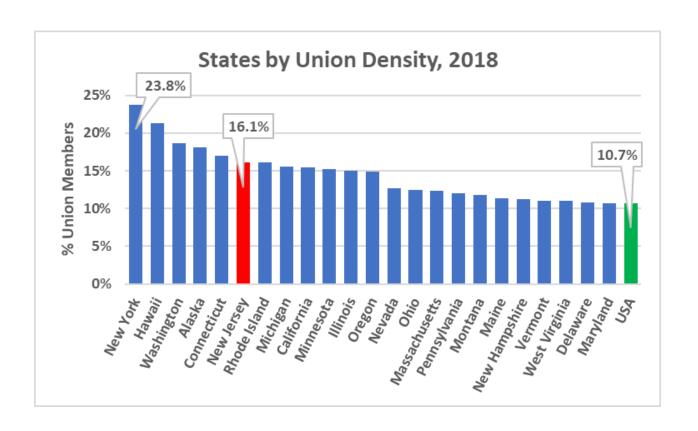


THE STATE OF LABOR IN NEW JERSEY

A REPORT FROM RUTGERS **LEARN**Labor Education Action Research Network

January 2019



THE STATE OF NEW JERSEY LABOR

Prepared for LEARN by Michael Merrill and Todd Vachon January 2019

This report was generously supported by the Goldstein-Farlee Fund established by Dr. Coralie Farlee in memory of Dr. Bernard Goldstein, champions of union activities and advocacy.

The data is drawn from an analysis of the U.S. *Current Population Survey* (CPS) Outgoing Rotation Group data for 2017 and the first six months of 2018. We created a merged data set from the 18 monthly surveys conducted from January 2017 to June 2018.

The "2018" data discussed here and shown in the figures and tables throughout are the averages for those 18 months. All results are calculated for employed civilian wage and salary workers aged 16 and over. We followed the sample definition and weighting procedures described in Barry T. Hirsch and David A. Macpherson, *Union Membership and Earnings Data Book* (Washington D.C.: Bureau of National Affairs, 2018).

To ensure reliability, given the limitations of the CPS dataset, we report unionization rates only for subgroups that have a minimum of 100 observations. Subgroups such as individual occupations and racial categories that fall below this threshold are combined into larger groups (e.g.; "nonwhite" as opposed to black, Asian, etc.) to provide projections.

"Union density" denotes the proportion of all wage and salary workers who are union members in a region, occupation, or industry. For the state rankings, see Hirsch and Macpherson: www.unionstats.com. The front and back cover graphs use their 2017 numbers.

Technical Note: Please note that due to the different scope of months included, the statewide union numbers included here will be slightly different from the annual data released by the Department of Labor on January 18, 2019. Updated projections for New Jersey, including the entirety of 2018 data without 2017 data, are being prepared for release by LEARN researchers later in the year.

Data Source: U.S. Census Bureau *Current Population Survey* monthly data, January 2017-June 2018.

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Executive Summary

KEY FINDINGS:

- 1. Unions of public sector workers comprise nearly half of the labor movement nationally and more than half of it in New Jersey (page 6).
- 2. Public union membership in New Jersey has grown from 296,000 in 1988 to 371,000 in 2018—a 25 percent increase overall (*page 7*).
- 3. Private sector employment grew by 9 percent in New Jersey between 1998 and 2018 (<u>page 18</u>), while private sector union membership fell by nearly 40 percent, from 484,000 to 294,000 (<u>page 7</u>).
- 4. But construction employment rose by 31 percent from 154,300 to 204,300 (page 17) and construction union membership rose from 53,500 to 58,000.
- 5. Manufacturing employment in New Jersey also fell by 40 percent between 1998 and 2018 (*page 18*). But manufacturing union memberships fell by 90 percent (*page 9*).
- 6. Between 1988 and 2018, the number of federal employees in New Jersey fell 25 percent (*page 17*) and the number of unionized federal employees by 47 percent (*page 8*).
- 7. Meanwhile, the number of unionized state and local government employees rose by 33 percent and 6 percent, respectively (*page 8*).

DETAILED FINDINGS:

- There are 15 million union members in the United States, 665,000 in New Jersey (page 1).
- 2. New Jersey ranks 6 out of the 50 states for "density" of union representation—the ratio of union members to the labor force—and 7 out of 50 for the number of union members (<u>page 2</u>).
- 3. The size and density of the union movement in both the US and New Jersey have been declining for several years. But the decline in size has been much slower than the decline in density (pages 3 and 4).
- 4. Why? Because while wage earners want unions and the public generally supports them, government policy no longer encourages their formation, and employers tenaciously resist worker efforts to secure union representation.

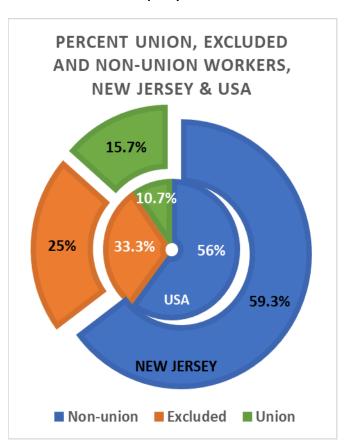
- 5. In state and local governments, where workers are freer to form unions with less interference, 50 to 60 percent of the workforce is unionized (*page 5*); and their number has been growing (*pages 6 and 7*).
- 6. In the private sector, where employers can and do interfere with unionization efforts more often, less than 10 percent of the workforce is unionized and this proportion has been trending downwards for many years (page 5).
- 7. Private sector unionization fell more rapidly than employment in declining industries and rose more slowly in expanding industries, as good union jobs in the private sector become increasingly scarce (pages 9 and 18).
- 8. Unionization rates also vary with occupations. 56 percent of uniformed protective service employees, 49 percent of educators and 37 percent of construction workers are unionized (*page 10*).
- 9. In comparison, only 7 percent of hospitality workers and 5 percent of private sector service workers are unionized (*page 10*).
- 10. The population of the state is also changing. In 1988 75 percent of New Jerseyans identified as white. