal Production and Aquaculture	68.0	69.0	70.0	9	8	12
113	Forestry and Logging	73.0	75.0	74.0	11	10	23
115	Support Activities for Agriculture and Forestry	74.0	76.0	75.0	53	48	54
211	Oil and Gas Extraction	83.5	0.0	0.0	8	0	0
212	Mining (except Oil and Gas)	65.5	67.0	68.0	30	44	47
213	Support Activities for Mining	79.0	79.0	86.5	39	38	77
221	Utilities	49.0	47.0	55.0	4	3	5
236	Construction of Buildings	26.0	23.0	26.0	NA	NA	NA
237	Heavy and Civil Engineering Construction	29.0	32.0	35.0	NA	NA	NA
238	Specialty Trade Contractors	7.0	6.0	7.0	NA	NA	NA
311	Food Manufacturing	19.0	19.0	19.0	33	27	25
312	Beverage and Tobacco Product Manufacturing	58.0	57.0	60.5	36	43	49
313	Textile Mills	65.5	70.0	67.0	40	51	39
314	Textile Product Mills	69.0	71.0	69.0	38	35	37
315	Apparel Manufacturing	63.5	63.5	64.0	31	31	30
316	Leather and Allied Product Manufacturing	77.0	74.0	73.0	10	4	3
321	Wood Product Manufacturing	34.0	38.0	34.0	24	25	20
322	Paper Manufacturing	47.0	51.0	49.0	56	60	55
323	Printing and Related Support Activities	60.0	61.0	57.0	64	63	57
324	Petroleum and Coal Products Manufacturing	81.5	81.5	81.0	76	70	76
325	Chemical Manufacturing	35.0	40.0	38.0	65	68	62
326	Plastics and Rubber Products Manufacturing	23.0	22.0	25.0	29	26	31
327	Nonmetallic Mineral Product Manufacturing	30.0	30.0	36.0	20	19	32
331	Primary Metal Manufacturing	37.0	31.0	31.0	25	12	10
332	Fabricated Metal Product Manufacturing	16.0	16.0	16.0	22	21	24
333	Machinery Manufacturing	33.0	29.0	29.0	61	56	52
334	Computer and Electronic Product Manufacturing	72.0	73.0	72.0	68	71	68
335	Electrical Equipment, Appliance, and Component Manufacturing	39.0	41.0	42.0	58	62	59
336	Transportation Equipment Manufacturing	6.0	5.0	4.0	23	20	19
337	Furniture and Related Product Manufacturing	27.0	28.0	28.0	6	7	6
339	Miscellaneous Manufacturing	46.0	48.0	50.0	55	58	56

Table P6: 2014-2016 FROI Claims: NAICS Three-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	2015	2016	2014	2015	2016
423	Merchant Wholesalers, Durable Goods	8.0	10.0	11.0	41	33	34
424	Merchant Wholesalers, Nondurable Goods	18.0	18.0	18.0	43	39	36
425	Wholesale Electronic Markets and Agents and Brokers	24.0	26.0	27.0	13	22	18
441	Motor Vehicle and Parts Dealers	20.0	20.0	20.0	54	49	44
442	Furniture and Home Furnishings Stores	53.0	55.0	47.0	42	41	22
443	Electronics and Appliance Stores	63.5	63.5	63.0	69	69	65
444	Building Material and Garden Equipment and Supplies Dealers	12.0	13.0	9.0	5	5	4
445	Food and Beverage Stores	13.0	14.0	14.0	19	23	16
446	Health and Personal Care Stores	42.0	43.0	46.0	60	65	64
447	Gasoline Stations	45.0	46.0	39.0	63	64	58
448	Clothing and Clothing Accessories Stores	59.0	60.0	58.0	71	72	70
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	56.5	54.0	52.0	51	42	38
452	General Merchandise Stores	11.0	11.0	12.0	27	30	26
453	Miscellaneous Store Retailers	32.0	33.0	24.0	35	32	8
454	Nonstore Retailers	55.0	56.0	56.0	48	46	48
481	Air Transportation	50.0	52.0	54.0	3	2	2
483	Water Transportation	85.5	89.5	84.5	81	81	79
484	Truck Transportation	4.0	4.0	5.0	16	13	17
485	Transit and Ground Passenger Transportation	51.0	49.0	45.0	17	18	9
486	Pipeline Transportation	88.0	86.0	86.5	78	73	75
487	Scenic and Sightseeing Transportation	75.0	80.0	80.0	2	15	66
488	Support Activities for Transportation	48.0	50.0	48.0	47	55	46
491	Postal Service	88.0	86.0	78.0	1	1	1
492	Couriers and Messengers	10.0	8.0	13.0	7	6	7
493	Warehousing and Storage	21.0	21.0	21.0	28	29	35
511	Publishing Industries (except Internet)	70.5	72.0	71.0	73	78	71
512	Motion Picture and Sound Recording Industries	70.5	66.0	66.0	70	66	67
515	Broadcasting (except Internet)	62.0	62.0	65.0	50	53	50
517	Telecommunications	67.0	68.0	62.0	74	75	69

Table P6: 2014-2016 FROI Claims: NAICS Three-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	2015	2016	2014	2015	2016
518	Data Processing, Hosting, and Related Services	80.0	83.5	84.5	79	80	80
519	Other Information Services	85.5	86.0	82.5	75	77	72
521	Monetary Authorities-Central Bank	0.0	88.0	88.5	0	NA	NA
522	Credit Intermediation and Related Activities	52.0	42.0	43.0	77	76	74
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	78.0	78.0	77.0	NA	NA	NA
524	Insurance Carriers and Related Activities	44.0	44.0	51.0	72	74	73
525	Funds, Trusts, and Other Financial Vehicles	81.5	89.5	88.5	NA	NA	NA
531	Real Estate	28.0	27.0	30.0	49	47	43
532	Rental and Leasing Services	43.0	45.0	44.0	37	45	40
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	88.0	83.5	82.5	NA	NA	NA
541	Professional, Scientific, and Technical Services	14.0	12.0	10.0	67	67	61
551	Management of Companies and Enterprises	15.0	15.0	15.0	NA	NA	NA
561	Administrative and Support Services	1.0	1.0	1.0	32	28	33
562	Waste Management and Remediation Services	54.0	53.0	53.0	45	36	28
611	Educational Services	25.0	25.0	22.0	57	57	51
621	Ambulatory Health Care Services	9.0	9.0	8.0	66	61	63
622	Hospitals	2.0	2.0	2.0	12	9	11
623	Nursing and Residential Care Facilities	5.0	7.0	6.0	14	14	13
624	Social Assistance	17.0	17.0	17.0	26	24	27
711	Performing Arts, Spectator Sports, and Related Industries	41.0	37.0	37.0	21	11	15
712	Museums, Historical Sites, and Similar Institutions	61.0	117.0	59.0	18	33	14
713	Amusement, Gambling, and Recreation Industries	38.0	36.0	32.0	44	34	29
721	Accommodation	22.0	24.0	23.0	46	50	41
722	Food Services and Drinking Places	3.0	3.0	3.0	52	52	45
811	Repair and Maintenance	36.0	34.0	33.0	59	54	53
812	Personal and Laundry Services	40.0	39.0	40.0	62	59	60
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	31.0	35.0	41.0	34	37	42

Table P6: 2014-2016 FROI Claims: NAICS Three-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	2015	2016	2014	2015	2016
814	Private Households	83.5	81.5	79.0	80	79	78
999	Non-classifiable Establishments	76.0	77.0	76.0	<i>NA</i>	<i>NA</i>	<i>NA</i>
All							

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
1111	Oilseed and Grain Farming	1556	18	NA	NA	271.0	NA
1112	Vegetable and Melon Farming	1858	58	NA	NA	227.5	NA
1113	Fruit and Tree Nut Farming	134	1	NA	NA	317.5	NA
1114	Greenhouse, Nursery, and Floriculture Production	7843	316	NA	NA	118.0	NA
1119	Other Crop Farming	1536	57	NA	NA	229.5	NA
1121	Cattle Ranching and Farming	1872	74	NA	NA	215.5	NA
1122	Hog and Pig Farming	761	80	NA	NA	211.0	NA
1123	Poultry and Egg Production	712	67	NA	NA	219.0	NA
1124	Sheep and Goat Farming	0	1	NA	NA	317.5	NA
1125	Aquaculture	0	7	NA	NA	290.5	NA
1129	Other Animal Production	289	7	NA	NA	290.5	NA
1131	Timber Tract Operations	32	1	NA	NA	317.5	NA
1133	Logging	2901	116	0.979	4.08	188.0	18
1151	Support Activities for Crop Production	1754	57	NA	NA	229.5	NA
1152	Support Activities for Animal Production	672	13	NA	NA	279.5	NA
1153	Support Activities for Forestry	873	7	NA	NA	290.5	NA
2111	Oil and Gas Extraction	114	4	NA	NA	303.5	NA
2121	Coal Mining	188	1	1.257	0.42	317.5	139
2122	Metal Ore Mining	1174	169	1.268	11.35	168.5	2
2123	Nonmetallic Mineral Mining and Quarrying	5181	96	1.166	1.59	197.5	95
2131	Support Activities for Mining	974	31	NA	NA	249.5	NA
2211	Electric Power Generation, Transmission and Distribution	7219	708	1.041	9.42	60.0	4
2212	Natural Gas Distribution	1483	58	1.038	3.77	227.5	26
2213	Water, Sewage and Other Systems	1440	24	0.990	1.68	259.5	91
2361	Residential Building Construction	30972	733	NA	NA	56.0	NA
2362	Nonresidential Building Construction	45331	1207	NA	NA	32.0	NA
2371	Utility System Construction	20068	541	NA	NA	78.5	NA
2372	Land Subdivision	2598	11	NA	NA	283.0	NA
2373	Highway, Street, and Bridge Construction	16333	669	NA	NA	65.0	NA
2379	Other Heavy and Civil Engineering Construction	5343	107	NA	NA	191.0	NA
2381	Foundation, Structure, and Building Exterior Contractors	40433	1352	NA	NA	29.0	NA
2382	Building Equipment Contractors	113691	3664	NA	NA	10.0	NA

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
2383	Building Finishing Contractors	30307	894	NA	NA	47.0	NA
2389	Other Specialty Trade Contractors	29178	849	NA	NA	49.0	NA
3111	Animal Food Manufacturing	1346	5	NA	NA	299.5	NA
3112	Grain and Oilseed Milling	5944	184	NA	NA	163.0	NA
3113	Sugar and Confectionery Product Manufacturing	7617	319	1.036	4.04	116.0	19
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	11273	256	1.066	2.13	135.0	76
3115	Dairy Product Manufacturing	7173	546	1.140	6.67	77.0	7
3116	Animal Slaughtering and Processing	33108	694	1.080	1.94	61.0	79
3118	Bakeries and Tortilla Manufacturing	19130	630	0.980	3.36	68.0	31
3119	Other Food Manufacturing	14548	317	NA	NA	117.0	NA
3121	Beverage Manufacturing	15279	465	1.075	2.83	88.0	46
3122	Tobacco Manufacturing	2677	5	1.136	0.16	299.5	146
3131	Fiber, Yarn, and Thread Mills	4223	87	1.042	1.98	206.0	78
3132	Fabric Mills	2887	69	1.072	2.23	218.0	70
3133	Textile and Fabric Finishing and Fabric Coating Mills	3229	112	1.117	3.11	190.0	37
3141	Textile Furnishings Mills	742	20	1.023	2.64	265.5	52
3149	Other Textile Product Mills	6709	185	NA	NA	162.0	NA
3151	Apparel Knitting Mills	2230	35	NA	NA	246.5	NA
3152	Cut and Sew Apparel Manufacturing	9909	321	0.982	3.30	114.0	32
3159	Apparel Accessories and Other Apparel Manufacturing	211	1	1.524	0.31	317.5	144
3162	Footwear Manufacturing	738	86	1.020	11.42	208.0	1
3169	Other Leather and Allied Product Manufacturing	451	7	NA	NA	290.5	NA
3211	Sawmills and Wood Preservation	7998	375	1.029	4.56	100.0	13
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	3091	124	1.034	3.88	185.5	25
3219	Other Wood Product Manufacturing	23737	689	1.047	2.77	63.0	47
3221	Pulp, Paper, and Paperboard Mills	16971	231	1.128	1.21	143.0	107
3222	Converted Paper Product Manufacturing	26759	561	1.090	1.92	76.0	81
3231	Printing and Related Support Activities	27907	425	1.045	1.46	90.0	98
3241	Petroleum and Coal Products Manufacturing	3270	20	1.096	0.56	265.5	136

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
3251	Basic Chemical Manufacturing	14437	259	NA	NA	133.0	NA
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	31501	322	1.096	0.93	112.5	117
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	1332	46	1.094	3.16	237.0	34
3254	Pharmaceutical and Medicine Manufacturing	6000	56	1.102	0.85	231.5	120
3255	Paint, Coating, and Adhesive Manufacturing	2844	73	1.010	2.54	217.0	56
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	9817	194	1.038	1.90	159.0	82
3259	Other Chemical Product and Preparation Manufacturing	10088	141	NA	NA	178.5	NA
3261	Plastics Product Manufacturing	39122	1440	1.070	3.44	25.0	30
3262	Rubber Product Manufacturing	26500	673	1.104	2.30	64.0	66
3271	Clay Product and Refractory Manufacturing	5426	201	0.994	3.73	155.5	29
3272	Glass and Glass Product Manufacturing	11953	535	1.073	4.17	80.0	17
3273	Cement and Concrete Product Manufacturing	14199	422	NA	NA	92.0	NA
3274	Lime and Gypsum Product Manufacturing	951	19	NA	NA	268.5	NA
3279	Other Nonmetallic Mineral Product Manufacturing	5486	144	1.054	2.49	177.0	59
3311	Iron and Steel Mills and Ferroalloy Manufacturing	4497	90	NA	NA	204.0	NA
3312	Steel Product Manufacturing from Purchased Steel	4384	134	NA	NA	181.0	NA
3313	Alumina and Aluminum Production and Processing	8765	401	1.155	3.96	96.0	20
3314	Nonferrous Metal (except Aluminum) Production and Processing	4812	146	1.069	2.84	176.0	45
3315	Foundries	8468	515	1.101	5.53	83.0	9
3321	Forging and Stamping	8255	390	1.087	4.35	97.0	16
3322	Cutlery and Handtool Manufacturing	1691	41	1.111	2.18	241.0	74
3323	Architectural and Structural Metals Manufacturing	26153	975	NA	NA	41.0	NA
3324	Boiler, Tank, and Shipping Container Manufacturing	8497	300	NA	NA	122.0	NA

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
3325	Hardware Manufacturing	873	130	NA	NA	183.0	NA
3326	Spring and Wire Product Manufacturing	5205	87	NA	NA	206.0	NA
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	15538	736	1.062	4.46	55.0	14
3328	Coating, Engraving, Heat Treating, and Allied Activities	8142	353	1.114	3.89	104.0	24
3329	Other Fabricated Metal Product Manufacturing	29514	692	1.059	2.21	62.0	72
3331	Agriculture, Construction, and Mining Machinery Manufacturing	10779	169	1.106	1.42	168.5	100
3332	Industrial Machinery Manufacturing	3847	124	NA	NA	185.5	NA
3333	Commercial and Service Industry Machinery Manufacturing	5277	148	1.102	2.55	175.0	55
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	26449	233	NA	NA	141.5	NA
3335	Metalworking Machinery Manufacturing	10150	271	1.070	2.50	129.0	58
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	4905	91	1.052	1.76	201.5	87
3339	Other General Purpose Machinery Manufacturing	15093	362	NA	NA	102.0	NA
3341	Computer and Peripheral Equipment Manufacturing	1066	13	1.077	1.13	279.5	109
3342	Communications Equipment Manufacturing	751	4	NA	NA	303.5	NA
3343	Audio and Video Equipment Manufacturing	433	3	NA	NA	306.5	NA
3344	Semiconductor and Other Electronic Component Manufacturing	4323	61	NA	NA	223.5	NA
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	7382	64	1.072	0.81	220.0	122
3346	Manufacturing and Reproducing Magnetic and Optical Media	764	6	NA	NA	295.5	NA
3351	Electric Lighting Equipment Manufacturing	4360	100	NA	NA	194.0	NA
3352	Household Appliance Manufacturing	29310	337	1.057	1.09	107.0	112
3353	Electrical Equipment Manufacturing	15915	283	NA	NA	127.0	NA
3359	Other Electrical Equipment and Component Manufacturing	8473	244	NA	NA	138.0	NA

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
3361	Motor Vehicle Manufacturing	39949	2913	NA	NA	13.0	NA
3362	Motor Vehicle Body and Trailer Manufacturing	18584	243	NA	NA	139.0	NA
3363	Motor Vehicle Parts Manufacturing	126459	4216	NA	NA	9.0	NA
3364	Aerospace Product and Parts Manufacturing	7495	15	1.098	0.18	277.0	145
3366	Ship and Boat Building	9195	482	1.068	4.91	86.0	11
3369	Other Transportation Equipment Manufacturing	218	23	1.022	10.32	262.0	3
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	20029	1029	NA	NA	39.0	NA
3372	Office Furniture (including Fixtures) Manufacturing	5423	384	NA	NA	98.0	NA
3379	Other Furniture Related Product Manufacturing	2005	203	NA	NA	154.0	NA
3391	Medical Equipment and Supplies Manufacturing	25807	214	1.091	0.76	147.0	124
3399	Other Miscellaneous Manufacturing	19892	618	1.051	2.96	69.0	41
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	31114	1006	1.130	2.86	40.0	43
4232	Furniture and Home Furnishing Merchant Wholesalers	4943	141	0.928	3.07	178.5	39
4233	Lumber and Other Construction Materials Merchant Wholesalers	15720	765	1.062	4.58	53.0	12
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	38290	802	1.083	1.93	51.0	80
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	8019	290	1.162	3.11	124.0	36
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	17576	486	1.075	2.57	84.0	53
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	12831	410	1.092	2.93	93.0	42
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	42083	1254	1.101	2.71	30.0	50
4239	Miscellaneous Durable Goods Merchant Wholesalers	17060	483	1.117	2.53	85.0	57
4241	Paper and Paper Product Merchant Wholesalers	9416	207	1.014	2.17	152.0	75

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
4242	Drugs and Druggists' Sundries Merchant Whole-salers	19864	406	NA	NA	94.0	NA
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	9699	96	1.017	0.97	197.5	114
4244	Grocery and Related Product Merchant Whole-salers	39186	1452	1.149	3.22	24.0	33
4245	Farm Product Raw Material Merchant Whole-salers	3258	91	0.920	3.04	201.5	40
4246	Chemical and Allied Products Merchant Whole-salers	6883	207	NA	NA	152.0	NA
4247	Petroleum and Petroleum Products Merchant Wholesalers	5231	233	1.125	3.96	141.5	21
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	9884	568	1.122	5.12	74.0	10
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	18931	211	1.017	1.10	149.0	111
4251	Wholesale Electronic Markets and Agents and Brokers	54171	1859	0.914	3.76	18.0	28
4411	Automobile Dealers	77926	1617	1.094	1.90	22.0	83
4412	Other Motor Vehicle Dealers	8723	179	1.027	2.00	165.0	77
4413	Automotive Parts, Accessories, and Tire Stores	45569	1128	1.002	2.47	34.0	60
4421	Furniture Stores	13795	376	NA	NA	99.0	NA
4422	Home Furnishings Stores	13574	349	NA	NA	105.0	NA
4431	Electronics and Appliance Stores	34320	365	1.001	1.06	101.0	113
4441	Building Material and Supplies Dealers	72732	5101	0.944	7.43	6.0	6
4442	Lawn and Garden Equipment and Supplies Stores	10487	329	1.013	3.10	108.0	38
4451	Grocery Stores	144032	4763	0.841	3.93	7.0	22
4452	Specialty Food Stores	7372	74	0.838	1.20	215.5	108
4453	Beer, Wine, and Liquor Stores	9575	51	0.890	0.60	234.5	133
4461	Health and Personal Care Stores	70503	893	0.920	1.38	48.0	102
4471	Gasoline Stations	66486	921	NA	NA	44.0	NA
4481	Clothing Stores	54671	357	0.716	0.91	103.0	118
4482	Shoe Stores	11764	61	0.779	0.67	223.5	130

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
4483	Jewelry, Luggage, and Leather Goods Stores	6842	24	0.930	0.38	259.5	141
4511	Sporting Goods, Hobby, and Musical Instrument Stores	31923	614	0.793	2.43	70.0	63
4512	Book Stores and News Dealers	4342	63	0.796	1.82	221.5	86
4521	Department Stores	107179	1434	0.846	1.58	26.0	96
4529	Other General Merchandise Stores	108783	729	0.867	0.77	57.0	123
4531	Florists	3523	46	0.804	1.62	237.0	94
4532	Office Supplies, Stationery, and Gift Stores	16488	180	0.796	1.37	164.0	103
4533	Used Merchandise Stores	14701	958	0.871	7.48	42.0	5
4539	Other Miscellaneous Store Retailers	17921	403	0.925	2.43	95.0	62
4541	Electronic Shopping and Mail-Order Houses	15262	207	0.977	1.39	152.0	101
4542	Vending Machine Operators	6000	240	1.063	3.76	140.0	27
4543	Direct Selling Establishments	6228	133	0.941	2.27	182.0	67
4811	Scheduled Air Transportation	5800	725	NA	NA	59.0	NA
4812	Nonscheduled Air Transportation	1167	18	NA	NA	271.0	NA
4831	Deep Sea, Coastal, and Great Lakes Water Transportation	151	1	NA	NA	317.5	NA
4832	Inland Water Transportation	7311	6	NA	NA	295.5	NA
4841	General Freight Trucking	130930	6109	NA	NA	4.0	NA
4842	Specialized Freight Trucking	42182	1855	NA	NA	19.0	NA
4851	Urban Transit Systems	5295	522	NA	NA	82.0	NA
4852	Interurban and Rural Bus Transportation	820	11	NA	NA	283.0	NA
4853	Taxi and Limousine Service	1780	30	0.992	1.70	251.0	90
4854	School and Employee Bus Transportation	6032	17	NA	NA	273.5	NA
4855	Charter Bus Industry	1919	37	NA	NA	244.0	NA
4859	Other Transit and Ground Passenger Transportation	4969	167	NA	NA	170.0	NA
4862	Pipeline Transportation of Natural Gas	978	6	NA	NA	295.5	NA
4871	Scenic and Sightseeing Transportation, Land	454	43	NA	NA	239.5	NA
4879	Scenic and Sightseeing Transportation, Other	115	2	NA	NA	310.0	NA
4881	Support Activities for Air Transportation	5477	137	NA	NA	180.0	NA
4882	Support Activities for Rail Transportation	1059	36	NA	NA	245.0	NA
4883	Support Activities for Water Transportation	818	2	NA	NA	310.0	NA

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
4884	Support Activities for Road Transportation	5992	195	NA	NA	158.0	NA
4885	Freight Transportation Arrangement	20375	325	NA	NA	111.0	NA
4889	Other Support Activities for Transportation	2527	113	NA	NA	189.0	NA
4911	Postal Service	0	12	NA	NA	281.0	NA
4921	Couriers and Express Delivery Services	108663	5640	NA	NA	5.0	NA
4922	Local Messengers and Local Delivery	1776	93	NA	NA	199.0	NA
4931	Warehousing and Storage	88044	2574	NA	NA	14.0	NA
5111	Newspaper, Periodical, Book, and Directory Publishers	20775	165	1.046	0.76	171.0	125
5112	Software Publishers	7430	6	1.190	0.07	295.5	148
5121	Motion Picture and Video Industries	19571	255	0.969	1.35	136.0	104
5122	Sound Recording Industries	6319	25	1.074	0.37	256.0	142
5151	Radio and Television Broadcasting	0	87	NA	NA	206.0	NA
5152	Cable and Other Subscription Programming	0	286	NA	NA	125.0	NA
5171	Wired Telecommunications Carriers	31021	245	1.041	0.76	137.0	126
5172	Wireless Telecommunications Carriers (except Satellite)	11423	53	NA	NA	233.0	NA
5174	Satellite Telecommunications	189	1	NA	NA	317.5	NA
5179	Other Telecommunications	636	10	NA	NA	286.0	NA
5182	Data Processing, Hosting, and Related Services	14639	16	1.058	0.10	275.0	147
5191	Other Information Services	1928	10	0.921	0.56	286.0	134
5211	Monetary Authorities-Central Bank	187	3	NA	NA	306.5	NA
5221	Depository Credit Intermediation	93943	611	0.985	0.66	71.0	131
5222	Nondepository Credit Intermediation	49285	150	NA	NA	174.0	NA
5223	Activities Related to Credit Intermediation	15858	60	NA	NA	225.5	NA
5231	Securities and Commodity Contracts Intermediation and Brokerage	15635	17	NA	NA	273.5	NA
5239	Other Financial Investment Activities	0	31	NA	NA	249.5	NA
5241	Insurance Carriers	53595	528	NA	NA	81.0	NA
5242	Agencies, Brokerages, and Other Insurance Related Activities	71206	320	NA	NA	115.0	NA
5251	Insurance and Employee Benefit Funds	123	7	NA	NA	290.5	NA
5259	Other Investment Pools and Funds	245	1	NA	NA	317.5	NA

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
5311	Lessors of Real Estate	31149	564	NA	NA	75.0	NA
5312	Offices of Real Estate Agents and Brokers	15652	192	NA	NA	160.0	NA
5313	Activities Related to Real Estate	25261	755	NA	NA	54.0	NA
5321	Automotive Equipment Rental and Leasing	15576	210	0.942	1.43	150.0	99
5322	Consumer Goods Rental	12341	298	0.872	2.77	123.0	48
5323	General Rental Centers	1377	34	NA	NA	248.0	NA
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	6647	160	NA	NA	173.0	NA
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	1136	10	NA	NA	286.0	NA
5411	Legal Services	42694	201	1.006	0.47	155.5	138
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	66166	270	0.983	0.42	130.5	140
5413	Architectural, Engineering, and Related Services	67251	1060	1.045	1.51	36.0	97
5414	Specialized Design Services	4579	15	0.980	0.33	277.0	143
5415	Computer Systems Design and Related Services	55113	305	1.055	0.52	120.0	137
5416	Management, Scientific, and Technical Consulting Services	64761	1491	1.028	2.24	23.0	68
5417	Scientific Research and Development Services	24430	273	1.018	1.10	128.0	110
5418	Advertising, Public Relations, and Related Services	19649	122	1.024	0.61	187.0	132
5419	Other Professional, Scientific, and Technical Services	35293	1373	0.882	4.41	27.0	15
5511	Management of Companies and Enterprises	124898	4287	NA	NA	8.0	NA
5611	Office Administrative Services	32839	1158	NA	NA	33.0	NA
5612	Facilities Support Services	10644	173	NA	NA	166.0	NA
5613	Employment Services	305578	11393	0.951	3.92	2.0	23
5614	Business Support Services	70405	576	0.990	0.83	73.0	121
5615	Travel Arrangement and Reservation Services	7593	56	1.047	0.70	231.5	128
5616	Investigation and Security Services	61938	1033	1.024	1.63	37.0	93
5617	Services to Buildings and Dwellings	124936	3372	0.945	2.86	11.0	44
5619	Other Support Services	27686	433	NA	NA	89.0	NA
5621	Waste Collection	7069	219	NA	NA	144.0	NA

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
5622	Waste Treatment and Disposal	6032	85	NA	NA	209.5	NA
5629	Remediation and Other Waste Management Services	10615	302	NA	NA	121.0	NA
6111	Elementary and Secondary Schools	40238	903	0.953	2.35	46.0	64
6112	Junior Colleges	911	7	NA	NA	290.5	NA
6113	Colleges, Universities, and Professional Schools	67425	1031	NA	NA	38.0	NA
6114	Business Schools and Computer and Management Training	3422	24	NA	NA	259.5	NA
6115	Technical and Trade Schools	5571	46	NA	NA	237.0	NA
6116	Other Schools and Instruction	14474	77	NA	NA	213.0	NA
6117	Educational Support Services	5128	18	NA	NA	271.0	NA
6211	Offices of Physicians	185140	1779	0.993	0.97	21.0	116
6212	Offices of Dentists	47713	308	0.889	0.73	119.0	127
6213	Offices of Other Health Practitioners	50338	258	0.915	0.56	134.0	135
6214	Outpatient Care Centers	49249	914	0.990	1.87	45.0	85
6215	Medical and Diagnostic Laboratories	20415	284	NA	NA	126.0	NA
6216	Home Health Care Services	58271	1211	0.938	2.22	31.0	71
6219	Other Ambulatory Health Care Services	19422	1103	NA	NA	35.0	NA
6221	General Medical and Surgical Hospitals	300412	13386	NA	NA	1.0	NA
6222	Psychiatric and Substance Abuse Hospitals	8781	79	NA	NA	212.0	NA
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals	3961	97	NA	NA	196.0	NA
6231	Nursing Care Facilities (Skilled Nursing Facilities)	101895	2465	0.948	2.55	16.0	54
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	39121	2495	NA	NA	15.0	NA
6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	37547	1353	NA	NA	28.0	NA
6239	Other Residential Care Facilities	5538	101	NA	NA	193.0	NA
6241	Individual and Family Services	72467	1845	0.954	2.67	20.0	51
6242	Community Food and Housing, and Emergency and Other Relief Services	6351	163	0.814	3.15	172.0	35
6243	Vocational Rehabilitation Services	17150	923	0.951	5.66	43.0	8

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
6244	Child Day Care Services	40360	541	0.806	1.66	78.5	92
7111	Performing Arts Companies	12448	328	NA	NA	109.0	NA
7112	Spectator Sports	5990	644	NA	NA	67.0	NA
7113	Promoters of Performing Arts, Sports, and Similar Events	5480	98	NA	NA	195.0	NA
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	2618	2	NA	NA	310.0	NA
7115	Independent Artists, Writers, and Performers	4700	43	NA	NA	239.5	NA
7121	Museums, Historical Sites, and Similar Institutions	12078	424	NA	NA	91.0	NA
7131	Amusement Parks and Arcades	0	472	NA	NA	87.0	NA
7132	Gambling Industries	0	2	NA	NA	310.0	NA
7139	Other Amusement and Recreation Industries	50393	728	0.828	1.74	58.0	88
7211	Traveler Accommodation	98853	2162	0.937	2.33	17.0	65
7212	RV (Recreational Vehicle) Parks and Recreational Camps	5603	29	NA	NA	252.0	NA
7213	Rooming and Boarding Houses	300	5	NA	NA	299.5	NA
7220	NA	NA	1	NA	NA	317.5	NA
7223	Special Food Services	28549	823	NA	NA	50.0	NA
7224	Drinking Places (Alcoholic Beverages)	11216	91	0.896	0.91	201.5	119
7225	Restaurants and Other Eating Places	676882	11187	NA	NA	3.0	NA
8111	Automotive Repair and Maintenance	44820	792	1.036	1.71	52.0	89
8112	Electronic and Precision Equipment Repair and Maintenance	8432	85	1.037	0.97	209.5	115
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	12846	327	1.137	2.24	110.0	69
8114	Personal and Household Goods Repair and Maintenance	2757	38	1.068	1.29	243.0	105
8121	Personal Care Services	32384	197	0.903	0.67	157.0	129
8122	Death Care Services	10890	125	0.896	1.28	184.0	106
8123	Drycleaning and Laundry Services	15824	322	0.927	2.19	112.5	73
8129	Other Personal Services	14817	348	0.956	2.46	106.0	61

Table P7: 2014-2016 FROI Claims: NAICS Four-Digit Three Year Summary- Employment, Claim Count, Rate, and Ranks - Matched Private

Naics	Description	2014-2016					
		QCEW.Empl	MP.Claims	FTE.Adj	Adj.Rate	Claim.Rank	Rate.Rank
8131	Religious Organizations	3354	75	0.820	2.73	214.0	49
8132	Grantmaking and Giving Services	6829	51	NA	NA	234.5	NA
8133	Social Advocacy Organizations	7245	213	NA	NA	148.0	NA
8134	Civic and Social Organizations	21278	589	NA	NA	72.0	NA
8139	Business, Professional, Labor, Political, and Similar Organizations	14815	270	0.963	1.89	130.5	84
8141	Private Households	20543	20	NA	NA	265.5	NA
9999	Non-classifiable Establishments	831	60	NA	NA	225.5	NA
All		7189665	183249				

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
1111	Oilseed and Grain Farming	494	502	560	4	6	8
1112	Vegetable and Melon Farming	616	583	659	27	9	22
1113	Fruit and Tree Nut Farming	48	0	0	1	0	0
1114	Greenhouse, Nursery, and Floriculture Production	2697	2594	2552	140	82	94
1119	Other Crop Farming	554	503	479	21	22	14
1121	Cattle Ranching and Farming	594	634	644	23	29	22
1122	Hog and Pig Farming	260	253	248	50	19	11
1123	Poultry and Egg Production	342	0	370	16	27	24
1124	Sheep and Goat Farming	0	NA	0	0	1	0
1125	Aquaculture	0	0	0	1	5	1
1129	Other Animal Production	141	0	148	1	5	1
1131	Timber Tract Operations	12	0	0	1	0	0
1133	Logging	937	1009	955	45	38	33
1151	Support Activities for Crop Production	597	617	540	22	18	17
1152	Support Activities for Animal Production	257	212	203	5	5	3
1153	Support Activities for Forestry	287	288	298	1	3	3
2111	Oil and Gas Extraction	50	0	0	4	0	0
2121	Coal Mining	0	0	0	0	0	1
2122	Metal Ore Mining	1174	0	0	76	56	37
2123	Nonmetallic Mineral Mining and Quarrying	1670	1750	1761	31	36	29
2131	Support Activities for Mining	358	325	291	14	15	2
2211	Electric Power Generation, Transmission and Distribution	2392	2396	2431	256	249	203
2212	Natural Gas Distribution	508	494	481	19	21	18
2213	Water, Sewage and Other Systems	481	475	484	9	8	7
2361	Residential Building Construction	9838	10389	10745	237	232	264
2362	Nonresidential Building Construction	14555	16426	14350	388	504	315
2371	Utility System Construction	6633	6612	6823	195	187	159
2372	Land Subdivision	907	985	706	2	6	3
2373	Highway, Street, and Bridge Construction	5403	5389	5541	246	218	205
2379	Other Heavy and Civil Engineering Construction	1741	1691	1911	38	31	38
2381	Foundation, Structure, and Building Exterior Contractors	12817	13382	14234	421	464	467

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
2382	Building Equipment Contractors	36027	37934	39730	1214	1261	1189
2383	Building Finishing Contractors	9591	10284	10432	281	339	274
2389	Other Specialty Trade Contractors	8999	9704	10475	275	315	259
3111	Animal Food Manufacturing	498	421	427	2	1	2
3112	Grain and Oilseed Milling	1868	2101	1975	76	50	58
3113	Sugar and Confectionery Product Manufacturing	2538	2538	2541	113	109	97
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	3730	3721	3822	86	68	102
3115	Dairy Product Manufacturing	2196	2396	2581	182	177	187
3116	Animal Slaughtering and Processing	11131	10904	11073	203	251	240
3118	Bakeries and Tortilla Manufacturing	6171	6301	6658	189	214	227
3119	Other Food Manufacturing	4527	4835	5186	126	108	83
3121	Beverage Manufacturing	4601	5038	5640	178	149	138
3122	Tobacco Manufacturing	863	896	0	3	2	0
3131	Fiber, Yarn, and Thread Mills	1359	1424	1440	37	28	22
3132	Fabric Mills	1013	917	957	24	18	27
3133	Textile and Fabric Finishing and Fabric Coating Mills	1060	1065	1104	46	30	36
3141	Textile Furnishings Mills	310	215	217	8	4	8
3149	Other Textile Product Mills	2245	2221	2243	65	66	54
3151	Apparel Knitting Mills	774	753	703	17	11	7
3152	Cut and Sew Apparel Manufacturing	3140	3395	3374	99	114	108
3159	Apparel Accessories and Other Apparel Manufacturing	80	0	0	1	0	0
3162	Footwear Manufacturing	163	297	278	15	38	33
3169	Other Leather and Allied Product Manufacturing	127	162	162	3	2	2
3211	Sawmills and Wood Preservation	2643	2651	2704	103	117	155
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	945	1031	1115	49	36	39
3219	Other Wood Product Manufacturing	7631	7867	8239	252	226	211
3221	Pulp, Paper, and Paperboard Mills	5689	5648	5634	102	68	61
3222	Converted Paper Product Manufacturing	8928	8947	8884	200	182	179

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
3231	Printing and Related Support Activities	9465	9237	9205	138	137	150
3241	Petroleum and Coal Products Manufacturing	1110	1067	1093	6	9	5
3251	Basic Chemical Manufacturing	4784	4756	4897	90	82	87
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	10515	10648	10338	110	87	125
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	434	456	442	20	14	12
3254	Pharmaceutical and Medicine Manufacturing	1809	1852	2339	21	11	24
3255	Paint, Coating, and Adhesive Manufacturing	951	949	944	22	25	26
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	3383	3364	3070	64	66	64
3259	Other Chemical Product and Preparation Manufacturing	3366	3377	3345	63	45	33
3261	Plastics Product Manufacturing	12140	13098	13884	473	529	438
3262	Rubber Product Manufacturing	8615	8751	9134	233	217	223
3271	Clay Product and Refractory Manufacturing	1725	1770	1931	58	78	65
3272	Glass and Glass Product Manufacturing	3872	3985	4096	198	186	151
3273	Cement and Concrete Product Manufacturing	4518	4679	5002	143	160	119
3274	Lime and Gypsum Product Manufacturing	307	320	324	6	5	8
3279	Other Nonmetallic Mineral Product Manufacturing	1487	1873	2126	46	46	52
3311	Iron and Steel Mills and Ferroalloy Manufacturing	1485	1508	1504	15	38	37
3312	Steel Product Manufacturing from Purchased Steel	1491	1439	1454	48	42	44
3313	Alumina and Aluminum Production and Processing	2864	2925	2976	81	168	152
3314	Nonferrous Metal (except Aluminum) Production and Processing	1523	1640	1649	61	35	50
3315	Foundries	2706	2828	2934	149	168	198
3321	Forging and Stamping	2570	2817	2868	118	152	120
3322	Cutlery and Handtool Manufacturing	714	0	977	17	9	15

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	Year 2015	2016	2014	Year 2015	2016
3323	Architectural and Structural Metals Manufacturing	8791	8893	8469	329	314	332
3324	Boiler, Tank, and Shipping Container Manufacturing	2823	2801	2873	101	115	84
3325	Hardware Manufacturing	361	0	512	53	62	15
3326	Spring and Wire Product Manufacturing	1788	1773	1644	13	36	38
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	5162	5169	5207	261	286	189
3328	Coating, Engraving, Heat Treating, and Allied Activities	2616	2711	2815	127	131	95
3329	Other Fabricated Metal Product Manufacturing	9588	9557	10369	251	219	222
3331	Agriculture, Construction, and Mining Machinery Manufacturing	3554	3701	3524	53	62	54
3332	Industrial Machinery Manufacturing	1239	1265	1343	36	43	45
3333	Commercial and Service Industry Machinery Manufacturing	1598	1857	1822	34	55	59
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	9431	8354	8664	45	82	106
3335	Metalworking Machinery Manufacturing	3418	3375	3357	82	101	88
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	1518	1730	1657	37	28	26
3339	Other General Purpose Machinery Manufacturing	4829	5066	5198	130	107	125
3341	Computer and Peripheral Equipment Manufacturing	364	351	351	6	1	6
3342	Communications Equipment Manufacturing	319	251	181	2	1	1
3343	Audio and Video Equipment Manufacturing	131	164	0	2	1	0
3344	Semiconductor and Other Electronic Component Manufacturing	1670	1388	1265	25	18	18
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	2339	2526	2517	27	21	16
3346	Manufacturing and Reproducing Magnetic and Optical Media	233	260	271	2	1	3

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	Year 2015	2016	2014	Year 2015	2016
3351	Electric Lighting Equipment Manufacturing	1518	1404	1438	44	30	26
3352	Household Appliance Manufacturing	9745	10123	9442	131	107	99
3353	Electrical Equipment Manufacturing	5335	5376	5204	101	89	93
3359	Other Electrical Equipment and Component Manufacturing	2757	2805	2911	68	81	95
3361	Motor Vehicle Manufacturing	11446	13003	15500	863	953	1097
3362	Motor Vehicle Body and Trailer Manufacturing	7094	6046	5444	95	78	70
3363	Motor Vehicle Parts Manufacturing	39494	41692	45273	1290	1508	1418
3364	Aerospace Product and Parts Manufacturing	2551	2558	2386	9	4	2
3366	Ship and Boat Building	2986	3121	3088	159	158	165
3369	Other Transportation Equipment Manufacturing	218	0	0	5	14	4
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	6519	6629	6881	369	336	324
3372	Office Furniture (including Fixtures) Manufacturing	1846	1727	1850	132	116	136
3379	Other Furniture Related Product Manufacturing	671	653	681	57	67	79
3391	Medical Equipment and Supplies Manufacturing	8388	8843	8576	80	67	67
3399	Other Miscellaneous Manufacturing	6352	6616	6924	223	201	194
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	10650	10656	9808	347	364	295
4232	Furniture and Home Furnishing Merchant Wholesalers	1594	1628	1721	43	50	48
4233	Lumber and Other Construction Materials Merchant Wholesalers	4962	5212	5546	250	271	244
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	13392	12382	12516	274	254	274
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	2672	2731	2616	113	87	90
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	5652	5865	6059	143	164	179
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	4195	4319	4317	155	122	133

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	13904	14081	14098	421	436	397
4239	Miscellaneous Durable Goods Merchant Wholesalers	5842	5738	5480	182	159	142
4241	Paper and Paper Product Merchant Wholesalers	3274	3068	3074	59	76	72
4242	Drugs and Druggists' Sundries Merchant Wholesalers	6356	6657	6851	143	160	103
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	3046	3128	3525	41	35	20
4244	Grocery and Related Product Merchant Wholesalers	13163	13340	12683	439	538	475
4245	Farm Product Raw Material Merchant Wholesalers	1095	1078	1085	37	30	24
4246	Chemical and Allied Products Merchant Wholesalers	2323	2274	2286	73	79	55
4247	Petroleum and Petroleum Products Merchant Wholesalers	1849	1703	1679	80	63	90
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	3099	3306	3479	196	185	187
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	6330	6315	6286	62	72	77
4251	Wholesale Electronic Markets and Agents and Brokers	19810	17575	16786	673	620	566
4411	Automobile Dealers	25001	25942	26983	477	577	563
4412	Other Motor Vehicle Dealers	2797	2919	3007	64	54	61
4413	Automotive Parts, Accessories, and Tire Stores	14807	15145	15617	376	384	368
4421	Furniture Stores	4437	4612	4746	121	126	129
4422	Home Furnishings Stores	4387	4582	4605	103	108	138
4431	Electronics and Appliance Stores	11250	11545	11525	117	125	123
4441	Building Material and Supplies Dealers	23686	23885	25161	1681	1635	1785
4442	Lawn and Garden Equipment and Supplies Stores	3376	3510	3601	110	106	113
4451	Grocery Stores	47493	47718	48821	1607	1523	1633

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
4452	Specialty Food Stores	2616	2450	2306	21	18	35
4453	Beer, Wine, and Liquor Stores	3090	3186	3299	17	19	15
4461	Health and Personal Care Stores	23068	23405	24030	324	288	281
4471	Gasoline Stations	21923	22107	22456	299	276	346
4481	Clothing Stores	18285	18018	18368	123	109	125
4482	Shoe Stores	3926	4016	3822	18	27	16
4483	Jewelry, Luggage, and Leather Goods Stores	2344	2242	2256	10	6	8
4511	Sporting Goods, Hobby, and Musical Instrument Stores	9978	10860	11085	165	215	234
4512	Book Stores and News Dealers	1421	1480	1441	28	24	11
4521	Department Stores	36413	35553	35213	524	467	443
4529	Other General Merchandise Stores	34728	35825	38230	229	260	240
4531	Florists	1169	1167	1187	10	17	19
4532	Office Supplies, Stationery, and Gift Stores	5593	5554	5341	53	65	62
4533	Used Merchandise Stores	4732	4913	5056	229	229	500
4539	Other Miscellaneous Store Retailers	5598	5924	6399	141	130	132
4541	Electronic Shopping and Mail-Order Houses	4899	5172	5191	60	81	66
4542	Vending Machine Operators	1917	2016	2067	84	83	73
4543	Direct Selling Establishments	2080	2122	2026	51	46	36
4811	Scheduled Air Transportation	2020	1916	1864	248	241	236
4812	Nonscheduled Air Transportation	373	357	437	7	8	3
4831	Deep Sea, Coastal, and Great Lakes Water Transportation	49	0	0	1	0	0
4832	Inland Water Transportation	2455	2482	2374	2	1	3
4841	General Freight Trucking	42914	43648	44368	2063	2088	1958
4842	Specialized Freight Trucking	13622	14180	14380	746	633	476
4851	Urban Transit Systems	1735	1787	1773	166	179	177
4852	Interurban and Rural Bus Transportation	283	0	0	11	0	0
4853	Taxi and Limousine Service	609	565	606	13	4	13
4854	School and Employee Bus Transportation	1758	2133	2141	6	5	6
4855	Charter Bus Industry	598	643	678	8	15	14

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
4859	Other Transit and Ground Passenger Transportation	1523	1708	1738	42	59	66
4862	Pipeline Transportation of Natural Gas	320	331	327	1	3	2
4871	Scenic and Sightseeing Transportation, Land	47	48	359	27	11	5
4879	Scenic and Sightseeing Transportation, Other	0	37	44	0	1	1
4881	Support Activities for Air Transportation	1698	1801	1978	36	47	54
4882	Support Activities for Rail Transportation	295	377	387	10	17	9
4883	Support Activities for Water Transportation	285	264	0	1	1	0
4884	Support Activities for Road Transportation	2089	1972	1931	77	52	66
4885	Freight Transportation Arrangement	6323	6898	7154	116	114	95
4889	Other Support Activities for Transportation	944	932	651	45	27	41
4911	Postal Service	0	0	0	1	3	8
4921	Couriers and Express Delivery Services	35088	36110	37465	1859	2091	1690
4922	Local Messengers and Local Delivery	488	586	702	21	32	40
4931	Warehousing and Storage	24911	29011	34122	772	852	950
5111	Newspaper, Periodical, Book, and Directory Publishers	7246	6941	6588	67	44	54
5112	Software Publishers	2197	2294	2939	3	1	2
5121	Motion Picture and Video Industries	5686	6116	7769	66	98	91
5122	Sound Recording Industries	2075	2100	2144	4	12	9
5151	Radio and Television Broadcasting	0	0	0	30	37	20
5152	Cable and Other Subscription Programming	0	0	0	101	94	91
5171	Wired Telecommunications Carriers	10645	10382	9994	76	67	102
5172	Wireless Telecommunications Carriers (except Satellite)	3871	3935	3617	16	19	18
5174	Satellite Telecommunications	0	0	64	0	0	1
5179	Other Telecommunications	226	213	197	4	4	2
5182	Data Processing, Hosting, and Related Services	4770	4932	4937	8	5	3
5191	Other Information Services	576	637	715	3	3	4
5211	Monetary Authorities-Central Bank	0	0	0	0	2	1
5221	Depository Credit Intermediation	30945	30553	32445	171	217	223
5222	Nondepository Credit Intermediation	16521	17119	15645	54	53	43

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
5223	Activities Related to Credit Intermediation	5174	5310	5374	15	24	21
5231	Securities and Commodity Contracts Intermediation and Brokerage	4906	5245	5484	5	5	7
5239	Other Financial Investment Activities	0	0	0	12	11	8
5241	Insurance Carriers	17383	17915	18297	209	160	159
5242	Agencies, Brokerages, and Other Insurance Related Activities	22822	23703	24681	99	127	94
5251	Insurance and Employee Benefit Funds	52	71	0	6	1	0
5259	Other Investment Pools and Funds	0	0	166	0	0	1
5311	Lessors of Real Estate	10308	10575	10266	206	200	158
5312	Offices of Real Estate Agents and Brokers	4956	5230	5466	51	76	65
5313	Activities Related to Real Estate	7951	8247	9063	236	253	266
5321	Automotive Equipment Rental and Leasing	4231	5272	6073	80	60	70
5322	Consumer Goods Rental	4222	4067	4052	117	90	91
5323	General Rental Centers	471	448	458	13	9	12
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	1974	2283	2390	47	57	56
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	379	379	378	1	5	4
5411	Legal Services	14108	14185	14401	76	60	65
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	22694	21761	21711	82	96	92
5413	Architectural, Engineering, and Related Services	22628	24021	20602	329	350	381
5414	Specialized Design Services	1445	1553	1581	4	7	4
5415	Computer Systems Design and Related Services	17439	18488	19186	89	126	90
5416	Management, Scientific, and Technical Consulting Services	15745	21627	27389	436	544	511
5417	Scientific Research and Development Services	8078	8134	8218	89	94	90
5418	Advertising, Public Relations, and Related Services	6581	6440	6628	56	29	37
5419	Other Professional, Scientific, and Technical Services	11272	11800	12221	381	447	545

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
5511	Management of Companies and Enterprises	38000	42152	44746	1420	1436	1431
5611	Office Administrative Services	10386	10858	11595	353	417	388
5612	Facilities Support Services	2638	3875	4131	52	56	65
5613	Employment Services	100149	102283	103146	3937	3973	3483
5614	Business Support Services	22112	24229	24064	214	183	179
5615	Travel Arrangement and Reservation Services	2422	2527	2644	24	18	14
5616	Investigation and Security Services	20003	20706	21229	313	376	344
5617	Services to Buildings and Dwellings	41001	41259	42676	1106	1153	1113
5619	Other Support Services	9027	9106	9553	111	154	168
5621	Waste Collection	2242	2358	2469	65	92	62
5622	Waste Treatment and Disposal	2127	1980	1925	31	20	34
5629	Remediation and Other Waste Management Services	3180	3700	3735	70	104	128
6111	Elementary and Secondary Schools	12340	13375	14523	284	300	319
6112	Junior Colleges	0	324	247	0	3	4
6113	Colleges, Universities, and Professional Schools	22460	22092	22873	311	322	398
6114	Business Schools and Computer and Management Training	1125	1165	1132	8	7	9
6115	Technical and Trade Schools	1866	1872	1833	20	12	14
6116	Other Schools and Instruction	4563	4859	5052	22	23	32
6117	Educational Support Services	1503	1731	1894	3	7	8
6211	Offices of Physicians	60466	61744	62930	588	588	603
6212	Offices of Dentists	15625	15900	16188	87	109	112
6213	Offices of Other Health Practitioners	16203	16901	17234	63	85	110
6214	Outpatient Care Centers	16337	16566	16346	310	335	269
6215	Medical and Diagnostic Laboratories	6482	6795	7138	100	99	85
6216	Home Health Care Services	18081	19789	20401	366	440	405
6219	Other Ambulatory Health Care Services	6686	6320	6416	376	402	325
6221	General Medical and Surgical Hospitals	97161	100983	102268	4491	4688	4207
6222	Psychiatric and Substance Abuse Hospitals	2828	2952	3001	20	31	28
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals	563	767	2631	13	33	51

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
6231	Nursing Care Facilities (Skilled Nursing Facilities)	33970	34131	33794	947	799	719
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	13179	13357	12585	872	870	753
6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	11748	12328	13471	420	443	490
6239	Other Residential Care Facilities	1833	1820	1885	31	38	32
6241	Individual and Family Services	23758	24199	24510	602	637	606
6242	Community Food and Housing, and Emergency and Other Relief Services	1897	2136	2318	54	57	52
6243	Vocational Rehabilitation Services	5891	5789	5470	302	317	304
6244	Child Day Care Services	13335	13352	13673	162	209	170
7111	Performing Arts Companies	4022	4232	4194	90	119	119
7112	Spectator Sports	1945	1909	2136	208	220	216
7113	Promoters of Performing Arts, Sports, and Similar Events	1645	1903	1932	23	45	30
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	0	886	941	0	1	1
7115	Independent Artists, Writers, and Performers	1575	1602	1523	10	15	18
7121	Museums, Historical Sites, and Similar Institutions	3746	4110	4222	137	146	141
7131	Amusement Parks and Arcades	0	0	0	115	175	182
7132	Gambling Industries	0	0	0	1	1	0
7139	Other Amusement and Recreation Industries	16038	16797	17558	232	239	257
7211	Traveler Accommodation	31887	33077	33889	741	706	715
7212	RV (Recreational Vehicle) Parks and Recreational Camps	1807	1829	1967	9	7	13
7213	Rooming and Boarding Houses	0	98	100	0	3	2
7223	Special Food Services	9264	9318	9967	279	276	268
7224	Drinking Places (Alcoholic Beverages)	3451	3716	4049	32	33	26
7225	Restaurants and Other Eating Places	217465	225497	233920	3637	3737	3813
8111	Automotive Repair and Maintenance	14253	15017	15550	229	274	289

Table P8: 2014-2016 FROI Claims: NAICS Four-Digit Annual Employment and Claim Counts - Matched Private

Naics	Description	QCEW.Empl			MP.Claims		
		2014	2015	2016	2014	2015	2016
8112	Electronic and Precision Equipment Repair and Maintenance	2912	2671	2849	22	32	31
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	4041	4461	4344	113	115	99
8114	Personal and Household Goods Repair and Maintenance	892	905	960	11	9	18
8121	Personal Care Services	10566	10682	11136	67	71	59
8122	Death Care Services	3579	3626	3685	37	53	35
8123	Drycleaning and Laundry Services	5415	5249	5160	117	106	99
8129	Other Personal Services	4728	4972	5117	100	118	130
8131	Religious Organizations	1153	1126	1075	31	28	16
8132	Grantmaking and Giving Services	2093	2217	2519	19	15	17
8133	Social Advocacy Organizations	2511	2386	2348	68	66	79
8134	Civic and Social Organizations	7224	7063	6991	213	207	169
8139	Business, Professional, Labor, Political, and Similar Organizations	4922	4923	4970	111	108	51
8141	Private Households	6687	6777	7079	4	9	7
9999	Non-classifiable Establishments	346	270	215	20	23	17
All		2327316	2396587	2461651	60760	62500	59989

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	2015	2016	2014	2015	2016
1111	Oilseed and Grain Farming	279.0	264.5	256.0	NA	NA	NA
1112	Vegetable and Melon Farming	209.0	251.5	215.0	NA	NA	NA
1113	Fruit and Tree Nut Farming	302.5	0.0	0.0	NA	0	0
1114	Greenhouse, Nursery, and Floriculture Production	92.0	139.0	123.5	NA	NA	NA
1119	Other Crop Farming	221.5	220.0	238.0	NA	NA	NA
1121	Cattle Ranching and Farming	214.5	207.5	215.0	NA	NA	NA
1122	Hog and Pig Farming	178.0	225.0	245.5	NA	NA	NA
1123	Poultry and Egg Production	234.5	213.0	210.5	NA	NA	NA
1124	Sheep and Goat Farming	0.0	302.5	0.0	0	NA	0
1125	Aquaculture	302.5	271.5	302.0	NA	NA	NA
1129	Other Animal Production	302.5	271.5	302.0	NA	NA	NA
1131	Timber Tract Operations	302.5	0.0	0.0	NA	0	0
1133	Logging	185.0	188.5	195.0	13	17	38
1151	Support Activities for Crop Production	217.5	229.0	227.0	NA	NA	NA
1152	Support Activities for Animal Production	273.5	271.5	282.0	NA	NA	NA
1153	Support Activities for Forestry	302.5	286.5	282.0	NA	NA	NA
2111	Oil and Gas Extraction	279.0	0.0	0.0	NA	0	0
2121	Coal Mining	0.0	0.0	302.0	0	0	2
2122	Metal Ore Mining	144.5	169.5	187.0	5	2	2
2123	Nonmetallic Mineral Mining and Quarrying	203.5	193.0	201.0	93	89	103
2131	Support Activities for Mining	240.0	235.5	291.0	NA	NA	NA
2211	Electric Power Generation, Transmission and Distribution	53.0	57.0	68.0	1	5	6
2212	Natural Gas Distribution	228.5	221.5	223.0	19	26	25
2213	Water, Sewage and Other Systems	256.0	255.5	264.0	86	93	98
2361	Residential Building Construction	59.0	60.0	53.0	NA	NA	NA
2362	Nonresidential Building Construction	30.0	26.0	43.0	NA	NA	NA
2371	Utility System Construction	76.0	75.0	84.5	NA	NA	NA
2372	Land Subdivision	292.0	264.5	282.0	NA	NA	NA
2373	Highway, Street, and Bridge Construction	58.0	65.0	67.0	NA	NA	NA
2379	Other Heavy and Civil Engineering Construction	192.5	202.5	184.5	NA	NA	NA
2381	Foundation, Structure, and Building Exterior Contractors	27.5	28.0	28.0	NA	NA	NA
2382	Building Equipment Contractors	10.0	10.0	10.0	NA	NA	NA
2383	Building Finishing Contractors	47.0	39.0	48.5	NA	NA	NA

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
2389	Other Specialty Trade Contractors	49.0	44.0	54.0	NA	NA	NA
3111	Animal Food Manufacturing	292.0	302.5	291.0	NA	NA	NA
3112	Grain and Oilseed Milling	144.5	176.5	163.0	NA	NA	NA
3113	Sugar and Confectionery Product Manufacturing	109.0	112.0	119.0	21	22	24
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	134.0	152.5	114.5	73	92	60
3115	Dairy Product Manufacturing	78.5	81.0	73.5	4	7	9
3116	Animal Slaughtering and Processing	72.0	56.0	57.5	90	71	77
3118	Bakeries and Tortilla Manufacturing	77.0	69.0	61.0	41	30	27
3119	Other Food Manufacturing	99.0	115.0	138.0	NA	NA	NA
3121	Beverage Manufacturing	80.0	93.0	93.5	35	41	68
3122	Tobacco Manufacturing	285.5	292.5	0.0	142	143	0
3131	Fiber, Yarn, and Thread Mills	195.5	210.0	215.0	56	85	89
3132	Fabric Mills	212.5	229.0	203.0	77	84	50
3133	Textile and Fabric Finishing and Fabric Coating Mills	182.5	205.0	189.5	27	62	37
3141	Textile Furnishings Mills	260.0	279.0	256.0	58	86	23
3149	Other Textile Product Mills	155.5	158.0	168.5	NA	NA	NA
3151	Apparel Knitting Mills	232.0	245.5	264.0	NA	NA	NA
3152	Cut and Sew Apparel Manufacturing	123.5	109.5	111.0	40	33	33
3159	Apparel Accessories and Other Apparel Manufacturing	302.5	0.0	0.0	NA	0	0
3162	Footwear Manufacturing	237.5	188.5	195.0	2	4	4
3169	Other Leather and Allied Product Manufacturing	285.5	292.5	291.0	NA	NA	NA
3211	Sawmills and Wood Preservation	115.5	105.0	87.0	24	23	11
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	179.0	193.0	183.0	10	36	22
3219	Other Wood Product Manufacturing	54.0	62.0	66.0	42	47	58
3221	Pulp, Paper, and Paperboard Mills	117.0	152.5	159.5	94	111	116
3222	Converted Paper Product Manufacturing	73.0	79.0	77.0	83	81	81
3231	Printing and Related Support Activities	93.0	95.0	90.0	100	101	94
3241	Petroleum and Coal Products Manufacturing	268.0	251.5	271.5	136	114	141
3251	Basic Chemical Manufacturing	128.0	139.0	135.0	NA	NA	NA

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	113.5	133.5	102.0	118	124	110
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	225.5	238.5	243.5	25	45	53
3254	Pharmaceutical and Medicine Manufacturing	221.5	245.5	210.5	116	133	117
3255	Paint, Coating, and Adhesive Manufacturing	217.5	215.0	206.0	63	53	55
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	157.5	158.0	155.0	88	78	78
3259	Other Chemical Product and Preparation Manufacturing	160.0	181.5	195.0	NA	NA	NA
3261	Plastics Product Manufacturing	24.0	25.0	30.0	33	28	39
3262	Rubber Product Manufacturing	61.0	66.5	62.5	61	70	65
3271	Clay Product and Refractory Manufacturing	166.5	145.5	152.5	31	21	35
3272	Glass and Glass Product Manufacturing	74.0	76.0	89.0	15	19	30
3273	Cement and Concrete Product Manufacturing	89.0	87.0	106.5	NA	NA	NA
3274	Lime and Gypsum Product Manufacturing	268.0	271.5	256.0	NA	NA	NA
3279	Other Nonmetallic Mineral Product Manufacturing	182.5	179.5	171.5	49	65	61
3311	Iron and Steel Mills and Ferroalloy Manufacturing	237.5	188.5	187.0	NA	NA	NA
3312	Steel Product Manufacturing from Purchased Steel	180.0	185.0	178.0	NA	NA	NA
3313	Alumina and Aluminum Production and Processing	138.0	83.5	88.0	65	11	17
3314	Nonferrous Metal (except Aluminum) Production and Processing	163.0	195.5	175.0	29	79	44
3315	Foundries	87.0	83.5	69.0	9	9	10
3321	Forging and Stamping	102.0	92.0	105.0	20	14	20
3322	Cutlery and Handtool Manufacturing	232.0	251.5	234.0	79	2	99
3323	Architectural and Structural Metals Manufacturing	38.5	45.0	39.0	NA	NA	NA
3324	Boiler, Tank, and Shipping Container Manufacturing	119.0	107.5	137.0	NA	NA	NA
3325	Hardware Manufacturing	173.0	162.5	234.0	NA	NA	NA
3326	Spring and Wire Product Manufacturing	242.5	193.0	184.5	NA	NA	NA
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	51.0	48.0	72.0	14	12	31
3328	Coating, Engraving, Heat Treating, and Allied Activities	98.0	96.0	121.0	17	25	32
3329	Other Fabricated Metal Product Manufacturing	55.0	64.0	64.0	57	76	74

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
3331	Agriculture, Construction, and Mining Machinery Manufacturing	173.0	162.5	168.5	101	98	101
3332	Industrial Machinery Manufacturing	198.5	184.0	177.0	NA	NA	NA
3333	Commercial and Service Industry Machinery Manufacturing	200.0	171.0	161.5	85	51	40
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	185.0	139.0	112.0	NA	NA	NA
3335	Metalworking Machinery Manufacturing	136.5	122.0	134.0	75	48	52
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	195.5	210.0	206.0	66	99	96
3339	Other General Purpose Machinery Manufacturing	97.0	117.5	102.0	NA	NA	NA
3341	Computer and Peripheral Equipment Manufacturing	268.0	302.5	269.0	95	142	93
3342	Communications Equipment Manufacturing	292.0	302.5	302.0	NA	NA	NA
3343	Audio and Video Equipment Manufacturing	292.0	302.5	0.0	NA	NA	0
3344	Semiconductor and Other Electronic Component Manufacturing	211.0	229.0	223.0	NA	NA	NA
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	209.0	221.5	230.5	112	120	129
3346	Manufacturing and Reproducing Magnetic and Optical Media	292.0	302.5	282.0	NA	NA	NA
3351	Electric Lighting Equipment Manufacturing	187.0	205.0	206.0	NA	NA	NA
3352	Household Appliance Manufacturing	96.0	117.5	117.0	105	112	114
3353	Electrical Equipment Manufacturing	119.0	130.0	125.0	NA	NA	NA
3359	Other Electrical Equipment and Component Manufacturing	150.5	142.5	121.0	NA	NA	NA
3361	Motor Vehicle Manufacturing	15.0	13.0	13.0	NA	NA	NA
3362	Motor Vehicle Body and Trailer Manufacturing	126.0	145.5	145.5	NA	NA	NA
3363	Motor Vehicle Parts Manufacturing	9.0	8.0	9.0	NA	NA	NA
3364	Aerospace Product and Parts Manufacturing	256.0	279.0	291.0	141	144	144
3366	Ship and Boat Building	85.0	90.0	83.0	12	16	13
3369	Other Transportation Equipment Manufacturing	273.5	238.5	275.5	69	2	2

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	34.0	40.0	41.0	NA	NA	NA
3372	Office Furniture (including Fixtures) Manufacturing	95.0	106.0	95.0	NA	NA	NA
3379	Other Furniture Related Product Manufacturing	168.0	155.0	140.5	NA	NA	NA
3391	Medical Equipment and Supplies Manufacturing	140.0	155.0	147.0	124	128	126
3399	Other Miscellaneous Manufacturing	66.0	72.0	71.0	37	42	47
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	37.0	37.0	45.0	43	37	62
4232	Furniture and Home Furnishing Merchant Wholesalers	188.5	176.5	176.0	59	38	34
4233	Lumber and Other Construction Materials Merchant Wholesalers	56.0	52.0	56.0	16	15	18
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	50.0	54.0	48.5	87	80	75
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	109.0	133.5	131.5	34	46	28
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	89.0	85.0	77.0	67	52	46
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	86.0	102.0	96.0	38	54	42
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	27.5	32.0	33.0	53	49	48
4239	Miscellaneous Durable Goods Merchant Wholesalers	78.5	89.0	91.0	54	58	57
4241	Paper and Paper Product Merchant Wholesalers	165.0	147.5	144.0	92	57	70
4242	Drugs and Druggists' Sundries Merchant Wholesalers	89.0	87.0	113.0	NA	NA	NA
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	191.0	195.5	218.5	103	109	130
4244	Grocery and Related Product Merchant Wholesalers	25.0	24.0	27.0	46	34	29
4245	Farm Product Raw Material Merchant Wholesalers	195.5	205.0	210.5	30	43	56
4246	Chemical and Allied Products Merchant Wholesalers	147.0	144.0	166.0	NA	NA	NA
4247	Petroleum and Petroleum Products Merchant Wholesalers	140.0	161.0	131.5	28	32	15
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	75.0	77.0	73.5	7	10	16
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	162.0	149.0	142.0	119	107	104

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
4251	Wholesale Electronic Markets and Agents and Brokers	19.0	20.0	20.0	18	31	26
4411	Automobile Dealers	23.0	22.0	21.0	89	75	82
4412	Other Motor Vehicle Dealers	157.5	172.0	159.5	70	90	76
4413	Automotive Parts, Accessories, and Tire Stores	32.5	35.0	36.0	60	60	59
4421	Furniture Stores	101.0	99.5	99.0	NA	NA	NA
4422	Home Furnishings Stores	115.5	115.0	93.5	NA	NA	NA
4431	Electronics and Appliance Stores	104.0	101.0	104.0	111	108	112
4441	Building Material and Supplies Dealers	6.0	6.0	5.0	3	6	7
4442	Lawn and Garden Equipment and Supplies Stores	113.5	119.5	108.0	39	44	36
4451	Grocery Stores	7.0	7.0	7.0	22	29	19
4452	Specialty Food Stores	221.5	229.0	191.5	121	116	83
4453	Beer, Wine, and Liquor Stores	232.0	225.0	234.0	133	129	134
4461	Health and Personal Care Stores	40.0	47.0	47.0	98	102	105
4471	Gasoline Stations	45.0	49.5	37.0	NA	NA	NA
4481	Clothing Stores	100.0	112.0	102.0	120	118	119
4482	Shoe Stores	230.0	213.0	230.5	132	117	135
4483	Jewelry, Luggage, and Leather Goods Stores	252.0	264.5	256.0	137	141	142
4511	Sporting Goods, Hobby, and Musical Instrument Stores	83.0	68.0	60.0	76	61	49
4512	Book Stores and News Dealers	207.0	216.5	245.5	81	68	120
4521	Department Stores	22.0	27.0	29.0	91	96	97
4529	Other General Merchandise Stores	64.0	53.0	57.5	126	119	124
4531	Florists	252.0	232.5	220.0	110	82	80
4532	Office Supplies, Stationery, and Gift Stores	173.0	160.0	157.5	104	103	95
4533	Used Merchandise Stores	64.0	61.0	24.0	6	8	5
4539	Other Miscellaneous Store Retailers	91.0	97.0	97.0	55	66	63
4541	Electronic Shopping and Mail-Order Houses	164.0	142.5	149.0	106	94	102
4542	Vending Machine Operators	135.0	136.0	143.0	8	27	41
4543	Direct Selling Establishments	176.5	179.5	189.5	50	72	79
4811	Scheduled Air Transportation	57.0	58.0	59.0	NA	NA	NA
4812	Nonscheduled Air Transportation	263.5	255.5	282.0	NA	NA	NA
4831	Deep Sea, Coastal, and Great Lakes Water Transportation	302.5	0.0	0.0	NA	0	0
4832	Inland Water Transportation	292.0	302.5	282.0	NA	NA	NA

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
4841	General Freight Trucking	4.0	5.0	4.0	NA	NA	NA
4842	Specialized Freight Trucking	17.0	19.0	26.0	NA	NA	NA
4851	Urban Transit Systems	82.0	80.0	79.0	NA	NA	NA
4852	Interurban and Rural Bus Transportation	248.0	0.0	0.0	NA	0	0
4853	Taxi and Limousine Service	242.5	279.0	241.5	80	127	71
4854	School and Employee Bus Transportation	268.0	271.5	269.0	NA	NA	NA
4855	Charter Bus Industry	260.0	235.5	238.0	NA	NA	NA
4859	Other Transit and Ground Passenger Transportation	190.0	166.0	149.0	NA	NA	NA
4862	Pipeline Transportation of Natural Gas	302.5	286.5	291.0	NA	NA	NA
4871	Scenic and Sightseeing Transportation, Land	209.0	245.5	271.5	NA	NA	NA
4879	Scenic and Sightseeing Transportation, Other	0.0	302.5	302.0	0	NA	NA
4881	Support Activities for Air Transportation	198.5	178.0	168.5	NA	NA	NA
4882	Support Activities for Rail Transportation	252.0	232.5	250.0	NA	NA	NA
4883	Support Activities for Water Transportation	302.5	302.5	0.0	NA	NA	0
4884	Support Activities for Road Transportation	142.0	175.0	149.0	NA	NA	NA
4885	Freight Transportation Arrangement	106.0	109.5	121.0	NA	NA	NA
4889	Other Support Activities for Transportation	185.0	213.0	181.0	NA	NA	NA
4911	Postal Service	302.5	286.5	256.0	NA	NA	NA
4921	Couriers and Express Delivery Services	5.0	4.0	6.0	NA	NA	NA
4922	Local Messengers and Local Delivery	221.5	200.0	182.0	NA	NA	NA
4931	Warehousing and Storage	16.0	15.0	14.0	NA	NA	NA
5111	Newspaper, Periodical, Book, and Directory Publishers	152.5	183.0	168.5	122	132	121
5112	Software Publishers	285.5	302.5	291.0	146	146	145
5121	Motion Picture and Video Industries	154.0	124.0	128.0	108	87	106
5122	Sound Recording Industries	279.0	241.5	250.0	144	136	140
5151	Radio and Television Broadcasting	206.0	191.0	218.5	NA	NA	NA
5152	Cable and Other Subscription Programming	119.0	126.5	128.0	NA	NA	NA
5171	Wired Telecommunications Carriers	144.5	155.0	114.5	129	131	115
5172	Wireless Telecommunications Carriers (except Satellite)	234.5	225.0	223.0	NA	NA	NA
5174	Satellite Telecommunications	0.0	0.0	302.0	0	0	NA
5179	Other Telecommunications	279.0	279.0	291.0	NA	NA	NA
5182	Data Processing, Hosting, and Related Services	260.0	271.5	282.0	145	145	146

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
5191	Other Information Services	285.5	286.5	275.5	130	135	132
5211	Monetary Authorities-Central Bank	0.0	292.5	302.0	0	NA	NA
5221	Depository Credit Intermediation	81.0	66.5	62.5	134	126	127
5222	Nondepository Credit Intermediation	170.5	173.5	179.0	NA	NA	NA
5223	Activities Related to Credit Intermediation	237.5	216.5	217.0	NA	NA	NA
5231	Securities and Commodity Contracts Intermediation and Brokerage	273.5	271.5	264.0	NA	NA	NA
5239	Other Financial Investment Activities	245.5	245.5	256.0	NA	NA	NA
5241	Insurance Carriers	69.0	87.0	84.5	NA	NA	NA
5242	Agencies, Brokerages, and Other Insurance Related Activities	123.5	98.0	123.5	NA	NA	NA
5251	Insurance and Employee Benefit Funds	268.0	302.5	0.0	NA	NA	0
5259	Other Investment Pools and Funds	0.0	0.0	302.0	0	0	NA
5311	Lessors of Real Estate	71.0	73.0	86.0	NA	NA	NA
5312	Offices of Real Estate Agents and Brokers	176.5	147.5	152.5	NA	NA	NA
5313	Activities Related to Real Estate	60.0	55.0	52.0	NA	NA	NA
5321	Automotive Equipment Rental and Leasing	140.0	164.5	145.5	82	104	107
5322	Consumer Goods Rental	104.0	129.0	128.0	44	20	12
5323	General Rental Centers	242.5	251.5	243.5	NA	NA	NA
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	181.0	167.5	165.0	NA	NA	NA
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	302.5	271.5	275.5	NA	NA	NA
5411	Legal Services	144.5	164.5	152.5	135	140	137
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	136.5	125.0	126.0	140	138	138
5413	Architectural, Engineering, and Related Services	38.5	38.0	35.0	102	100	86
5414	Specialized Design Services	279.0	259.0	275.5	143	137	143
5415	Computer Systems Design and Related Services	130.5	99.5	131.5	138	130	139
5416	Management, Scientific, and Technical Consulting Services	26.0	23.0	23.0	52	63	84
5417	Scientific Research and Development Services	130.5	126.5	131.5	113	106	108
5418	Advertising, Public Relations, and Related Services	169.0	207.5	187.0	125	139	133

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
5419	Other Professional, Scientific, and Technical Services	31.0	29.0	22.0	26	18	14
5511	Management of Companies and Enterprises	8.0	9.0	8.0	NA	NA	NA
5611	Office Administrative Services	36.0	33.0	34.0	NA	NA	NA
5612	Facilities Support Services	175.0	169.5	152.5	NA	NA	NA
5613	Employment Services	2.0	2.0	3.0	23	24	21
5614	Business Support Services	67.0	78.0	77.0	115	122	123
5615	Travel Arrangement and Reservation Services	212.5	229.0	238.0	123	123	136
5616	Investigation and Security Services	41.0	36.0	38.0	96	91	91
5617	Services to Buildings and Dwellings	11.0	11.0	12.0	48	39	45
5619	Other Support Services	111.5	91.0	82.0	NA	NA	NA
5621	Waste Collection	155.5	128.0	157.5	NA	NA	NA
5622	Waste Treatment and Disposal	203.5	223.0	193.0	NA	NA	NA
5629	Remediation and Other Waste Management Services	148.5	121.0	100.0	NA	NA	NA
6111	Elementary and Secondary Schools	46.0	46.0	42.0	64	64	66
6112	Junior Colleges	0.0	286.5	275.5	0	NA	NA
6113	Colleges, Universities, and Professional Schools	42.0	42.0	32.0	NA	NA	NA
6114	Business Schools and Computer and Management Training	260.0	259.0	250.0	NA	NA	NA
6115	Technical and Trade Schools	225.5	241.5	238.0	NA	NA	NA
6116	Other Schools and Instruction	217.5	218.5	197.5	NA	NA	NA
6117	Educational Support Services	285.5	259.0	256.0	NA	NA	NA
6211	Offices of Physicians	21.0	21.0	19.0	117	113	118
6212	Offices of Dentists	132.5	112.0	109.0	131	121	122
6213	Offices of Other Health Practitioners	160.0	135.0	110.0	139	134	128
6214	Outpatient Care Centers	43.0	41.0	50.0	84	77	90
6215	Medical and Diagnostic Laboratories	121.5	123.0	136.0	NA	NA	NA
6216	Home Health Care Services	35.0	31.0	31.0	72	67	72
6219	Other Ambulatory Health Care Services	32.5	34.0	40.0	NA	NA	NA
6221	General Medical and Surgical Hospitals	1.0	1.0	1.0	NA	NA	NA
6222	Psychiatric and Substance Abuse Hospitals	225.5	202.5	202.0	NA	NA	NA
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals	242.5	197.5	173.5	NA	NA	NA
6231	Nursing Care Facilities (Skilled Nursing Facilities)	13.0	16.0	16.0	45	59	67

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	14.0	14.0	15.0	NA	NA	NA
6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	29.0	30.0	25.0	NA	NA	NA
6239	Other Residential Care Facilities	203.5	188.5	197.5	NA	NA	NA
6241	Individual and Family Services	20.0	18.0	18.0	47	50	54
6242	Community Food and Housing, and Emergency and Other Relief Services	170.5	167.5	171.5	32	35	43
6243	Vocational Rehabilitation Services	44.0	43.0	44.0	11	13	8
6244	Child Day Care Services	84.0	70.0	80.0	99	83	92
7111	Performing Arts Companies	128.0	103.0	106.5	NA	NA	NA
7112	Spectator Sports	70.0	63.0	65.0	NA	NA	NA
7113	Promoters of Performing Arts, Sports, and Similar Events	214.5	181.5	200.0	NA	NA	NA
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	0.0	302.5	302.0	0	NA	NA
7115	Independent Artists, Writers, and Performers	252.0	235.5	223.0	NA	NA	NA
7121	Museums, Historical Sites, and Similar Institutions	94.0	94.0	92.0	NA	NA	NA
7131	Amusement Parks and Arcades	107.0	82.0	75.0	NA	NA	NA
7132	Gambling Industries	302.5	302.5	0.0	NA	NA	0
7139	Other Amusement and Recreation Industries	62.0	59.0	55.0	51	97	100
7211	Traveler Accommodation	18.0	17.0	17.0	62	69	64
7212	RV (Recreational Vehicle) Parks and Recreational Camps	256.0	259.0	241.5	NA	NA	NA
7213	Rooming and Boarding Houses	0.0	286.5	291.0	0	NA	NA
7223	Special Food Services	48.0	49.5	51.0	NA	NA	NA
7224	Drinking Places (Alcoholic Beverages)	201.0	197.5	206.0	114	110	125
7225	Restaurants and Other Eating Places	3.0	3.0	2.0	NA	NA	NA
8111	Automotive Repair and Maintenance	64.0	51.0	46.0	97	88	87
8112	Electronic and Precision Equipment Repair and Maintenance	217.5	200.0	199.0	128	105	113
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	109.0	107.5	117.0	78	56	73
8114	Personal and Household Goods Repair and Maintenance	248.0	251.5	223.0	107	115	88

Table P9: 2014-2016 FROI Claims: NAICS Four-Digit Annual Claim and Rate Rank - Matched Private

Naics	Description	Claim.Rank			Rate.Rank		
		2014	Year 2015	2016	2014	Year 2015	2016
8121	Personal Care Services	152.5	150.0	161.5	127	125	131
8122	Death Care Services	195.5	173.5	191.5	109	95	111
8123	Drycleaning and Laundry Services	104.0	119.5	117.0	71	74	69
8129	Other Personal Services	121.5	104.0	98.0	74	55	51
8131	Religious Organizations	203.5	210.0	230.5	36	40	85
8132	Grantmaking and Giving Services	228.5	235.5	227.0	<i>NA</i>	<i>NA</i>	<i>NA</i>
8133	Social Advocacy Organizations	150.5	158.0	140.5	<i>NA</i>	<i>NA</i>	<i>NA</i>
8134	Civic and Social Organizations	68.0	71.0	81.0	<i>NA</i>	<i>NA</i>	<i>NA</i>
8139	Business, Professional, Labor, Political, and Similar Organizations	111.5	115.0	173.5	68	73	109
8141	Private Households	279.0	251.5	264.0	<i>NA</i>	<i>NA</i>	<i>NA</i>
9999	Non-classifiable Establishments	225.5	218.5	227.0	<i>NA</i>	<i>NA</i>	<i>NA</i>
All							

Table P10: 2014-2016 FROI Claims: NAICS Three-Digit Ranks and Indices - Matched Private

Burden.Idx	Naics	Description	2014-2016			Prev.Idx
			Claim.Rank	Rate.Rank	LT.Rank	
7.3	484	Truck Transportation	4.0	15	7.0	9.50
9.0	492	Couriers and Messengers	9.0	7	8.0	8.00
17.3	238	Specialty Trade Contractors	7.0	NA	15.0	NA
19.0	481	Air Transportation	52.0	2	3.0	27.00
22.0	336	Transportation Equipment Manufacturing	5.0	20	44.0	12.50
24.7	425	Wholesale Electronic Markets and Agents and Brokers	26.0	18	21.0	22.00
25.0	423	Merchant Wholesalers, Durable Goods	10.0	33	32.0	21.50
26.0	237	Heavy and Civil Engineering Construction	32.0	NA	10.0	NA
27.0	321	Wood Product Manufacturing	35.0	23	22.0	29.00
27.3	424	Merchant Wholesalers, Nondurable Goods	18.0	39	24.0	28.50
28.0	561	Administrative and Support Services	1.0	31	42.0	16.00
28.3	332	Fabricated Metal Product Manufacturing	16.0	24	49.0	20.00
28.5	491	Postal Service	83.0	1	1.5	42.00
29.0	327	Nonmetallic Mineral Product Manufacturing	31.0	25	34.0	28.00
29.7	236	Construction of Buildings	25.0	NA	16.0	NA
30.0	623	Nursing and Residential Care Facilities	6.0	13	65.0	9.50
30.7	113	Forestry and Logging	73.0	14	4.0	43.50
31.0	331	Primary Metal Manufacturing	33.0	17	46.0	25.00
32.7	622	Hospitals	2.0	10	83.0	6.00
33.0	444	Building Material and Garden Equipment and Supplies Dealers	12.0	4	81.0	8.00
33.7	485	Transit and Ground Passenger Transportation	50.0	12	33.0	31.00
34.0	445	Food and Beverage Stores	14.0	19	56.0	16.50
35.7	493	Warehousing and Storage	21.0	32	48.0	26.50
36.0	311	Food Manufacturing	19.0	28	58.0	23.50
37.0	562	Waste Management and Remediation Services	54.0	37	20.0	45.50
37.3	312	Beverage and Tobacco Product Manufacturing	58.0	43	9.0	50.50
39.3	441	Motor Vehicle and Parts Dealers	20.0	49	45.0	34.50
40.3	624	Social Assistance	17.0	26	61.0	21.50
40.7	213	Support Activities for Mining	79.0	54	14.0	66.50
41.3	111	Crop Production	59.0	22	40.0	40.50
42.0	322	Paper Manufacturing	48.0	59	18.0	53.50
42.7	221	Utilities	51.0	3	74.0	27.00

Table P10: 2014-2016 FROI Claims: NAICS Three-Digit Ranks and Indices - Matched Private

Burden.Idx	Naics	Description	2014-2016			Prev.Idx
			Claim.Rank	Rate.Rank	LT.Rank	
43.0	452	General Merchandise Stores	11.0	27	71.0	19.00
43.7	212	Mining (except Oil and Gas)	68.0	40	28.0	54.00
44.0	453	Miscellaneous Store Retailers	28.0	21	70.0	24.50
44.3	487	Scenic and Sightseeing Transportation	78.0	11	39.0	44.50
44.7	515	Broadcasting (except Internet)	62.0	52	17.0	57.00
45.3	711	Performing Arts, Spectator Sports, and Related Industries	38.0	16	77.0	27.00
45.7	531	Real Estate	29.0	47	54.0	38.00
46.0	314	Textile Product Mills	70.0	35	26.0	52.50
46.7	722	Food Services and Drinking Places	3.0	50	73.0	26.50
47.3	447	Gasoline Stations	42.0	63	30.0	52.50
47.7	325	Chemical Manufacturing	39.0	67	35.0	53.00
48.0	339	Miscellaneous Manufacturing	46.0	57	36.0	51.50
49.3	621	Ambulatory Health Care Services	8.0	64	68.0	36.00
49.7	517	Telecommunications	65.0	72	5.0	68.50
50.0	442	Furniture and Home Furnishings Stores	53.0	34	53.0	43.50
50.3	313	Textile Mills	67.0	44	38.0	55.50
50.7	541	Professional, Scientific, and Technical Services	13.0	66	66.0	39.50
51.0	115	Support Activities for Agriculture and Forestry	75.0	53	28.0	64.00
51.3	812	Personal and Laundry Services	40.0	61	43.0	50.50
53.3	999	Non-classifiable Establishments	76.0	NA	80.0	NA
54.7	316	Leather and Allied Product Manufacturing	74.0	5	85.0	39.50
55.0	323	Printing and Related Support Activities	61.0	62	37.0	61.50
55.3	511	Publishing Industries (except Internet)	71.0	74	13.0	72.50
55.7	446	Health and Personal Care Stores	43.0	65	50.0	54.00
55.8	324	Petroleum and Coal Products Manufacturing	80.5	76	6.0	78.25
56.0	611	Educational Services	24.0	55	76.0	39.50
56.7	335	Electrical Equipment, Appliance, and Component Manufacturing	41.0	60	64.0	50.50
57.3	713	Amusement, Gambling, and Recreation Industries	36.0	36	78.0	36.00
57.7	451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	55.0	45	59.0	50.00
58.0	454	Nonstore Retailers	56.0	48	62.0	52.00

Table P10: 2014-2016 FROI Claims: NAICS Three-Digit Ranks and Indices - Matched Private

Burden.Idx	Naics	Description	2014-2016			Prev.Idx
			Claim.Rank	Rate.Rank	LT.Rank	
58.7	523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	77.0	NA	12.0	NA
59.5	483	Water Transportation	87.0	81	1.5	84.00
60.0	443	Electronics and Appliance Stores	63.0	69	41.0	66.00
60.3	525	Funds, Trusts, and Other Financial Vehicles	86.0	NA	88.0	NA
61.8	533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	84.5	NA	23.0	NA
65.8	814	Private Households	80.5	79	28.0	79.75
66.7	211	Oil and Gas Extraction	89.0	42	88.0	65.50
67.7	522	Credit Intermediation and Related Activities	47.0	77	72.0	62.00
70.0	448	Clothing and Clothing Accessories Stores	60.0	71	67.0	65.50
72.7	334	Computer and Electronic Product Manufacturing	72.0	70	69.0	71.00
74.0	518	Data Processing, Hosting, and Related Services	82.0	80	52.0	81.00
75.0	512	Motion Picture and Sound Recording Industries	66.0	68	84.0	67.00
81.3	521	Monetary Authorities-Central Bank	90.0	NA	88.0	NA
85.8	519	Other Information Services	84.5	75	88.0	79.75
87.3	486	Pipeline Transportation	88.0	78	88.0	83.00
All						

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
1	3325	Hardware Manufacturing	2014-2016	130	873	14.89
2	2122	Metal Ore Mining	2014-2016	169	1174	14.40
3	4811	Scheduled Air Transportation	2014-2016	725	5800	12.50
4	3162	Footwear Manufacturing	2014-2016	86	738	11.65
5	7112	Spectator Sports	2014-2016	644	5990	10.75
6	3369	Other Transportation Equipment Manufacturing	2014-2016	23	218	10.55
7	1122	Hog and Pig Farming	2014-2016	80	761	10.51
8	3379	Other Furniture Related Product Manufacturing	2014-2016	203	2005	10.12
9	4851	Urban Transit Systems	2014-2016	522	5295	9.86
10	2211	Electric Power Generation, Transmission and Distribution	2014-2016	708	7219	9.81
11	4871	Scenic and Sightseeing Transportation, Land	2014-2016	43	454	9.47
12	1123	Poultry and Egg Production	2014-2016	67	712	9.41
13	3115	Dairy Product Manufacturing	2014-2016	546	7173	7.61
14	3361	Motor Vehicle Manufacturing	2014-2016	2913	39949	7.29
15	9999	Non-classifiable Establishments	2014-2016	60	831	7.22
16	3372	Office Furniture (including Fixtures) Manufacturing	2014-2016	384	5423	7.08
17	4441	Building Material and Supplies Dealers	2014-2016	5101	72732	7.01
18	4533	Used Merchandise Stores	2014-2016	958	14701	6.52
19	6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	2014-2016	2495	39121	6.38
20	3315	Foundries	2014-2016	515	8468	6.08
21	4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	2014-2016	568	9884	5.75
22	5251	Insurance and Employee Benefit Funds	2014-2016	7	123	5.69
23	6219	Other Ambulatory Health Care Services	2014-2016	1103	19422	5.68
24	6243	Vocational Rehabilitation Services	2014-2016	923	17150	5.38
25	3366	Ship and Boat Building	2014-2016	482	9195	5.24
26	4922	Local Messengers and Local Delivery	2014-2016	93	1776	5.24
27	4921	Couriers and Express Delivery Services	2014-2016	5640	108663	5.19
28	3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	2014-2016	1029	20029	5.14

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
29	4233	Lumber and Other Construction Materials Merchant Wholesalers	2014-2016	765	15720	4.87
30	3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	2014-2016	736	15538	4.74
31	3321	Forging and Stamping	2014-2016	390	8255	4.72
32	3211	Sawmills and Wood Preservation	2014-2016	375	7998	4.69
33	4841	General Freight Trucking	2014-2016	6109	130930	4.67
34	3313	Alumina and Aluminum Production and Processing	2014-2016	401	8765	4.58
35	3272	Glass and Glass Product Manufacturing	2014-2016	535	11953	4.48
36	4889	Other Support Activities for Transportation	2014-2016	113	2527	4.47
37	6221	General Medical and Surgical Hospitals	2014-2016	13386	300412	4.46
38	4247	Petroleum and Petroleum Products Merchant Wholesalers	2014-2016	233	5231	4.45
39	4842	Specialized Freight Trucking	2014-2016	1855	42182	4.40
40	3328	Coating, Engraving, Heat Treating, and Allied Activities	2014-2016	353	8142	4.34
41	3113	Sugar and Confectionery Product Manufacturing	2014-2016	319	7617	4.19
42	2373	Highway, Street, and Bridge Construction	2014-2016	669	16333	4.10
43	1114	Greenhouse, Nursery, and Floriculture Production	2014-2016	316	7843	4.03
44	3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	2014-2016	124	3091	4.01
45	4542	Vending Machine Operators	2014-2016	240	6000	4.00
46	1133	Logging	2014-2016	116	2901	4.00
47	1121	Cattle Ranching and Farming	2014-2016	74	1872	3.95
48	2212	Natural Gas Distribution	2014-2016	58	1483	3.91
49	5419	Other Professional, Scientific, and Technical Services	2014-2016	1373	35293	3.89
50	5613	Employment Services	2014-2016	11393	305578	3.73
51	3323	Architectural and Structural Metals Manufacturing	2014-2016	975	26153	3.73
52	1119	Other Crop Farming	2014-2016	57	1536	3.71
53	4244	Grocery and Related Product Merchant Wholesalers	2014-2016	1452	39186	3.71

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
54	3271	Clay Product and Refractory Manufacturing	2014-2016	201	5426	3.70
55	3261	Plastics Product Manufacturing	2014-2016	1440	39122	3.68
56	4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	2014-2016	290	8019	3.62
57	6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	2014-2016	1353	37547	3.60
58	3324	Boiler, Tank, and Shipping Container Manufacturing	2014-2016	300	8497	3.53
59	5611	Office Administrative Services	2014-2016	1158	32839	3.53
60	7121	Museums, Historical Sites, and Similar Institutions	2014-2016	424	12078	3.51
61	2111	Oil and Gas Extraction	2014-2016	4	114	3.51
62	3133	Textile and Fabric Finishing and Fabric Coating Mills	2014-2016	112	3229	3.47
63	3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	2014-2016	46	1332	3.45
64	5511	Management of Companies and Enterprises	2014-2016	4287	124898	3.43
65	4251	Wholesale Electronic Markets and Agents and Brokers	2014-2016	1859	54171	3.43
66	4882	Support Activities for Rail Transportation	2014-2016	36	1059	3.40
67	4859	Other Transit and Ground Passenger Transportation	2014-2016	167	4969	3.36
68	2381	Foundation, Structure, and Building Exterior Contractors	2014-2016	1352	40433	3.34
69	3363	Motor Vehicle Parts Manufacturing	2014-2016	4216	126459	3.33
70	4451	Grocery Stores	2014-2016	4763	144032	3.31
71	3118	Bakeries and Tortilla Manufacturing	2014-2016	630	19130	3.29
72	4884	Support Activities for Road Transportation	2014-2016	195	5992	3.25
73	1151	Support Activities for Crop Production	2014-2016	57	1754	3.25
74	3152	Cut and Sew Apparel Manufacturing	2014-2016	321	9909	3.24
75	4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	2014-2016	1006	31114	3.23
76	3332	Industrial Machinery Manufacturing	2014-2016	124	3847	3.22
77	2382	Building Equipment Contractors	2014-2016	3664	113691	3.22

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
78	4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	2014-2016	410	12831	3.20
79	2131	Support Activities for Mining	2014-2016	31	974	3.18
80	4442	Lawn and Garden Equipment and Supplies Stores	2014-2016	329	10487	3.14
81	1131	Timber Tract Operations	2014-2016	1	32	3.12
82	1112	Vegetable and Melon Farming	2014-2016	58	1858	3.12
83	3399	Other Miscellaneous Manufacturing	2014-2016	618	19892	3.11
84	5621	Waste Collection	2014-2016	219	7069	3.10
85	3112	Grain and Oilseed Milling	2014-2016	184	5944	3.10
86	3312	Steel Product Manufacturing from Purchased Steel	2014-2016	134	4384	3.06
87	3121	Beverage Manufacturing	2014-2016	465	15279	3.04
88	3314	Nonferrous Metal (except Aluminum) Production and Processing	2014-2016	146	4812	3.03
89	4246	Chemical and Allied Products Merchant Wholesalers	2014-2016	207	6883	3.01
90	5313	Activities Related to Real Estate	2014-2016	755	25261	2.99
91	4238	Machinery, Equipment, and Supplies Merchant Wholesalers	2014-2016	1254	42083	2.98
92	3273	Cement and Concrete Product Manufacturing	2014-2016	422	14199	2.97
93	2383	Building Finishing Contractors	2014-2016	894	30307	2.95
94	8133	Social Advocacy Organizations	2014-2016	213	7245	2.94
95	4931	Warehousing and Storage	2014-2016	2574	88044	2.92
96	2389	Other Specialty Trade Contractors	2014-2016	849	29178	2.91
97	3219	Other Wood Product Manufacturing	2014-2016	689	23737	2.90
98	7223	Special Food Services	2014-2016	823	28549	2.88
99	3359	Other Electrical Equipment and Component Manufacturing	2014-2016	244	8473	2.88
100	4232	Furniture and Home Furnishing Merchant Wholesalers	2014-2016	141	4943	2.85
101	5629	Remediation and Other Waste Management Services	2014-2016	302	10615	2.85
102	4239	Miscellaneous Durable Goods Merchant Wholesalers	2014-2016	483	17060	2.83

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
103	3333	Commercial and Service Industry Machinery Manufacturing	2014-2016	148	5277	2.80
104	4245	Farm Product Raw Material Merchant Wholesalers	2014-2016	91	3258	2.79
105	8134	Civic and Social Organizations	2014-2016	589	21278	2.77
106	4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	2014-2016	486	17576	2.77
107	3149	Other Textile Product Mills	2014-2016	185	6709	2.76
108	4421	Furniture Stores	2014-2016	376	13795	2.73
109	5617	Services to Buildings and Dwellings	2014-2016	3372	124936	2.70
110	2371	Utility System Construction	2014-2016	541	20068	2.70
111	3141	Textile Furnishings Mills	2014-2016	20	742	2.70
112	3335	Metalworking Machinery Manufacturing	2014-2016	271	10150	2.67
113	2362	Nonresidential Building Construction	2014-2016	1207	45331	2.66
114	7111	Performing Arts Companies	2014-2016	328	12448	2.63
115	3279	Other Nonmetallic Mineral Product Manufacturing	2014-2016	144	5486	2.62
116	4422	Home Furnishings Stores	2014-2016	349	13574	2.57
117	3255	Paint, Coating, and Adhesive Manufacturing	2014-2016	73	2844	2.57
118	6242	Community Food and Housing, and Emergency and Other Relief Services	2014-2016	163	6351	2.57
119	6241	Individual and Family Services	2014-2016	1845	72467	2.55
120	8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	2014-2016	327	12846	2.55
121	3262	Rubber Product Manufacturing	2014-2016	673	26500	2.54
122	4881	Support Activities for Air Transportation	2014-2016	137	5477	2.50
123	4413	Automotive Parts, Accessories, and Tire Stores	2014-2016	1128	45569	2.48
124	5323	General Rental Centers	2014-2016	34	1377	2.47
125	6223	Specialty (except Psychiatric and Substance Abuse) Hospitals	2014-2016	97	3961	2.45
126	3322	Cutlery and Handtool Manufacturing	2014-2016	41	1691	2.42
127	1129	Other Animal Production	2014-2016	7	289	2.42
128	6231	Nursing Care Facilities (Skilled Nursing Facilities)	2014-2016	2465	101895	2.42

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
129	5322	Consumer Goods Rental	2014-2016	298	12341	2.41
130	5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	2014-2016	160	6647	2.41
131	3339	Other General Purpose Machinery Manufacturing	2014-2016	362	15093	2.40
132	3132	Fabric Mills	2014-2016	69	2887	2.39
133	2361	Residential Building Construction	2014-2016	733	30972	2.37
134	8129	Other Personal Services	2014-2016	348	14817	2.35
135	3329	Other Fabricated Metal Product Manufacturing	2014-2016	692	29514	2.34
136	5416	Management, Scientific, and Technical Consulting Services	2014-2016	1491	64761	2.30
137	3351	Electric Lighting Equipment Manufacturing	2014-2016	100	4360	2.29
138	3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	2014-2016	256	11273	2.27
139	4539	Other Miscellaneous Store Retailers	2014-2016	403	17921	2.25
140	6111	Elementary and Secondary Schools	2014-2016	903	40238	2.24
141	8131	Religious Organizations	2014-2016	75	3354	2.24
142	4241	Paper and Paper Product Merchant Wholesalers	2014-2016	207	9416	2.20
143	7211	Traveler Accommodation	2014-2016	2162	98853	2.19
144	3119	Other Food Manufacturing	2014-2016	317	14548	2.18
145	4543	Direct Selling Establishments	2014-2016	133	6228	2.14
146	3222	Converted Paper Product Manufacturing	2014-2016	561	26759	2.10
147	3116	Animal Slaughtering and Processing	2014-2016	694	33108	2.10
148	4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	2014-2016	802	38290	2.09
149	6216	Home Health Care Services	2014-2016	1211	58271	2.08
150	4411	Automobile Dealers	2014-2016	1617	77926	2.08
151	3131	Fiber, Yarn, and Thread Mills	2014-2016	87	4223	2.06
152	4412	Other Motor Vehicle Dealers	2014-2016	179	8723	2.05
153	4242	Drugs and Druggists' Sundries Merchant Wholesalers	2014-2016	406	19864	2.04
154	8123	Drycleaning and Laundry Services	2014-2016	322	15824	2.03
155	2379	Other Heavy and Civil Engineering Construction	2014-2016	107	5343	2.00
156	3311	Iron and Steel Mills and Ferroalloy Manufacturing	2014-2016	90	4497	2.00
157	3274	Lime and Gypsum Product Manufacturing	2014-2016	19	951	2.00

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
158	3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	2014-2016	194	9817	1.98
159	1152	Support Activities for Animal Production	2014-2016	13	672	1.93
160	4855	Charter Bus Industry	2014-2016	37	1919	1.93
161	4511	Sporting Goods, Hobby, and Musical Instrument Stores	2014-2016	614	31923	1.92
162	6214	Outpatient Care Centers	2014-2016	914	49249	1.86
163	3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	2014-2016	91	4905	1.86
164	2123	Nonmetallic Mineral Mining and Quarrying	2014-2016	96	5181	1.85
165	6239	Other Residential Care Facilities	2014-2016	101	5538	1.82
166	8139	Business, Professional, Labor, Political, and Similar Organizations	2014-2016	270	14815	1.82
167	5311	Lessors of Real Estate	2014-2016	564	31149	1.81
168	3251	Basic Chemical Manufacturing	2014-2016	259	14437	1.79
169	7113	Promoters of Performing Arts, Sports, and Similar Events	2014-2016	98	5480	1.79
170	3353	Electrical Equipment Manufacturing	2014-2016	283	15915	1.78
171	8111	Automotive Repair and Maintenance	2014-2016	792	44820	1.77
172	4879	Scenic and Sightseeing Transportation, Other	2014-2016	2	115	1.74
173	4853	Taxi and Limousine Service	2014-2016	30	1780	1.69
174	3326	Spring and Wire Product Manufacturing	2014-2016	87	5205	1.67
175	5616	Investigation and Security Services	2014-2016	1033	61938	1.67
176	2213	Water, Sewage and Other Systems	2014-2016	24	1440	1.67
177	7213	Rooming and Boarding Houses	2014-2016	5	300	1.67
178	7225	Restaurants and Other Eating Places	2014-2016	11187	676882	1.65
179	5612	Facilities Support Services	2014-2016	173	10644	1.63
180	5211	Monetary Authorities-Central Bank	2014-2016	3	187	1.60
181	4885	Freight Transportation Arrangement	2014-2016	325	20375	1.60
182	5413	Architectural, Engineering, and Related Services	2014-2016	1060	67251	1.58
183	5179	Other Telecommunications	2014-2016	10	636	1.57
184	3151	Apparel Knitting Mills	2014-2016	35	2230	1.57
185	3331	Agriculture, Construction, and Mining Machinery Manufacturing	2014-2016	169	10779	1.57

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
186	5619	Other Support Services	2014-2016	433	27686	1.56
187	3169	Other Leather and Allied Product Manufacturing	2014-2016	7	451	1.55
188	4812	Nonscheduled Air Transportation	2014-2016	18	1167	1.54
189	6113	Colleges, Universities, and Professional Schools	2014-2016	1031	67425	1.53
190	3231	Printing and Related Support Activities	2014-2016	425	27907	1.52
191	4512	Book Stores and News Dealers	2014-2016	63	4342	1.45
192	7139	Other Amusement and Recreation Industries	2014-2016	728	50393	1.44
193	3344	Semiconductor and Other Electronic Component Manufacturing	2014-2016	61	4323	1.41
194	5622	Waste Treatment and Disposal	2014-2016	85	6032	1.41
195	3259	Other Chemical Product and Preparation Manufacturing	2014-2016	141	10088	1.40
196	6215	Medical and Diagnostic Laboratories	2014-2016	284	20415	1.39
197	4471	Gasoline Stations	2014-2016	921	66486	1.39
198	8114	Personal and Household Goods Repair and Maintenance	2014-2016	38	2757	1.38
199	3221	Pulp, Paper, and Paperboard Mills	2014-2016	231	16971	1.36
200	4541	Electronic Shopping and Mail-Order Houses	2014-2016	207	15262	1.36
201	5321	Automotive Equipment Rental and Leasing	2014-2016	210	15576	1.35
202	4852	Interurban and Rural Bus Transportation	2014-2016	11	820	1.34
203	6244	Child Day Care Services	2014-2016	541	40360	1.34
204	4521	Department Stores	2014-2016	1434	107179	1.34
205	3362	Motor Vehicle Body and Trailer Manufacturing	2014-2016	243	18584	1.31
206	4531	Florists	2014-2016	46	3523	1.31
207	5121	Motion Picture and Video Industries	2014-2016	255	19571	1.30
208	4461	Health and Personal Care Stores	2014-2016	893	70503	1.27
209	5312	Offices of Real Estate Agents and Brokers	2014-2016	192	15652	1.23
210	3341	Computer and Peripheral Equipment Manufacturing	2014-2016	13	1066	1.22
211	1111	Oilseed and Grain Farming	2014-2016	18	1556	1.16
212	3352	Household Appliance Manufacturing	2014-2016	337	29310	1.15
213	8122	Death Care Services	2014-2016	125	10890	1.15
214	5417	Scientific Research and Development Services	2014-2016	273	24430	1.12

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
215	4249	Miscellaneous Nondurable Goods Merchant Wholesalers	2014-2016	211	18931	1.11
216	4532	Office Supplies, Stationery, and Gift Stores	2014-2016	180	16488	1.09
217	4431	Electronics and Appliance Stores	2014-2016	365	34320	1.06
218	3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	2014-2016	322	31501	1.02
219	8112	Electronic and Precision Equipment Repair and Maintenance	2014-2016	85	8432	1.01
220	4452	Specialty Food Stores	2014-2016	74	7372	1.00
221	4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	2014-2016	96	9699	0.99
222	5241	Insurance Carriers	2014-2016	528	53595	0.99
223	6211	Offices of Physicians	2014-2016	1779	185140	0.96
224	3254	Pharmaceutical and Medicine Manufacturing	2014-2016	56	6000	0.93
225	7115	Independent Artists, Writers, and Performers	2014-2016	43	4700	0.91
226	6222	Psychiatric and Substance Abuse Hospitals	2014-2016	79	8781	0.90
227	3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	2014-2016	233	26449	0.88
228	5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	2014-2016	10	1136	0.88
229	3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	2014-2016	64	7382	0.87
230	3391	Medical Equipment and Supplies Manufacturing	2014-2016	214	25807	0.83
231	6115	Technical and Trade Schools	2014-2016	46	5571	0.83
232	5614	Business Support Services	2014-2016	576	70405	0.82
233	7224	Drinking Places (Alcoholic Beverages)	2014-2016	91	11216	0.81
234	1153	Support Activities for Forestry	2014-2016	7	873	0.80
235	5111	Newspaper, Periodical, Book, and Directory Publishers	2014-2016	165	20775	0.79
236	5171	Wired Telecommunications Carriers	2014-2016	245	31021	0.79
237	3346	Manufacturing and Reproducing Magnetic and Optical Media	2014-2016	6	764	0.79
238	6112	Junior Colleges	2014-2016	7	911	0.77
239	8132	Grantmaking and Giving Services	2014-2016	51	6829	0.75

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

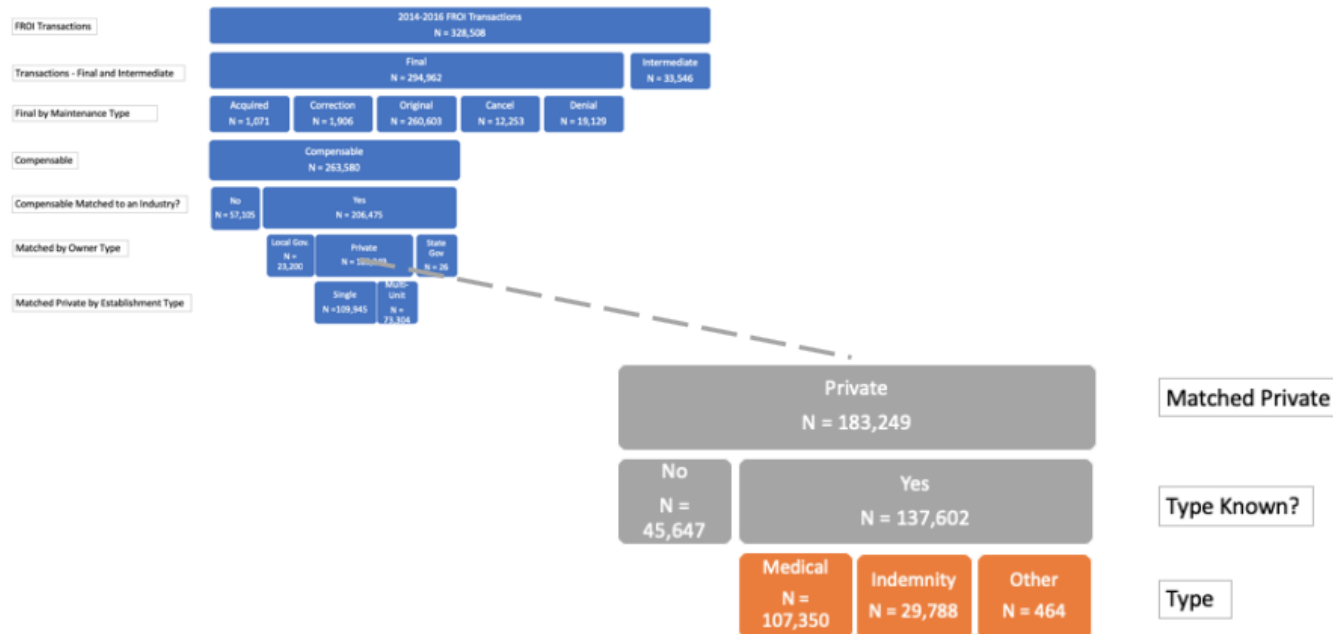
Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
240	1113	Fruit and Tree Nut Farming	2014-2016	1	134	0.75
241	5615	Travel Arrangement and Reservation Services	2014-2016	56	7593	0.74
242	6114	Business Schools and Computer and Management Training	2014-2016	24	3422	0.70
243	3343	Audio and Video Equipment Manufacturing	2014-2016	3	433	0.69
244	4529	Other General Merchandise Stores	2014-2016	729	108783	0.67
245	4831	Deep Sea, Coastal, and Great Lakes Water Transportation	2014-2016	1	151	0.66
246	4481	Clothing Stores	2014-2016	357	54671	0.65
247	5221	Depository Credit Intermediation	2014-2016	611	93943	0.65
248	6212	Offices of Dentists	2014-2016	308	47713	0.65
249	5418	Advertising, Public Relations, and Related Services	2014-2016	122	19649	0.62
250	4862	Pipeline Transportation of Natural Gas	2014-2016	6	978	0.61
251	3241	Petroleum and Coal Products Manufacturing	2014-2016	20	3270	0.61
252	8121	Personal Care Services	2014-2016	197	32384	0.61
253	5415	Computer Systems Design and Related Services	2014-2016	305	55113	0.55
254	4453	Beer, Wine, and Liquor Stores	2014-2016	51	9575	0.53
255	3342	Communications Equipment Manufacturing	2014-2016	4	751	0.53
256	6116	Other Schools and Instruction	2014-2016	77	14474	0.53
257	2121	Coal Mining	2014-2016	1	188	0.53
258	5174	Satellite Telecommunications	2014-2016	1	189	0.53
259	5191	Other Information Services	2014-2016	10	1928	0.52
260	4482	Shoe Stores	2014-2016	61	11764	0.52
261	7212	RV (Recreational Vehicle) Parks and Recreational Camps	2014-2016	29	5603	0.52
262	6213	Offices of Other Health Practitioners	2014-2016	258	50338	0.51
263	3159	Apparel Accessories and Other Apparel Manufacturing	2014-2016	1	211	0.47
264	5411	Legal Services	2014-2016	201	42694	0.47
265	5172	Wireless Telecommunications Carriers (except Satellite)	2014-2016	53	11423	0.46
266	5242	Agencies, Brokerages, and Other Insurance Related Activities	2014-2016	320	71206	0.45

Table P11: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Unadjusted Rate Rank - Matched Private

Unadj.Rank	Naics	Description	Year	MP.Claims	QCEW.Empl	Unadj.Rate
267	2372	Land Subdivision	2014-2016	11	2598	0.42
268	5259	Other Investment Pools and Funds	2014-2016	1	245	0.41
269	5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	2014-2016	270	66166	0.41
270	5122	Sound Recording Industries	2014-2016	25	6319	0.40
271	5223	Activities Related to Credit Intermediation	2014-2016	60	15858	0.38
272	3111	Animal Food Manufacturing	2014-2016	5	1346	0.37
273	6117	Educational Support Services	2014-2016	18	5128	0.35
274	4483	Jewelry, Luggage, and Leather Goods Stores	2014-2016	24	6842	0.35
275	5414	Specialized Design Services	2014-2016	15	4579	0.33
276	5222	Nondepository Credit Intermediation	2014-2016	150	49285	0.30
277	4854	School and Employee Bus Transportation	2014-2016	17	6032	0.28
278	4883	Support Activities for Water Transportation	2014-2016	2	818	0.24
279	3364	Aerospace Product and Parts Manufacturing	2014-2016	15	7495	0.20
280	3122	Tobacco Manufacturing	2014-2016	5	2677	0.19
281	5182	Data Processing, Hosting, and Related Services	2014-2016	16	14639	0.11
282	5231	Securities and Commodity Contracts Intermediation and Brokerage	2014-2016	17	15635	0.11
283	8141	Private Households	2014-2016	20	20543	0.10
284	4832	Inland Water Transportation	2014-2016	6	7311	0.08
285	5112	Software Publishers	2014-2016	6	7430	0.08
286	7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	2014-2016	2	2618	0.08
All				182351	7189665	2.54

7.4 Claim Aggregations and Ranks - Lost Time, Medical, and Other

Figure 10: 2014-2016 FROI Claims - Type



Notes:

1. Claim type was not a mandatory reporting field, so only 137,602 of 183,249 (75 percent) matched private sector claims are 'Type Known.'
2. The known types consist of Lost-time, Medical, and Other where the last sub-type denotes notification and transfer claims that are a negligible portion of the total known (0.34 percent).
3. $LT.Ratio = LT.Claims / (LT.Claims + Med.Claims + Other.Claims)$.

Table T1: 2014-2016 FROI Claims: NAICS Three-Digit Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			
			LT.Claims	Med.Claims	Other.Claims	LT.Ratio
1.5	483	Water Transportation	4	0	0	1.000
1.5	491	Postal Service	2	0	0	1.000
3	481	Air Transportation	345	231	1	0.598
4	113	Forestry and Logging	49	49	0	0.500
5	517	Telecommunications	130	132	0	0.496
6	324	Petroleum and Coal Products Manufacturing	6	7	0	0.462
7	484	Truck Transportation	2811	3722	27	0.429
8	492	Couriers and Messengers	2172	3070	5	0.414
9	312	Beverage and Tobacco Product Manufacturing	137	232	0	0.371
10	237	Heavy and Civil Engineering Construction	379	690	4	0.353
11	488	Support Activities for Transportation	215	399	2	0.349
12	523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	10	19	0	0.345
13	511	Publishing Industries (except Internet)	37	72	0	0.339
14	213	Support Activities for Mining	6	12	0	0.333
15	238	Specialty Trade Contractors	1564	3162	21	0.329
16	236	Construction of Buildings	422	900	9	0.317
17	515	Broadcasting (except Internet)	101	225	0	0.310
18	322	Paper Manufacturing	213	484	1	0.305
19	532	Rental and Leasing Services	192	441	2	0.302
20	562	Waste Management and Remediation Services	147	348	1	0.296
21	425	Wholesale Electronic Markets and Agents and Brokers	397	950	1	0.295
22	321	Wood Product Manufacturing	282	686	0	0.291
23	533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	2	5	0	0.286
24	424	Merchant Wholesalers, Nondurable Goods	769	2012	9	0.276
25	811	Repair and Maintenance	255	680	7	0.271
26	314	Textile Product Mills	43	122	0	0.261
28	115	Support Activities for Agriculture and Forestry	13	39	0	0.250
28	212	Mining (except Oil and Gas)	54	162	0	0.250
28	814	Private Households	4	12	0	0.250
30	447	Gasoline Stations	168	509	2	0.247
31	315	Apparel Manufacturing	70	213	0	0.247

Table T1: 2014-2016 FROI Claims: NAICS Three-Digit Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			
			LT.Claims	Med.Claims	Other.Claims	LT.Ratio
32	423	Merchant Wholesalers, Durable Goods	1053	3255	3	0.244
33	485	Transit and Ground Passenger Transportation	171	535	3	0.241
34	327	Nonmetallic Mineral Product Manufacturing	238	771	1	0.236
35	325	Chemical Manufacturing	203	664	1	0.234
36	339	Miscellaneous Manufacturing	165	543	4	0.232
37	323	Printing and Related Support Activities	79	266	2	0.228
38	313	Textile Mills	49	167	0	0.227
39	487	Scenic and Sightseeing Transportation	9	31	0	0.225
40	111	Crop Production	74	261	0	0.221
41	443	Electronics and Appliance Stores	58	205	0	0.221
42	561	Administrative and Support Services	2893	10182	51	0.220
43	812	Personal and Laundry Services	157	588	1	0.210
44	336	Transportation Equipment Manufacturing	1214	4583	3	0.209
45	441	Motor Vehicle and Parts Dealers	487	1835	6	0.209
46	331	Primary Metal Manufacturing	219	829	6	0.208
47	333	Machinery Manufacturing	241	930	2	0.205
48	493	Warehousing and Storage	434	1657	26	0.205
49	332	Fabricated Metal Product Manufacturing	602	2351	6	0.203
50	446	Health and Personal Care Stores	135	530	0	0.203
51	551	Management of Companies and Enterprises	551	2183	5	0.201
52	518	Data Processing, Hosting, and Related Services	2	8	0	0.200
53	442	Furniture and Home Furnishings Stores	101	408	1	0.198
54	531	Real Estate	224	937	0	0.193
55	524	Insurance Carriers and Related Activities	113	477	0	0.192
56	445	Food and Beverage Stores	577	2501	14	0.187
57	337	Furniture and Related Product Manufacturing	257	1122	16	0.184
58	311	Food Manufacturing	480	2170	8	0.181
59	451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	87	401	2	0.178
60	326	Plastics and Rubber Products Manufacturing	316	1463	5	0.177
61	624	Social Assistance	489	2273	9	0.176
62	454	Nonstore Retailers	78	368	2	0.174
63	721	Accommodation	305	1487	13	0.169

Table T1: 2014-2016 FROI Claims: NAICS Three-Digit Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			
			LT.Claims	Med.Claims	Other.Claims	LT.Ratio
64	335	Electrical Equipment, Appliance, and Component Manufacturing	130	651	4	0.166
65	623	Nursing and Residential Care Facilities	813	4093	25	0.165
66	541	Professional, Scientific, and Technical Services	623	3190	8	0.163
67	448	Clothing and Clothing Accessories Stores	49	259	0	0.159
68	621	Ambulatory Health Care Services	686	3670	17	0.157
69	334	Computer and Electronic Product Manufacturing	19	107	0	0.151
70	453	Miscellaneous Store Retailers	168	959	0	0.149
71	452	General Merchandise Stores	731	4229	7	0.147
72	522	Credit Intermediation and Related Activities	84	486	1	0.147
73	722	Food Services and Drinking Places	1229	7214	22	0.145
74	221	Utilities	107	587	55	0.143
75	112	Animal Production and Aquaculture	21	136	0	0.134
76	611	Educational Services	205	1331	1	0.133
77	711	Performing Arts, Spectator Sports, and Related Industries	97	640	1	0.131
78	713	Amusement, Gambling, and Recreation Industries	116	791	5	0.127
79	813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	112	820	3	0.120
80	999	Non-classifiable Establishments	6	45	0	0.118
81	444	Building Material and Garden Equipment and Supplies Dealers	523	4165	4	0.111
82	712	Museums, Historical Sites, and Similar Institutions	30	239	7	0.109
83	622	Hospitals	960	7874	22	0.108
84	512	Motion Picture and Sound Recording Industries	17	229	0	0.069
85	316	Leather and Allied Product Manufacturing	2	50	0	0.038
88	211	Oil and Gas Extraction	0	4	0	0.000
88	486	Pipeline Transportation	0	3	0	0.000
88	519	Other Information Services	0	5	0	0.000
88	521	Monetary Authorities-Central Bank	0	3	0	0.000
88	525	Funds, Trusts, and Other Financial Vehicles	0	4	0	0.000
All			29788	107350	464	

Table T2: 2014-2016 FROI Claims: NAICS Three-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
1	7.333	484	Truck Transportation	2014-2016	11	4.0	7.0
2	9.000	492	Couriers and Messengers	2014-2016	10	9.0	8.0
3	17.333	238	Specialty Trade Contractors	2014-2016	30	7.0	15.0
4	19.000	481	Air Transportation	2014-2016	2	52.0	3.0
5	22.000	336	Transportation Equipment Manufacturing	2014-2016	17	5.0	44.0
6	24.667	425	Wholesale Electronic Markets and Agents and Brokers	2014-2016	27	26.0	21.0
7	25.000	423	Merchant Wholesalers, Durable Goods	2014-2016	33	10.0	32.0
8	26.000	237	Heavy and Civil Engineering Construction	2014-2016	36	32.0	10.0
9	27.000	321	Wood Product Manufacturing	2014-2016	24	35.0	22.0
10	27.333	424	Merchant Wholesalers, Non-durable Goods	2014-2016	40	18.0	24.0
11	28.000	561	Administrative and Support Services	2014-2016	41	1.0	42.0
12	28.333	332	Fabricated Metal Product Manufacturing	2014-2016	20	16.0	49.0
13	28.500	491	Postal Service	2014-2016	1	83.0	1.5
14	29.000	327	Nonmetallic Mineral Product Manufacturing	2014-2016	22	31.0	34.0
15	29.667	236	Construction of Buildings	2014-2016	48	25.0	16.0
16	30.000	623	Nursing and Residential Care Facilities	2014-2016	19	6.0	65.0
17	30.667	113	Forestry and Logging	2014-2016	15	73.0	4.0
18	30.667	337	Furniture and Related Product Manufacturing	2014-2016	8	27.0	57.0
19	30.667	551	Management of Companies and Enterprises	2014-2016	26	15.0	51.0
20	31.000	331	Primary Metal Manufacturing	2014-2016	14	33.0	46.0
21	32.667	622	Hospitals	2014-2016	13	2.0	83.0
22	33.000	444	Building Material and Garden Equipment and Supplies Dealers	2014-2016	6	12.0	81.0

Table T2: 2014-2016 FROI Claims: NAICS Three-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
23	33.667	485	Transit and Ground Passenger Transportation	2014-2016	18	50.0	33.0
24	34.000	445	Food and Beverage Stores	2014-2016	32	14.0	56.0
25	35.667	493	Warehousing and Storage	2014-2016	38	21.0	48.0
26	36.000	311	Food Manufacturing	2014-2016	31	19.0	58.0
27	37.000	326	Plastics and Rubber Products Manufacturing	2014-2016	28	23.0	60.0
28	37.000	562	Waste Management and Remediation Services	2014-2016	37	54.0	20.0
29	37.333	312	Beverage and Tobacco Product Manufacturing	2014-2016	45	58.0	9.0
30	37.333	488	Support Activities for Transportation	2014-2016	52	49.0	11.0
31	37.333	532	Rental and Leasing Services	2014-2016	49	44.0	19.0
32	39.333	441	Motor Vehicle and Parts Dealers	2014-2016	53	20.0	45.0
33	40.333	624	Social Assistance	2014-2016	43	17.0	61.0
34	40.667	213	Support Activities for Mining	2014-2016	29	79.0	14.0
35	40.667	811	Repair and Maintenance	2014-2016	63	34.0	25.0
36	41.333	111	Crop Production	2014-2016	25	59.0	40.0
37	42.000	322	Paper Manufacturing	2014-2016	60	48.0	18.0
38	42.667	221	Utilities	2014-2016	3	51.0	74.0
39	43.000	452	General Merchandise Stores	2014-2016	47	11.0	71.0
40	43.667	212	Mining (except Oil and Gas)	2014-2016	35	68.0	28.0
41	44.000	453	Miscellaneous Store Retailers	2014-2016	34	28.0	70.0
42	44.333	487	Scenic and Sightseeing Transportation	2014-2016	16	78.0	39.0
43	44.667	315	Apparel Manufacturing	2014-2016	39	64.0	31.0
44	44.667	515	Broadcasting (except Internet)	2014-2016	55	62.0	17.0
45	45.333	711	Performing Arts, Spectator Sports, and Related Industries	2014-2016	21	38.0	77.0
46	45.667	531	Real Estate	2014-2016	54	29.0	54.0
47	46.000	314	Textile Product Mills	2014-2016	42	70.0	26.0
48	46.000	333	Machinery Manufacturing	2014-2016	61	30.0	47.0

Table T2: 2014-2016 FROI Claims: NAICS Three-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
49	46.667	722	Food Services and Drinking Places	2014-2016	64	3.0	73.0
50	47.333	447	Gasoline Stations	2014-2016	70	42.0	30.0
51	47.333	721	Accommodation	2014-2016	57	22.0	63.0
52	47.667	325	Chemical Manufacturing	2014-2016	69	39.0	35.0
53	48.000	339	Miscellaneous Manufacturing	2014-2016	62	46.0	36.0
54	49.333	621	Ambulatory Health Care Services	2014-2016	72	8.0	68.0
55	49.667	517	Telecommunications	2014-2016	79	65.0	5.0
56	50.000	442	Furniture and Home Furnishings Stores	2014-2016	44	53.0	53.0
57	50.333	313	Textile Mills	2014-2016	46	67.0	38.0
58	50.333	712	Museums, Historical Sites, and Similar Institutions	2014-2016	12	57.0	82.0
59	50.667	541	Professional, Scientific, and Technical Services	2014-2016	73	13.0	66.0
60	51.000	112	Animal Production and Aquaculture	2014-2016	9	69.0	75.0
61	51.000	115	Support Activities for Agriculture and Forestry	2014-2016	50	75.0	28.0
62	51.333	812	Personal and Laundry Services	2014-2016	71	40.0	43.0
63	53.333	999	Non-classifiable Establishments	2014-2016	4	76.0	80.0
64	54.667	316	Leather and Allied Product Manufacturing	2014-2016	5	74.0	85.0
65	55.000	323	Printing and Related Support Activities	2014-2016	67	61.0	37.0
66	55.333	511	Publishing Industries (except Internet)	2014-2016	82	71.0	13.0
67	55.667	446	Health and Personal Care Stores	2014-2016	74	43.0	50.0
68	55.667	813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	2014-2016	51	37.0	79.0
69	55.833	324	Petroleum and Coal Products Manufacturing	2014-2016	81	80.5	6.0

Table T2: 2014-2016 FROI Claims: NAICS Three-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
70	56.000	611	Educational Services	2014-2016	68	24.0	76.0
71	56.667	335	Electrical Equipment, Appliance, and Component Manufacturing	2014-2016	65	41.0	64.0
72	57.333	713	Amusement, Gambling, and Recreation Industries	2014-2016	58	36.0	78.0
73	57.667	451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	2014-2016	59	55.0	59.0
74	58.000	454	Nonstore Retailers	2014-2016	56	56.0	62.0
75	58.667	523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	2014-2016	87	77.0	12.0
76	59.500	483	Water Transportation	2014-2016	90	87.0	1.5
77	60.000	443	Electronics and Appliance Stores	2014-2016	76	63.0	41.0
78	60.000	524	Insurance Carriers and Related Activities	2014-2016	80	45.0	55.0
79	60.333	525	Funds, Trusts, and Other Financial Vehicles	2014-2016	7	86.0	88.0
80	61.833	533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	2014-2016	78	84.5	23.0
81	65.833	814	Private Households	2014-2016	89	80.5	28.0
82	66.667	211	Oil and Gas Extraction	2014-2016	23	89.0	88.0
83	67.667	522	Credit Intermediation and Related Activities	2014-2016	84	47.0	72.0
84	70.000	448	Clothing and Clothing Accessories Stores	2014-2016	83	60.0	67.0
85	72.667	334	Computer and Electronic Product Manufacturing	2014-2016	77	72.0	69.0
86	74.000	518	Data Processing, Hosting, and Related Services	2014-2016	88	82.0	52.0
87	75.000	512	Motion Picture and Sound Recording Industries	2014-2016	75	66.0	84.0

Table T2: 2014-2016 FROI Claims: NAICS Three-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
88	81.333	521	Monetary Authorities-Central Bank	2014-2016	66	90.0	88.0
89	85.833	519	Other Information Services	2014-2016	85	84.5	88.0
90	87.333	486	Pipeline Transportation	2014-2016	86	88.0	88.0

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
1	1131	Timber Tract Operations	1	0	0	1.000
2	2121	Coal Mining	1	0	0	1.000
3	3159	Apparel Accessories and Other Apparel Manufac- turing	1	0	0	1.000
4	4832	Inland Water Transportation	2	0	0	1.000
5	4883	Support Activities for Water Transportation	2	0	0	1.000
6	4911	Postal Service	4	0	0	1.000
8	4854	School and Employee Bus Transportation	7	4	0	0.636
9	4811	Scheduled Air Transportation	341	226	1	0.600
10	3346	Manufacturing and Reproducing Magnetic and Optical Media	3	2	0	0.600
11	4922	Local Messengers and Local Delivery	35	27	0	0.565
12	5171	Wired Telecommunications Carriers	116	91	0	0.560
13	2372	Land Subdivision	3	3	0	0.500
14	3111	Animal Food Manufacturing	1	1	0	0.500
15	4879	Scenic and Sightseeing Transportation, Other	1	1	0	0.500
16	5231	Securities and Commodity Contracts Intermedia- tion and Brokerage	5	5	0	0.500
17	6112	Junior Colleges	1	1	0	0.500
18	1133	Logging	48	49	0	0.495
19	3241	Petroleum and Coal Products Manufacturing	6	7	0	0.462
20	5414	Specialized Design Services	6	7	0	0.462
22	2379	Other Heavy and Civil Engineering Construction	39	48	0	0.448
23	4812	Nonscheduled Air Transportation	4	5	0	0.444
24	4841	General Freight Trucking	2096	2702	25	0.435
25	1129	Other Animal Production	3	4	0	0.429
26	4885	Freight Transportation Arrangement	118	159	0	0.426
27	2361	Residential Building Construction	184	254	3	0.417
28	2371	Utility System Construction	173	244	0	0.415
29	4531	Florists	17	24	0	0.415
30	4921	Couriers and Express Delivery Services	2137	3043	5	0.412
32	3211	Sawmills and Wood Preservation	123	187	0	0.397
33	5615	Travel Arrangement and Reservation Services	13	20	0	0.394

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
34	2381	Foundation, Structure, and Building Exterior Contractors	375	581	3	0.391
35	2389	Other Specialty Trade Contractors	207	324	1	0.389
36	4842	Specialized Freight Trucking	574	941	2	0.378
37	3369	Other Transportation Equipment Manufacturing	3	5	0	0.375
38	3121	Beverage Manufacturing	136	230	0	0.372
39	3141	Textile Furnishings Mills	7	12	0	0.368
40	5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	47	82	0	0.364
41	5321	Automotive Equipment Rental and Leasing	44	77	0	0.364
42	5622	Waste Treatment and Disposal	28	49	0	0.364
43	3221	Pulp, Paper, and Paperboard Mills	77	137	0	0.360
44	3131	Fiber, Yarn, and Thread Mills	20	36	0	0.357
45	6114	Business Schools and Computer and Management Training	5	9	0	0.357
46	2383	Building Finishing Contractors	223	408	2	0.352
47	5111	Newspaper, Periodical, Book, and Directory Publishers	36	68	0	0.346
48	1123	Poultry and Egg Production	12	23	0	0.343
49	4244	Grocery and Related Product Merchant Wholesalers	381	723	8	0.343
50	5152	Cable and Other Subscription Programming	86	171	0	0.335
51	2131	Support Activities for Mining	6	12	0	0.333
52	3122	Tobacco Manufacturing	1	2	0	0.333
53	4882	Support Activities for Rail Transportation	7	13	1	0.333
57	3112	Grain and Oilseed Milling	37	77	0	0.325
58	8114	Personal and Household Goods Repair and Maintenance	9	18	1	0.321
59	3361	Motor Vehicle Manufacturing	485	1033	0	0.319
60	4884	Support Activities for Road Transportation	44	96	1	0.312
61	3311	Iron and Steel Mills and Ferroalloy Manufacturing	23	51	0	0.311
62	7115	Independent Artists, Writers, and Performers	9	20	0	0.310
64	2123	Nonmetallic Mineral Mining and Quarrying	22	50	0	0.306
66	4853	Taxi and Limousine Service	7	16	0	0.304

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
67	3351	Electric Lighting Equipment Manufacturing	23	53	0	0.303
68	3333	Commercial and Service Industry Machinery Manufacturing	32	74	0	0.302
69	5322	Consumer Goods Rental	61	140	2	0.300
70	3326	Spring and Wire Product Manufacturing	6	14	0	0.300
71	8122	Death Care Services	29	68	0	0.299
72	4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	57	134	0	0.298
73	7224	Drinking Places (Alcoholic Beverages)	17	40	0	0.298
74	3255	Paint, Coating, and Adhesive Manufacturing	14	33	0	0.298
75	8112	Electronic and Precision Equipment Repair and Maintenance	19	45	0	0.297
76	4859	Other Transit and Ground Passenger Transportation	36	85	1	0.295
77	4251	Wholesale Electronic Markets and Agents and Brokers	397	950	1	0.295
78	4855	Charter Bus Industry	7	17	0	0.292
79	2373	Highway, Street, and Bridge Construction	164	395	4	0.291
80	8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	68	163	3	0.291
81	8123	Drycleaning and Laundry Services	68	166	0	0.291
82	2382	Building Equipment Contractors	759	1849	15	0.289
83	3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	78	191	1	0.289
84	4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	149	368	0	0.288
85	5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	2	5	0	0.286
86	5621	Waste Collection	54	136	1	0.283
87	1151	Support Activities for Crop Production	11	28	0	0.282
88	5172	Wireless Telecommunications Carriers (except Satellite)	14	36	0	0.280
89	3222	Converted Paper Product Manufacturing	129	331	1	0.280

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
90	4247	Petroleum and Petroleum Products Merchant Wholesalers	54	139	0	0.280
91	4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	246	640	0	0.278
92	6216	Home Health Care Services	248	644	8	0.276
93	3322	Cutlery and Handtool Manufacturing	11	29	0	0.275
94	3314	Nonferrous Metal (except Aluminum) Production and Processing	28	72	2	0.275
95	3335	Metalworking Machinery Manufacturing	59	157	0	0.273
96	4239	Miscellaneous Durable Goods Merchant Wholesalers	101	269	0	0.273
97	4881	Support Activities for Air Transportation	26	70	0	0.271
98	5629	Remediation and Other Waste Management Services	37	100	0	0.270
99	5616	Investigation and Security Services	202	549	0	0.269
100	3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	23	63	0	0.267
101	2362	Nonresidential Building Construction	238	646	6	0.267
102	3273	Cement and Concrete Product Manufacturing	81	222	0	0.267
103	3279	Other Nonmetallic Mineral Product Manufacturing	27	73	1	0.267
104	4241	Paper and Paper Product Merchant Wholesalers	43	118	0	0.267
105	5418	Advertising, Public Relations, and Related Services	25	69	0	0.266
106	3323	Architectural and Structural Metals Manufacturing	197	542	2	0.266
107	5617	Services to Buildings and Dwellings	635	1746	9	0.266
109	2213	Water, Sewage and Other Systems	5	14	0	0.263
110	5239	Other Financial Investment Activities	5	14	0	0.263
111	4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	122	345	0	0.261
112	8111	Automotive Repair and Maintenance	159	454	3	0.258
113	3262	Rubber Product Manufacturing	153	445	4	0.254
114	4471	Gasoline Stations	167	495	2	0.252

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
115	1114	Greenhouse, Nursery, and Floriculture Production	61	183	0	0.250
116	1152	Support Activities for Animal Production	2	6	0	0.250
117	3151	Apparel Knitting Mills	7	21	0	0.250
118	3169	Other Leather and Allied Product Manufacturing	1	3	0	0.250
119	5619	Other Support Services	89	267	0	0.250
120	7213	Rooming and Boarding Houses	1	3	0	0.250
121	8141	Private Households	4	12	0	0.250
122	3399	Other Miscellaneous Manufacturing	133	400	4	0.248
123	3149	Other Textile Product Mills	36	110	0	0.247
124	4529	Other General Merchandise Stores	157	481	0	0.246
125	4442	Lawn and Garden Equipment and Supplies Stores	57	176	0	0.245
126	4413	Automotive Parts, Accessories, and Tire Stores	192	592	2	0.244
127	3152	Cut and Sew Apparel Manufacturing	62	192	0	0.244
128	3219	Other Wood Product Manufacturing	136	422	0	0.244
129	6239	Other Residential Care Facilities	22	69	0	0.242
130	4233	Lumber and Other Construction Materials Merchant Wholesalers	127	400	1	0.241
131	4412	Other Motor Vehicle Dealers	28	88	1	0.239
132	6213	Offices of Other Health Practitioners	45	145	1	0.236
134	3364	Aerospace Product and Parts Manufacturing	3	10	0	0.231
135	3231	Printing and Related Support Activities	79	263	2	0.230
136	4245	Farm Product Raw Material Merchant Wholesalers	16	54	0	0.229
137	4889	Other Support Activities for Transportation	18	61	0	0.228
138	4238	Machinery, Equipment, and Supplies Merchant Wholesalers	221	749	1	0.228
139	4453	Beer, Wine, and Liquor Stores	10	34	0	0.227
140	4532	Office Supplies, Stationery, and Gift Stores	31	106	0	0.226
141	4422	Home Furnishings Stores	47	164	0	0.223
143	4543	Direct Selling Establishments	25	87	1	0.221
144	3329	Other Fabricated Metal Product Manufacturing	109	383	1	0.221
145	3272	Glass and Glass Product Manufacturing	87	307	0	0.221
146	4431	Electronics and Appliance Stores	58	205	0	0.221
147	3251	Basic Chemical Manufacturing	42	150	0	0.219

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
148	3315	Foundries	92	329	0	0.219
149	5151	Radio and Television Broadcasting	15	54	0	0.217
150	2122	Metal Ore Mining	31	112	0	0.217
151	4851	Urban Transit Systems	109	398	0	0.215
152	6116	Other Schools and Instruction	12	44	0	0.214
153	4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	16	59	0	0.213
154	3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	37	138	0	0.211
155	3324	Boiler, Tank, and Shipping Container Manufacturing	54	202	0	0.211
156	4871	Scenic and Sightseeing Transportation, Land	8	30	0	0.211
157	5613	Employment Services	1711	6401	32	0.210
158	3118	Bakeries and Tortilla Manufacturing	121	455	2	0.209
159	3271	Clay Product and Refractory Manufacturing	37	140	0	0.209
160	3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	44	167	0	0.209
161	5311	Lessors of Real Estate	86	327	0	0.208
162	4452	Specialty Food Stores	11	42	0	0.208
163	4931	Warehousing and Storage	434	1657	26	0.205
164	6231	Nursing Care Facilities (Skilled Nursing Facilities)	369	1427	18	0.203
165	4461	Health and Personal Care Stores	135	530	0	0.203
167	5416	Management, Scientific, and Technical Consulting Services	225	890	0	0.202
168	5312	Offices of Real Estate Agents and Brokers	23	91	0	0.202
169	5511	Management of Companies and Enterprises	551	2183	5	0.201
170	3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	7	28	0	0.200
171	3274	Lime and Gypsum Product Manufacturing	2	8	0	0.200
172	3331	Agriculture, Construction, and Mining Machinery Manufacturing	26	104	0	0.200
173	3359	Other Electrical Equipment and Component Manufacturing	37	147	1	0.200
174	5112	Software Publishers	1	4	0	0.200

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
175	5182	Data Processing, Hosting, and Related Services	2	8	0	0.200
176	5411	Legal Services	28	112	0	0.200
177	6241	Individual and Family Services	282	1126	3	0.200
178	3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	183	722	12	0.200
179	4242	Drugs and Druggists' Sundries Merchant Wholesalers	68	274	1	0.198
180	5241	Insurance Carriers	73	296	0	0.198
181	4249	Miscellaneous Nondurable Goods Merchant Wholesalers	34	140	0	0.195
182	4542	Vending Machine Operators	36	149	0	0.195
183	3119	Other Food Manufacturing	54	221	4	0.194
184	5413	Architectural, Engineering, and Related Services	158	661	2	0.192
185	4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	62	263	0	0.191
186	5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	36	152	1	0.190
187	3133	Textile and Fabric Finishing and Fabric Coating Mills	19	81	0	0.190
188	4511	Sporting Goods, Hobby, and Musical Instrument Stores	84	358	2	0.189
189	6222	Psychiatric and Substance Abuse Hospitals	13	56	0	0.188
190	7212	RV (Recreational Vehicle) Parks and Recreational Camps	3	13	0	0.188
191	4411	Automobile Dealers	267	1155	3	0.187
192	3254	Pharmaceutical and Medicine Manufacturing	8	35	0	0.186
193	4232	Furniture and Home Furnishing Merchant Wholesalers	21	92	0	0.186
194	4451	Grocery Stores	556	2425	14	0.186
195	3353	Electrical Equipment Manufacturing	41	180	0	0.186
196	7223	Special Food Services	108	475	2	0.185
197	3332	Industrial Machinery Manufacturing	19	84	0	0.184
198	7111	Performing Arts Companies	52	230	0	0.184
199	8121	Personal Care Services	23	102	0	0.184

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
200	3116	Animal Slaughtering and Processing	97	431	0	0.184
201	4482	Shoe Stores	9	40	0	0.184
202	5612	Facilities Support Services	20	89	0	0.183
203	3391	Medical Equipment and Supplies Manufacturing	32	143	0	0.183
204	7139	Other Amusement and Recreation Industries	93	416	0	0.183
205	5122	Sound Recording Industries	2	9	0	0.182
206	7113	Promoters of Performing Arts, Sports, and Similar Events	10	44	1	0.182
207	4539	Other Miscellaneous Store Retailers	53	239	0	0.182
208	5242	Agencies, Brokerages, and Other Insurance Related Activities	40	181	0	0.181
209	3363	Motor Vehicle Parts Manufacturing	654	2964	2	0.181
210	4421	Furniture Stores	54	244	1	0.181
211	3344	Semiconductor and Other Electronic Component Manufacturing	9	41	0	0.180
212	5223	Activities Related to Credit Intermediation	9	41	0	0.180
213	3328	Coating, Engraving, Heat Treating, and Allied Activities	54	247	0	0.179
214	4483	Jewelry, Luggage, and Leather Goods Stores	3	14	0	0.176
215	5313	Activities Related to Real Estate	108	505	0	0.176
216	4246	Chemical and Allied Products Merchant Wholesalers	31	146	0	0.175
217	4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	67	320	0	0.173
218	3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	14	67	0	0.173
219	5611	Office Administrative Services	149	709	8	0.172
220	3313	Alumina and Aluminum Production and Processing	62	297	4	0.171
221	8131	Religious Organizations	12	59	0	0.169
222	7211	Traveler Accommodation	301	1471	13	0.169
223	1112	Vegetable and Melon Farming	5	25	0	0.167
224	3132	Fabric Mills	10	50	0	0.167
225	3321	Forging and Stamping	50	261	0	0.161

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
226	3259	Other Chemical Product and Preparation Manufacturing	17	89	0	0.160
228	3362	Motor Vehicle Body and Trailer Manufacturing	30	159	0	0.159
230	5222	Nondepository Credit Intermediation	15	79	1	0.158
231	8132	Grantmaking and Giving Services	6	32	0	0.158
232	6243	Vocational Rehabilitation Services	110	588	5	0.156
233	3372	Office Furniture (including Fixtures) Manufacturing	53	286	1	0.156
234	5417	Scientific Research and Development Services	32	174	0	0.155
235	4521	Department Stores	182	985	7	0.155
236	6244	Child Day Care Services	59	321	1	0.155
237	5415	Computer Systems Design and Related Services	29	160	0	0.153
238	4481	Clothing Stores	37	205	0	0.153
239	1119	Other Crop Farming	7	39	0	0.152
240	3379	Other Furniture Related Product Manufacturing	21	114	3	0.152
241	6113	Colleges, Universities, and Professional Schools	108	601	1	0.152
242	6219	Other Ambulatory Health Care Services	127	711	0	0.152
243	3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	88	497	2	0.150
244	5614	Business Support Services	70	395	2	0.150
245	3312	Steel Product Manufacturing from Purchased Steel	14	80	0	0.149
246	3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	26	150	0	0.148
247	3113	Sugar and Confectionery Product Manufacturing	38	224	0	0.145
248	8139	Business, Professional, Labor, Political, and Similar Organizations	34	202	0	0.144
249	3339	Other General Purpose Machinery Manufacturing	44	261	2	0.143
250	5221	Depository Credit Intermediation	60	362	0	0.142
251	2211	Electric Power Generation, Transmission and Distribution	95	523	55	0.141
252	7225	Restaurants and Other Eating Places	1104	6698	20	0.141
253	6242	Community Food and Housing, and Emergency and Other Relief Services	17	104	0	0.140

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
254	6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	283	1758	0	0.139
255	8133	Social Advocacy Organizations	18	111	1	0.138
256	3261	Plastics Product Manufacturing	163	1018	1	0.138
257	6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	130	821	7	0.136
259	6214	Outpatient Care Centers	85	562	4	0.131
261	3325	Hardware Manufacturing	16	110	0	0.127
263	6215	Medical and Diagnostic Laboratories	26	185	0	0.123
264	2212	Natural Gas Distribution	7	50	0	0.123
266	4541	Electronic Shopping and Mail-Order Houses	17	132	1	0.113
267	6212	Offices of Dentists	26	204	0	0.113
268	3341	Computer and Peripheral Equipment Manufacturing	1	8	0	0.111
269	7121	Museums, Historical Sites, and Similar Institutions	30	239	7	0.109
270	6115	Technical and Trade Schools	4	33	0	0.108
271	6221	General Medical and Surgical Hospitals	915	7578	22	0.107
272	8129	Other Personal Services	28	234	1	0.106
273	6111	Elementary and Secondary Schools	74	633	0	0.105
274	4441	Building Material and Supplies Dealers	466	3987	4	0.105
275	3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	6	52	0	0.103
276	3115	Dairy Product Manufacturing	53	464	1	0.102
277	4533	Used Merchandise Stores	67	590	0	0.102
279	5323	General Rental Centers	2	18	0	0.100
280	6211	Offices of Physicians	128	1186	3	0.097
281	3352	Household Appliance Manufacturing	29	270	3	0.096
282	8134	Civic and Social Organizations	42	416	2	0.091
283	6117	Educational Support Services	1	10	0	0.091
284	6223	Specialty (except Psychiatric and Substance Abuse) Hospitals	7	72	0	0.089
286	1121	Cattle Ranching and Farming	6	65	0	0.085

Table T3: 2014-2016 FROI Claims: NAICS Four-Digit Rank, Claims, Lost-Time Ratio, and Rank - Matched Private (Type Known)

LT.Rank	Naics	Description	2014-2016			LT.Ratio
			LT.Claims	Med.Claims	Other.Claims	
287	3366	Ship and Boat Building	33	359	1	0.084
288	5419	Other Professional, Scientific, and Technical Services	84	965	5	0.080
289	1111	Oilseed and Grain Farming	1	13	0	0.071
290	7112	Spectator Sports	26	345	0	0.070
292	4512	Book Stores and News Dealers	3	43	0	0.065
293	5121	Motion Picture and Video Industries	15	220	0	0.064
294	7131	Amusement Parks and Arcades	23	374	5	0.057
296	3162	Footwear Manufacturing	1	47	0	0.021
297	1113	Fruit and Tree Nut Farming	0	1	0	0.000
298	1122	Hog and Pig Farming	0	38	0	0.000
299	1125	Aquaculture	0	6	0	0.000
300	1153	Support Activities for Forestry	0	5	0	0.000
301	2111	Oil and Gas Extraction	0	4	0	0.000
304	3342	Communications Equipment Manufacturing	0	3	0	0.000
305	3343	Audio and Video Equipment Manufacturing	0	1	0	0.000
308	4852	Interurban and Rural Bus Transportation	0	10	1	0.000
309	4862	Pipeline Transportation of Natural Gas	0	3	0	0.000
311	5179	Other Telecommunications	0	1	0	0.000
312	5191	Other Information Services	0	5	0	0.000
313	5211	Monetary Authorities-Central Bank	0	3	0	0.000
315	5251	Insurance and Employee Benefit Funds	0	4	0	0.000
316	7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	0	1	0	0.000
317	7132	Gambling Industries	0	1	0	0.000
319	1124	Sheep and Goat Farming	NA	NA	NA	NA
320	4831	Deep Sea, Coastal, and Great Lakes Water Transportation	NA	NA	NA	NA
321	5174	Satellite Telecommunications	NA	NA	NA	NA
322	5259	Other Investment Pools and Funds	NA	NA	NA	NA
All			29788	107350	464	0.217

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
1	23.00	4841	General Freight Trucking	2014-2016	41.0	4.0	24.0
2	23.33	4921	Couriers and Express Delivery Services	2014-2016	35.0	5.0	30.0
3	26.33	4811	Scheduled Air Transportation	2014-2016	11.0	59.0	9.0
4	31.33	3361	Motor Vehicle Manufacturing	2014-2016	22.0	13.0	59.0
5	34.00	4842	Specialized Freight Trucking	2014-2016	47.0	19.0	36.0
6	44.67	4244	Grocery and Related Product Merchant Wholesalers	2014-2016	61.0	24.0	49.0
7	46.33	2381	Foundation, Structure, and Building Exterior Contractors	2014-2016	76.0	29.0	34.0
8	56.00	4251	Wholesale Electronic Markets and Agents and Brokers	2014-2016	73.0	18.0	77.0
9	57.33	3211	Sawmills and Wood Preservation	2014-2016	40.0	100.0	32.0
10	59.00	2382	Building Equipment Contractors	2014-2016	85.0	10.0	82.0
11	59.83	5152	Cable and Other Subscription Programming	2014-2016	4.5	125.0	50.0
12	62.67	2389	Other Specialty Trade Contractors	2014-2016	104.0	49.0	35.0
13	64.67	2373	Highway, Street, and Bridge Construction	2014-2016	50.0	65.0	79.0
14	64.67	2383	Building Finishing Contractors	2014-2016	101.0	47.0	46.0
15	68.67	3323	Architectural and Structural Metals Manufacturing	2014-2016	59.0	41.0	106.0
16	71.33	4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	2014-2016	83.0	40.0	91.0
17	71.33	4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	2014-2016	29.0	74.0	111.0
18	72.33	5613	Employment Services	2014-2016	58.0	2.0	157.0
19	73.33	4233	Lumber and Other Construction Materials Merchant Wholesalers	2014-2016	37.0	53.0	130.0
20	73.67	3121	Beverage Manufacturing	2014-2016	95.0	88.0	38.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
21	74.67	2361	Residential Building Construction	2014-2016	141.0	56.0	27.0
22	74.83	2371	Utility System Construction	2014-2016	118.0	78.5	28.0
23	78.33	5617	Services to Buildings and Dwellings	2014-2016	117.0	11.0	107.0
24	81.33	4922	Local Messengers and Local Delivery	2014-2016	34.0	199.0	11.0
25	83.00	5511	Management of Companies and Enterprises	2014-2016	72.0	8.0	169.0
26	83.33	4851	Urban Transit Systems	2014-2016	17.0	82.0	151.0
27	84.33	3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	2014-2016	36.0	39.0	178.0
28	84.67	2362	Nonresidential Building Construction	2014-2016	121.0	32.0	101.0
29	86.33	3315	Foundries	2014-2016	28.0	83.0	148.0
30	86.67	1133	Logging	2014-2016	54.0	188.0	18.0
31	86.67	4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	2014-2016	64.0	124.0	72.0
32	89.00	4238	Machinery, Equipment, and Supplies Merchant Wholesalers	2014-2016	99.0	30.0	138.0
33	89.33	3272	Glass and Glass Product Manufacturing	2014-2016	43.0	80.0	145.0
34	92.50	4247	Petroleum and Petroleum Products Merchant Wholesalers	2014-2016	46.0	141.5	90.0
35	93.00	4451	Grocery Stores	2014-2016	78.0	7.0	194.0
36	93.33	4931	Warehousing and Storage	2014-2016	103.0	14.0	163.0
37	93.33	6216	Home Health Care Services	2014-2016	157.0	31.0	92.0
38	94.00	3399	Other Miscellaneous Manufacturing	2014-2016	91.0	69.0	122.0
39	95.67	1114	Greenhouse, Nursery, and Floriculture Production	2014-2016	51.0	118.0	118.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
40	95.67	1123	Poultry and Egg Production	2014-2016	20.0	219.0	48.0
41	96.33	4911	Postal Service	2014-2016	4.5	281.0	3.5
42	97.00	4234	Professional and Commercial Equipment and Supplies Mer- chant Wholesalers	2014-2016	156.0	51.0	84.0
43	97.00	4239	Miscellaneous Durable Goods Merchant Wholesalers	2014-2016	110.0	85.0	96.0
44	97.00	4413	Automotive Parts, Accessories, and Tire Stores	2014-2016	131.0	34.0	126.0
45	98.17	3273	Cement and Concrete Product Manufacturing	2014-2016	100.0	92.0	102.5
46	98.33	3363	Motor Vehicle Parts Manufactur- ing	2014-2016	77.0	9.0	209.0
47	98.67	3219	Other Wood Product Manufac- turing	2014-2016	105.0	63.0	128.0
48	98.67	6232	Residential Intellectual and De- velopmental Disability, Mental Health, and Substance Abuse Fa- cilities	2014-2016	27.0	15.0	254.0
49	99.33	4884	Support Activities for Road Transportation	2014-2016	80.0	158.0	60.0
50	101.67	3118	Bakeries and Tortilla Manufac- turing	2014-2016	79.0	68.0	158.0
51	101.67	4441	Building Material and Supplies Dealers	2014-2016	25.0	6.0	274.0
52	102.00	3262	Rubber Product Manufacturing	2014-2016	129.0	64.0	113.0
53	102.33	6243	Vocational Rehabilitation Ser- vices	2014-2016	32.0	43.0	232.0
54	102.67	6219	Other Ambulatory Health Care Services	2014-2016	31.0	35.0	242.0
55	104.33	3112	Grain and Oilseed Milling	2014-2016	93.0	163.0	57.0
56	104.33	3369	Other Transportation Equipment Manufacturing	2014-2016	14.0	262.0	37.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
57	105.33	6231	Nursing Care Facilities (Skilled Nursing Facilities)	2014-2016	136.0	16.0	164.0
58	105.67	6221	General Medical and Surgical Hospitals	2014-2016	45.0	1.0	271.0
59	106.17	8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	2014-2016	128.0	110.0	80.5
60	106.33	3222	Converted Paper Product Manufacturing	2014-2016	154.0	76.0	89.0
61	106.33	5611	Office Administrative Services	2014-2016	67.0	33.0	219.0
62	106.33	5616	Investigation and Security Services	2014-2016	183.0	37.0	99.0
63	107.00	4442	Lawn and Garden Equipment and Supplies Stores	2014-2016	88.0	108.0	125.0
64	107.00	4859	Other Transit and Ground Passenger Transportation	2014-2016	75.0	170.0	76.0
65	107.33	5621	Waste Collection	2014-2016	92.0	144.0	86.0
66	107.67	3152	Cut and Sew Apparel Manufacturing	2014-2016	82.0	114.0	127.0
67	108.00	6241	Individual and Family Services	2014-2016	127.0	20.0	177.0
68	108.67	4885	Freight Transportation Arrangement	2014-2016	189.0	111.0	26.0
69	109.33	5629	Remediation and Other Waste Management Services	2014-2016	109.0	121.0	98.0
70	109.50	2122	Metal Ore Mining	2014-2016	10.0	168.5	150.0
71	109.67	2211	Electric Power Generation, Transmission and Distribution	2014-2016	18.0	60.0	251.0
72	109.67	5322	Consumer Goods Rental	2014-2016	137.0	123.0	69.0
73	111.33	5416	Management, Scientific, and Technical Consulting Services	2014-2016	144.0	23.0	167.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
74	112.00	3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	2014-2016	38.0	55.0	243.0
75	112.50	3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	2014-2016	52.0	185.5	100.0
76	114.33	3324	Boiler, Tank, and Shipping Container Manufacturing	2014-2016	66.0	122.0	155.0
77	114.33	8111	Automotive Repair and Maintenance	2014-2016	179.0	52.0	112.0
78	114.67	3261	Plastics Product Manufacturing	2014-2016	63.0	25.0	256.0
79	114.67	3335	Metalworking Machinery Manufacturing	2014-2016	120.0	129.0	95.0
80	115.00	4533	Used Merchandise Stores	2014-2016	26.0	42.0	277.0
81	116.33	3329	Other Fabricated Metal Product Manufacturing	2014-2016	143.0	62.0	144.0
82	116.67	6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	2014-2016	65.0	28.0	257.0
83	117.00	5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	2014-2016	138.0	173.0	40.0
84	117.33	7223	Special Food Services	2014-2016	106.0	50.0	196.0
85	118.00	3333	Commercial and Service Industry Machinery Manufacturing	2014-2016	111.0	175.0	68.0
86	118.33	3372	Office Furniture (including Fixtures) Manufacturing	2014-2016	24.0	98.0	233.0
87	118.33	8123	Drycleaning and Laundry Services	2014-2016	162.0	112.5	80.5
88	119.33	3313	Alumina and Aluminum Production and Processing	2014-2016	42.0	96.0	220.0
89	119.83	5151	Radio and Television Broadcasting	2014-2016	4.5	206.0	149.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
90	120.33	3321	Forging and Stamping	2014-2016	39.0	97.0	225.0
91	121.00	4471	Gasoline Stations	2014-2016	205.0	44.0	114.0
92	121.17	5239	Other Financial Investment Activities	2014-2016	4.5	249.5	109.5
93	121.33	4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	2014-2016	86.0	93.0	185.0
94	121.67	3328	Coating, Engraving, Heat Treating, and Allied Activities	2014-2016	48.0	104.0	213.0
95	122.00	3314	Nonferrous Metal (except Aluminum) Production and Processing	2014-2016	96.0	176.0	94.0
96	122.33	5313	Activities Related to Real Estate	2014-2016	98.0	54.0	215.0
97	123.33	4422	Home Furnishings Stores	2014-2016	124.0	105.0	141.0
98	123.33	4889	Other Support Activities for Transportation	2014-2016	44.0	189.0	137.0
99	123.33	7112	Spectator Sports	2014-2016	13.0	67.0	290.0
100	123.67	4411	Automobile Dealers	2014-2016	158.0	22.0	191.0
101	124.00	5419	Other Professional, Scientific, and Technical Services	2014-2016	57.0	27.0	288.0
102	124.17	4882	Support Activities for Rail Transportation	2014-2016	74.0	245.0	53.5
103	124.67	3115	Dairy Product Manufacturing	2014-2016	21.0	77.0	276.0
104	125.00	4542	Vending Machine Operators	2014-2016	53.0	140.0	182.0
105	125.33	2379	Other Heavy and Civil Engineering Construction	2014-2016	163.0	191.0	22.0
106	125.50	3271	Clay Product and Refractory Manufacturing	2014-2016	62.0	155.5	159.0
107	128.50	7131	Amusement Parks and Arcades	2014-2016	4.5	87.0	294.0
108	130.00	2131	Support Activities for Mining	2014-2016	87.0	249.5	53.5
109	130.00	7211	Traveler Accommodation	2014-2016	151.0	17.0	222.0
110	131.00	3221	Pulp, Paper, and Paperboard Mills	2014-2016	207.0	143.0	43.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
111	131.00	5171	Wired Telecommunications Carriers	2014-2016	244.0	137.0	12.0
112	132.50	1151	Support Activities for Crop Production	2014-2016	81.0	229.5	87.0
113	133.33	3149	Other Textile Product Mills	2014-2016	115.0	162.0	123.0
114	133.50	5321	Automotive Equipment Rental and Leasing	2014-2016	209.0	150.0	41.5
115	133.67	5619	Other Support Services	2014-2016	194.0	89.0	118.0
116	134.17	3279	Other Nonmetallic Mineral Product Manufacturing	2014-2016	123.0	177.0	102.5
117	135.33	3351	Electric Lighting Equipment Manufacturing	2014-2016	145.0	194.0	67.0
118	135.33	3366	Ship and Boat Building	2014-2016	33.0	86.0	287.0
119	135.33	4241	Paper and Paper Product Merchant Wholesalers	2014-2016	150.0	152.0	104.0
120	135.67	4881	Support Activities for Air Transportation	2014-2016	130.0	180.0	97.0
121	136.50	3131	Fiber, Yarn, and Thread Mills	2014-2016	159.0	206.0	44.5
122	136.50	3379	Other Furniture Related Product Manufacturing	2014-2016	16.0	154.0	239.5
123	136.67	1131	Timber Tract Operations	2014-2016	89.0	317.5	3.5
124	136.67	5413	Architectural, Engineering, and Related Services	2014-2016	190.0	36.0	184.0
125	137.00	5311	Lessors of Real Estate	2014-2016	175.0	75.0	161.0
126	137.33	3113	Sugar and Confectionery Product Manufacturing	2014-2016	49.0	116.0	247.0
127	138.17	4871	Scenic and Sightseeing Transportation, Land	2014-2016	19.0	239.5	156.0
128	138.33	4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	2014-2016	114.0	84.0	217.0
129	138.67	3116	Animal Slaughtering and Processing	2014-2016	155.0	61.0	200.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
130	138.67	3255	Paint, Coating, and Adhesive Manufacturing	2014-2016	125.0	217.0	74.0
131	139.33	3359	Other Electrical Equipment and Component Manufacturing	2014-2016	107.0	138.0	173.0
132	140.50	3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	2014-2016	226.0	112.5	83.0
133	141.00	3231	Printing and Related Support Activities	2014-2016	198.0	90.0	135.0
134	141.17	3141	Textile Furnishings Mills	2014-2016	119.0	265.5	39.0
135	141.67	4421	Furniture Stores	2014-2016	116.0	99.0	210.0
136	142.33	4511	Sporting Goods, Hobby, and Musical Instrument Stores	2014-2016	169.0	70.0	188.0
137	142.67	7121	Museums, Historical Sites, and Similar Institutions	2014-2016	68.0	91.0	269.0
138	143.00	3311	Iron and Steel Mills and Ferroalloy Manufacturing	2014-2016	164.0	204.0	61.0
139	143.00	4461	Health and Personal Care Stores	2014-2016	216.0	48.0	165.0
140	143.00	7111	Performing Arts Companies	2014-2016	122.0	109.0	198.0
141	144.33	4529	Other General Merchandise Stores	2014-2016	252.0	57.0	124.0
142	144.50	2123	Nonmetallic Mineral Mining and Quarrying	2014-2016	172.0	197.5	64.0
143	144.67	4242	Drugs and Druggists' Sundries Merchant Wholesalers	2014-2016	161.0	94.0	179.0
144	147.00	7225	Restaurants and Other Eating Places	2014-2016	186.0	3.0	252.0
145	149.00	3133	Textile and Fabric Finishing and Fabric Coating Mills	2014-2016	70.0	190.0	187.0
146	149.67	4539	Other Miscellaneous Store Retailers	2014-2016	147.0	95.0	207.0
147	149.83	4245	Farm Product Raw Material Merchant Wholesalers	2014-2016	112.0	201.5	136.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
148	150.17	1129	Other Animal Production	2014-2016	135.0	290.5	25.0
149	150.67	3119	Other Food Manufacturing	2014-2016	152.0	117.0	183.0
150	151.00	3325	Hardware Manufacturing	2014-2016	9.0	183.0	261.0
151	151.00	5622	Waste Treatment and Disposal	2014-2016	202.0	209.5	41.5
152	152.00	3251	Basic Chemical Manufacturing	2014-2016	176.0	133.0	147.0
153	152.00	4412	Other Motor Vehicle Dealers	2014-2016	160.0	165.0	131.0
154	152.67	3326	Spring and Wire Product Manufacturing	2014-2016	182.0	206.0	70.0
155	153.67	5111	Newspaper, Periodical, Book, and Directory Publishers	2014-2016	243.0	171.0	47.0
156	154.00	7139	Other Amusement and Recreation Industries	2014-2016	200.0	58.0	204.0
157	155.00	4246	Chemical and Allied Products Merchant Wholesalers	2014-2016	97.0	152.0	216.0
158	155.50	3332	Industrial Machinery Manufacturing	2014-2016	84.0	185.5	197.0
159	155.67	6111	Elementary and Secondary Schools	2014-2016	148.0	46.0	273.0
160	155.67	8134	Civic and Social Organizations	2014-2016	113.0	72.0	282.0
161	156.00	3322	Cutlery and Handtool Manufacturing	2014-2016	134.0	241.0	93.0
162	157.33	4431	Electronics and Appliance Stores	2014-2016	225.0	101.0	146.0
163	157.67	4521	Department Stores	2014-2016	212.0	26.0	235.0
164	158.00	6214	Outpatient Care Centers	2014-2016	170.0	45.0	259.0
165	158.67	6113	Colleges, Universities, and Professional Schools	2014-2016	197.0	38.0	241.0
166	158.67	8122	Death Care Services	2014-2016	221.0	184.0	71.0
167	159.33	4543	Direct Selling Establishments	2014-2016	153.0	182.0	143.0
168	159.67	3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	2014-2016	166.0	159.0	154.0
169	159.83	4232	Furniture and Home Furnishing Merchant Wholesalers	2014-2016	108.0	178.5	193.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
170	160.00	4531	Florists	2014-2016	214.0	237.0	29.0
171	160.33	3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufac- turing	2014-2016	71.0	237.0	173.0
172	163.33	3339	Other General Purpose Machin- ery Manufacturing	2014-2016	139.0	102.0	249.0
173	163.33	4812	Nonscheduled Air Transportation	2014-2016	196.0	271.0	23.0
174	163.33	4855	Charter Bus Industry	2014-2016	168.0	244.0	78.0
175	163.67	5241	Insurance Carriers	2014-2016	230.0	81.0	180.0
176	165.00	6239	Other Residential Care Facilities	2014-2016	173.0	193.0	129.0
177	165.83	4853	Taxi and Limousine Service	2014-2016	181.0	251.0	65.5
178	166.67	3353	Electrical Equipment Manufac- turing	2014-2016	178.0	127.0	195.0
179	168.33	4879	Scenic and Sightseeing Trans- portation, Other	2014-2016	180.0	310.0	15.0
180	168.33	8133	Social Advocacy Organizations	2014-2016	102.0	148.0	255.0
181	169.00	8114	Personal and Household Goods Repair and Maintenance	2014-2016	206.0	243.0	58.0
182	170.50	8112	Electronic and Precision Equip- ment Repair and Maintenance	2014-2016	227.0	209.5	75.0
183	171.17	5615	Travel Arrangement and Reserva- tion Services	2014-2016	249.0	231.5	33.0
184	171.17	9999	Non-classifiable Establishments	2014-2016	23.0	225.5	265.0
185	171.83	7224	Drinking Places (Alcoholic Bev- erages)	2014-2016	241.0	201.5	73.0
186	172.00	3162	Footwear Manufacturing	2014-2016	12.0	208.0	296.0
187	173.33	3312	Steel Product Manufacturing from Purchased Steel	2014-2016	94.0	181.0	245.0
188	173.33	8129	Other Personal Services	2014-2016	142.0	106.0	272.0
189	175.17	6244	Child Day Care Services	2014-2016	211.0	78.5	236.0
190	175.67	3114	Fruit and Vegetable Preserving and Specialty Food Manufactur- ing	2014-2016	146.0	135.0	246.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
191	176.00	4532	Office Supplies, Stationery, and Gift Stores	2014-2016	224.0	164.0	140.0
192	176.33	1119	Other Crop Farming	2014-2016	60.0	229.5	239.5
193	177.33	6211	Offices of Physicians	2014-2016	231.0	21.0	280.0
194	177.83	1122	Hog and Pig Farming	2014-2016	15.0	211.0	307.5
195	178.17	3331	Agriculture, Construction, and Mining Machinery Manufacturing	2014-2016	193.0	168.5	173.0
196	178.17	7115	Independent Artists, Writers, and Performers	2014-2016	233.0	239.5	62.0
197	178.67	6213	Offices of Other Health Practitioners	2014-2016	270.0	134.0	132.0
198	178.83	3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	2014-2016	235.0	141.5	160.0
199	180.33	1112	Vegetable and Melon Farming	2014-2016	90.0	227.5	223.5
200	181.33	3241	Petroleum and Coal Products Manufacturing	2014-2016	259.0	265.5	19.5
201	181.67	5312	Offices of Real Estate Agents and Brokers	2014-2016	217.0	160.0	168.0
202	182.50	2212	Natural Gas Distribution	2014-2016	56.0	227.5	264.0
203	183.00	5418	Advertising, Public Relations, and Related Services	2014-2016	257.0	187.0	105.0
204	183.50	3346	Manufacturing and Reproducing Magnetic and Optical Media	2014-2016	245.0	295.5	10.0
205	183.67	6242	Community Food and Housing, and Emergency and Other Relief Services	2014-2016	126.0	172.0	253.0
206	183.83	6112	Junior Colleges	2014-2016	246.0	290.5	15.0
207	184.17	8139	Business, Professional, Labor, Political, and Similar Organizations	2014-2016	174.0	130.5	248.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
208	184.33	4249	Miscellaneous Nondurable Goods Merchant Wholesalers	2014-2016	223.0	149.0	181.0
209	184.50	2213	Water, Sewage and Other Systems	2014-2016	184.5	259.5	109.5
210	184.67	6114	Business Schools and Computer and Management Training	2014-2016	250.0	259.5	44.5
211	185.00	5612	Facilities Support Services	2014-2016	187.0	166.0	202.0
212	185.50	1121	Cattle Ranching and Farming	2014-2016	55.0	215.5	286.0
213	185.50	3151	Apparel Knitting Mills	2014-2016	192.0	246.5	118.0
214	185.67	5614	Business Support Services	2014-2016	240.0	73.0	244.0
215	188.17	1152	Support Activities for Animal Production	2014-2016	167.0	279.5	118.0
216	188.83	4854	School and Employee Bus Transportation	2014-2016	285.0	273.5	8.0
217	191.00	2372	Land Subdivision	2014-2016	275.0	283.0	15.0
218	192.00	5221	Depository Credit Intermediation	2014-2016	255.0	71.0	250.0
219	192.50	7113	Promoters of Performing Arts, Sports, and Similar Events	2014-2016	177.0	195.0	205.5
220	192.83	5231	Securities and Commodity Contracts Intermediation and Brokerage	2014-2016	290.0	273.5	15.0
221	193.17	4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	2014-2016	229.0	197.5	153.0
222	193.17	5414	Specialized Design Services	2014-2016	283.0	277.0	19.5
223	193.33	3362	Motor Vehicle Body and Trailer Manufacturing	2014-2016	213.0	139.0	228.0
224	193.83	3132	Fabric Mills	2014-2016	140.0	218.0	223.5
225	194.67	5417	Scientific Research and Development Services	2014-2016	222.0	128.0	234.0
226	194.67	8131	Religious Organizations	2014-2016	149.0	214.0	221.0
227	195.33	2121	Coal Mining	2014-2016	265.0	317.5	3.5
228	196.00	3391	Medical Equipment and Supplies Manufacturing	2014-2016	238.0	147.0	203.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
229	196.83	3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	2014-2016	171.0	201.5	218.0
230	197.00	4832	Inland Water Transportation	2014-2016	292.0	295.5	3.5
231	197.33	3159	Apparel Accessories and Other Apparel Manufacturing	2014-2016	271.0	317.5	3.5
232	197.67	6215	Medical and Diagnostic Laboratories	2014-2016	204.0	126.0	263.0
233	197.83	5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	2014-2016	277.0	130.5	186.0
234	198.00	5172	Wireless Telecommunications Carriers (except Satellite)	2014-2016	273.0	233.0	88.0
235	198.17	3111	Animal Food Manufacturing	2014-2016	280.0	299.5	15.0
236	198.33	4481	Clothing Stores	2014-2016	254.0	103.0	238.0
237	199.00	5242	Agencies, Brokerages, and Other Insurance Related Activities	2014-2016	274.0	115.0	208.0
238	199.83	4883	Support Activities for Water Transportation	2014-2016	286.0	310.0	3.5
239	200.17	5411	Legal Services	2014-2016	272.0	155.5	173.0
240	200.67	7213	Rooming and Boarding Houses	2014-2016	184.5	299.5	118.0
241	200.83	1125	Aquaculture	2014-2016	4.5	290.5	307.5
242	201.17	3169	Other Leather and Allied Product Manufacturing	2014-2016	195.0	290.5	118.0
243	201.83	4452	Specialty Food Stores	2014-2016	228.0	215.5	162.0
244	202.17	3274	Lime and Gypsum Product Manufacturing	2014-2016	165.0	268.5	173.0
245	202.33	5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	2014-2016	236.0	286.0	85.0
246	202.50	3259	Other Chemical Product and Preparation Manufacturing	2014-2016	203.0	178.5	226.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
247	202.67	3352	Household Appliance Manufac- turing	2014-2016	220.0	107.0	281.0
248	204.33	6223	Specialty (except Psychiatric and Substance Abuse) Hospitals	2014-2016	133.0	196.0	284.0
249	205.33	8121	Personal Care Services	2014-2016	260.0	157.0	199.0
250	206.00	5415	Computer Systems Design and Related Services	2014-2016	261.0	120.0	237.0
251	207.33	7132	Gambling Industries	2014-2016	4.5	310.0	307.5
252	208.67	4541	Electronic Shopping and Mail- Order Houses	2014-2016	208.0	152.0	266.0
253	209.33	5251	Insurance and Employee Benefit Funds	2014-2016	30.0	290.5	307.5
254	209.67	6116	Other Schools and Instruction	2014-2016	264.0	213.0	152.0
255	211.67	6222	Psychiatric and Substance Abuse Hospitals	2014-2016	234.0	212.0	189.0
256	211.83	4453	Beer, Wine, and Liquor Stores	2014-2016	262.0	234.5	139.0
257	212.00	3344	Semiconductor and Other Elec- tronic Component Manufactur- ing	2014-2016	201.0	223.5	211.5
258	213.67	3122	Tobacco Manufacturing	2014-2016	288.0	299.5	53.5
259	214.00	6212	Offices of Dentists	2014-2016	256.0	119.0	267.0
260	214.67	5121	Motion Picture and Video Indus- tries	2014-2016	215.0	136.0	293.0
261	218.50	3254	Pharmaceutical and Medicine Manufacturing	2014-2016	232.0	231.5	192.0
262	219.67	5323	General Rental Centers	2014-2016	132.0	248.0	279.0
263	224.83	8141	Private Households	2014-2016	291.0	265.5	118.0
264	226.67	2111	Oil and Gas Extraction	2014-2016	69.0	303.5	307.5
265	229.33	5222	Nondepository Credit Intermedi- ation	2014-2016	284.0	174.0	230.0
266	230.83	4482	Shoe Stores	2014-2016	268.0	223.5	201.0
267	232.67	3364	Aerospace Product and Parts Manufacturing	2014-2016	287.0	277.0	134.0

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
268	237.00	7212	RV (Recreational Vehicle) Parks and Recreational Camps	2014-2016	269.0	252.0	190.0
269	237.17	8132	Grantmaking and Giving Services	2014-2016	247.0	234.5	230.0
270	237.50	4512	Book Stores and News Dealers	2014-2016	199.0	221.5	292.0
271	238.67	5223	Activities Related to Credit Intermediation	2014-2016	279.0	225.5	211.5
272	244.00	3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	2014-2016	237.0	220.0	275.0
273	245.67	5182	Data Processing, Hosting, and Related Services	2014-2016	289.0	275.0	173.0
274	246.50	5122	Sound Recording Industries	2014-2016	278.0	256.0	205.5
275	248.67	6115	Technical and Trade Schools	2014-2016	239.0	237.0	270.0
276	251.83	4483	Jewelry, Luggage, and Leather Goods Stores	2014-2016	282.0	259.5	214.0
277	253.83	5112	Software Publishers	2014-2016	293.0	295.5	173.0
278	255.17	3341	Computer and Peripheral Equipment Manufacturing	2014-2016	218.0	279.5	268.0
279	259.67	1111	Oilseed and Grain Farming	2014-2016	219.0	271.0	289.0
280	261.50	5179	Other Telecommunications	2014-2016	191.0	286.0	307.5
281	266.83	4852	Interurban and Rural Bus Transportation	2014-2016	210.0	283.0	307.5
282	267.33	5211	Monetary Authorities-Central Bank	2014-2016	188.0	306.5	307.5
283	278.33	6117	Educational Support Services	2014-2016	281.0	271.0	283.0
284	280.00	1153	Support Activities for Forestry	2014-2016	242.0	290.5	307.5
285	286.83	5191	Other Information Services	2014-2016	267.0	286.0	307.5
286	287.00	4862	Pipeline Transportation of Natural Gas	2014-2016	258.0	295.5	307.5
287	288.33	3343	Audio and Video Equipment Manufacturing	2014-2016	251.0	306.5	307.5
288	291.00	1113	Fruit and Tree Nut Farming	2014-2016	248.0	317.5	307.5

Table T4: 2014-2016 FROI Claims: NAICS Four-Digit Industries By Burden Rank
Matched Private (Type Known)

Burden.Rank	Burden.Idx	Naics	Description	Year	UnadjRate.Rank	Claim.Rank	LT.Rank
289	291.33	3342	Communications Equipment Manufacturing	2014-2016	263.0	303.5	307.5
290	303.83	7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	2014-2016	294.0	310.0	307.5

8 Appendix

Figure 11: Data Properties of 2014 FROI Transactions

DN	Column Name	Number Missing	Pct Missing	Number Unique	Avg Len (char)	Min Len (char)	Max Len (char)	Unique Values	Min Value	Max Value
DN0001	FROI_TRAN_NBR	0	0.00%	109253	7	6	7	> 30 unique values	203335	850753
NA	CLM_TRAN_NBR	0	0.00%	97381	10	10	10	> 30 unique values	2004593904	2017105977
NA	CLMNT_ID	0	0.00%	91756	10	10	10	> 30 unique values	147	2017442031
DN0002	MTC	0	0.00%	5	1.02	1	2	0, 4, 1, CO, AU,	0	CO
DN0003	MTC_DTE	90	0.08%	934	10	10	10	> 30 unique values	6/7/04	10/23/17
DN0021	EMPR_CTY	1	0.00%	1994	8.97	2	15	> 30 unique values	: SOUTH	ZIONSVILLE
DN0022	EMPR_ST	0	0.00%	48	2	2	2	> 30 unique values	AK	WY
DN0023	EMPR_PSTL_CDE	34	0.03%	7345	6.08	1	9	> 30 unique values	1	995030000
DN0024	SELF_INSD_IND	0	0.00%	2	1	1	1	N, Y,	N	Y
DN0025	NAICS_CDE	71600	65.54%	853	5.99	1	6	> 30 unique values	0	999999
DN0031	DTE_OF_INJR	0	0.00%	365	10	10	10	> 30 unique values	1/1/14	12/31/14
DN0032	TME_OF_INJR	17093	15.65%	1330	3.4	1	4	> 30 unique values	0	959
DN0033	PSTL_INJR_SITE	11	0.01%	9250	6.26	1	9	> 30 unique values	1	99501
DN0034	INJR_EMPR_PRMS	23	0.02%	3	1	1	1	N, Y, NA,	N	Y
DN0036	INJR_BODY_PART_ID	0	0.00%	56	2	2	2	> 30 unique values	10	99
BodyPartDesc	IA_BODY_PART_DESC	0	0.00%	56	11.85	3	30	> 30 unique values	ABDOMEN INCLUDING GROIN	WRIST(S) & HAND(S)
DN0037	SRCE	0	0.00%	75	1.96	1	2	> 30 unique values	1	99
Source Desc	IA_SRCE_DESC	810	0.74%	71	22.41	2	54	> 30 unique values	--	WIELDING OR THROWING
DN0035	NATR_OF_INJR_ID	1	0.00%	54	2	2	2	> 30 unique values	1	91
NCCI Table 284 Desc	NATR_OF_INJR_DESC	0	0.00%	54	11.21	2	46	> 30 unique values	--	VISION LOSS
DN0039	INIT_TMNT	21852	20.00%	7	1	1	1	2, NA, 0, 1, 3, 4, 5,	0	5
DN0040	DTE_EMPR_INFO	8681	7.95%	659	10	10	10	> 30 unique values	6/2/04	10/16/17
DN0041	DTE_RPT_TO_CLM_ADMN	14018	12.83%	732	10	10	10	> 30 unique values	6/2/04	10/18/17
DN0050	EMPL_PSTL_CDE	9	0.01%	17562	6.15	1	9	> 30 unique values	1	99654
DN0052	TransformedDOB	0	0.00%	892	10	10	10	> 30 unique values	1/1/00	1/1/15
DN0053	GNDR_CDE	0	0.00%	3	1	1	1	M, U, F,	F	U
DN0054	EMPL_MRTL_STA	19977	18.29%	5	1	1	1	M, U, K, NA, S,	K	U
DN0055	NBR_OF_DPND	27733	25.38%	17	2	2	2	0, 1, NA, 3, 2, 4, 5, 6, 7, 10, 8, 9, 99, 11, 34, 57, 16,	0	99
DN0056	DTE_DSBL_BEG	85119	77.91%	456	10	10	10	> 30 unique values	6/3/04	10/16/17
DN0057	DTE_OF_DTH	109125	99.88%	82	10	10	10	> 30 unique values	1/9/14	6/26/15
DN0058	EMPLM_STA_CDE	39676	36.32%	10	1	1	1	NA, 1, 7, 2, 3, 8, 5, 6, 9, 4,	1	9
DN0059	EMPLMT_CLS_CDE	25305	23.16%	663	3.98	1	4	> 30 unique values	0	9999
DN0060	EMPL_JOB_TTL	14090	12.90%	19226	13.54	1	30	> 30 unique values	@ HOME COVERAGE	ZOOKEEPER
DN0061	HIRE_DTE	18591	17.02%	8975	10	10	10	> 30 unique values	5/17/51	8/26/15
DN0062	WGE	25587	23.42%	8925	9	9	9	> 30 unique values	0	161646000
DN0063	WGE_PRD	40962	37.49%	5	2	2	2	1, NA, 2, 6, 4,	1	6
DN0064	DAYS_PER_WK	28852	26.41%	9	2	2	2	5, 0, NA, 3, 4, 7, 6, 2, 1,	0	7
DN0065	LAST_DTE_WRKD	74583	68.27%	452	10	10	10	> 30 unique values	1/17/05	10/16/17
DN0066	EMPL_PD_NO_ACTV	33834	30.97%	3	1	1	1	Y, NA, N,	N	Y
DN0067	SLRY_PD_FOR_COMP	20874	19.11%	3	1	1	1	N, NA, Y,	N	Y
DN0068	RTRN_WRK_DTE	87499	80.09%	439	10	10	10	> 30 unique values	1/27/05	12/21/16

Figure 12: Data Properties of 2015 FROI Transactions

2015 Data Quality										
DN	Column Name	Number Missing	Pct Missing	Number Unique	Avg Len (char)	Min Len (char)	Max Len (char)	Unique Values	Min Value	Max Value
DN0001	FROI_TRAN_NBR	0	0.00%	111261	7	7	7	> 30 unique values	4276526	5307915
NA	CLM_TRAN_NBR	0	0.00%	99996	10	10	10	> 30 unique values	2014795767	2017105530
NA	CLMNT_ID	0	0.00%	94160	10	10	10	> 30 unique values	107	2017441080
DN0002	MTC	0	0.00%	5	1.02	1	2	0, 1, 4, CO, AU,	0	CO
DN0003	MTC_DTE	0	0.00%	818	10	10	10	> 30 unique values	10/3/14	10/23/17
DN0021	EMPR_CTY	0	0.00%	2001	8.95	2	15	> 30 unique values	OMAHA	ZEPHYRHILLS
DN0022	EMPR_ST	0	0.00%	53	2	2	2	> 30 unique values	AK	WV
DN0023	EMPR_PSTL_CDE	3	0.00%	7892	5.95	1	9	> 30 unique values	1	99503
DN0024	SELF_INSD_IND	0	0.00%	2	1	1	1	N, Y,	N	Y
DN0025	NAICS_CDE	65955	59.28%	865	6	1	6	> 30 unique values	0	999999
DN0031	DTE_OF_INJR	0	0.00%	365	10	10	10	> 30 unique values	1/1/15	12/31/15
DN0032	TME_OF_INJR	14505	13.04%	1321	3.4	1	4	> 30 unique values	0	959
DN0033	PSTL_INJR_SITE	9	0.01%	9450	6.1	1	9	> 30 unique values	1	999990000
DN0034	INJR_EMPR_PRMS	5	0.00%	3	1	1	1	Y, N, NA,	N	Y
DN0036	INJR_BODY_PART_ID	1	0.00%	57	2	2	2	> 30 unique values	10	99
BodyPartDesc	IA_BODY_PART_DESC	0	0.00%	57	11.87	2	30	> 30 unique values	--	WRIST(S) & HAN
DN0037	SRCE	0	0.00%	75	1.97	1	2	> 30 unique values	1	99
Source Desc	IA_SRCE_DESC	827	0.74%	71	22.43	4	54	> 30 unique values	ABNORMAL A	WIELDING OR
DN0035	NATR_OF_INJR_ID	0	0.00%	53	2	2	2	> 30 unique values	1	91
NCCI Table										
284 Desc	NATR_OF_INJR_DESC	0	0.00%	53	11.28	4	46	> 30 unique values	AIDS	VISION LOSS
DN0039	INIT_TMNT	19593	17.61%	7	1	1	1	2, 3, NA, 0, 1, 4, 5,	0	5
DN0040	DTE_EMPR_INFO	10117	9.09%	630	10	10	10	> 30 unique values	12/14/10	9/26/17
DN0041	DTE_RPT_TO_CLM_ADMN	11334	10.19%	691	10	10	10	> 30 unique values	9/11/14	10/16/17
DN0050	EMPL_PSTL_CDE	3	0.00%	19221	6.15	1	9	> 30 unique values	1	99352
DN0052	TransformedDOB	0	0.00%	917	10	10	10	> 30 unique values	1/1/00	12/1/15
DN0053	GNDR_CDE	0	0.00%	3	1	1	1	M, F, U,	F	U
DN0054	EMPL_MRTL_STA	16607	14.93%	5	1	1	1	K, U, NA, M, S,	K	U
DN0055	NBR_OF_DPND	28135	25.29%	16	2	2	2	5, 7, 9, 8, 99, 10, 18, 11,	0	99
DN0056	DTE_DSL_BEG	81991	73.69%	501	10	10	10	> 30 unique values	8/30/10	7/17/17
DN0057	DTE_OF_DTH	111159	99.91%	64	10	10	10	> 30 unique values	1/6/15	3/17/17
DN0058	EMPLM_STA_CDE	37827	34.00%	10	1	1	1	1, 7, NA, 4, 2, 5, 8, 3, 9, 6,	1	9
DN0059	EMPLMT_CLS_CDE	24110	21.67%	677	3.98	1	18	> 30 unique values	0	9999
DN0060	EMPL_JOB_TTL	13809	12.41%	20226	13.48	1	30	> 30 unique values	/ARMY NATL	ZOOKEEPER
DN0061	HIRE_DTE	16165	14.53%	9094	10	10	10	> 30 unique values	7/14/08	4/20/16
DN0062	WGE	25254	22.70%	8877	9	9	9	> 30 unique values	0	161544000
DN0063	WGE_PRD	38885	34.95%	5	2	2	2	1, NA, 4, 2, 6,	1	6
DN0064	DAYS_PER_WK	28566	25.67%	9	2	2	2	5, NA, 4, 3, 7, 0, 1, 6, 2,	0	7
DN0065	LAST_DTE_WRKD	78980	70.99%	465	10	10	10	> 30 unique values	1/5/14	4/14/17
DN0066	EMPL_PD_NO_ACTV	32817	29.50%	3	1	1	1	NA, Y, N,	N	Y
DN0067	SLRY_PD_FOR_COMP	25110	22.57%	3	1	1	1	N, NA, Y,	N	Y
DN0068	RTRN_WRK_DTE	87127	78.31%	458	10	10	10	> 30 unique values	1/6/14	4/14/17

Figure 13: Data Properties of 2016 FROI Transactions

2016 Data Quality										
DN	Column Name	Number Missing	Pct Missing	Number Unique	Avg Len (char)	Min Len (char)	Max Len (char)	Unique Values	Min Value	Max Value
DN0001	FROI_TRAN_	0	0.00%	107994	7	7	7	> 30 unique values	4343476	5309246
NA	CLM_TRAN_	0	0.00%	97585	10	10	10	> 30 unique values	2014815188	2017106287
NA	CLMNT_ID	0	0.00%	91928	10	10	10	> 30 unique values	1	2017442195
DN0002	MTC	0	0.00%	5	1.01	1	2	0, 4, CO, 1, AU,	0	CO
DN0003	MTC_DTE	0	0.00%	602	10	10	10	> 30 unique values	12/12/14	10/24/17
DN0021	EMPR_CTY	0	0.00%	1921	8.95	3	15	> 30 unique values	OMAHA	ZIONSVILLE
DN0022	EMPR_ST	0	0.00%	51	2	2	2	> 30 unique values	AK	WV
DN0023	EMPR_PSTL	2	0.00%	8424	6.08	1	9	> 30 unique values	1	99503
DN0024	SELF_INSD_I	0	0.00%	2	1	1	1	N, Y,	N	Y
DN0025	NAICS_CDE	71043	65.78%	801	6	1	6	> 30 unique values	0	999999
DN0031	DTE_OF_INJ	0	0.00%	366	10	10	10	> 30 unique values	1/1/16	12/31/16
DN0032	TME_OF_INJ	13911	12.88%	1323	3.41	1	4	> 30 unique values	0	959
DN0033	PSTL_INJR_S	8	0.01%	9926	6.18	1	9	> 30 unique values	1	999990000
DN0034	INJR_EMPR_	1	0.00%	3	1	1	1	Y, N, NA,	N	Y
DN0036	INJR_BODY_	0	0.00%	56	2	2	2	> 30 unique values	10	99
BodyPartDesc	IA_BODY_PA	0	0.00%	56	11.74	3	30	> 30 unique values	ABDOMEN I	WRIST(S) & I
DN0037	SRCE	0	0.00%	74	1.96	1	2	> 30 unique values	1	99
Source Desc	IA_SRCE_DES	771	0.71%	70	22.56	2	54	> 30 unique values	--	WELDING OI
DN0035	NATR_OF_IN	0	0.00%	52	2	2	2	> 30 unique values	1	91
NCCI Table 284										
Desc	NATR_OF_IN	0	0.00%	52	11.2	4	46	> 30 unique values	AIDS	VISION LOSS
DN0039	INIT_TMNT	17385	16.10%	7	1	1	1	2, 3, NA, 0, 4, 5, 1,	0	5
DN0040	DTE_EMPR_I	9631	8.92%	554	10	10	10	> 30 unique values	8/18/11	10/18/17
DN0041	DTE_RPT_TC	10402	9.63%	571	10	10	10	> 30 unique values	8/22/13	10/23/17
DN0050	EMPL_PSTL	6	0.01%	20392	6.24	1	9	> 30 unique values	1	99623
DN0052	Transformed	0	0.00%	904	10	10	10	> 30 unique values	1/1/00	11/1/16
DN0053	GNDR_CDE	0	0.00%	3	1	1	1	F, M, U,	F	U
DN0054	EMPL_MRTL	13389	12.40%	5	1	1	1	U, M, K, NA, S,	K	U
DN0055	NBR_OF_DP	29471	27.29%	15	2	2	2	0, 1, 3, NA, 2, 4, 5, 6,	0	30
DN0056	DTE_DSBL_B	79424	73.54%	446	10	10	10	> 30 unique values	6/1/11	9/22/17
DN0057	DTE_OF_DTH	107833	99.85%	95	10	10	10	> 30 unique values	1/21/16	5/8/17
DN0058	EMPLM_STA	33975	31.46%	10	1	1	1	2, 1, NA, 7, 9, 8, 3, 6, 5, 4,	1	9
DN0059	EMPLMT_CL	21519	19.93%	662	3.98	1	4	> 30 unique values	0	9999
DN0060	EMPL_JOB_T	12075	11.18%	20074	13.71	1	30	> 30 unique values	(ILLEGIBLE)	ZUMBA INST
DN0061	HIRE_DTE	14303	13.24%	9004	10	10	10	> 30 unique values	1111-11-18	1/1/17
DN0062	WGE	26833	24.85%	8578	9	9	9	> 30 unique values	0	188000000
DN0063	WGE_PRD	39062	36.17%	5	2	2	2	1, NA, 2, 6, 4,	1	6
DN0064	DAYS_PER_V	29854	27.64%	9	2	2	2	5, 7, 0, NA, 4, 1, 3, 6,	0	7
DN0065	LAST_DTE_V	76646	70.97%	441	10	10	10	> 30 unique values	6/1/11	9/22/17
DN0066	EMPL_PD_N	32006	29.64%	3	1	1	1	Y, NA, N,	N	Y
DN0067	SLRY_PD_FO	21945	20.32%	3	1	1	1	Y, N, NA,	N	Y
DN0068	RTRN_WRK_	83923	77.71%	434	10	10	10	> 30 unique values	5/2/13	1/6/12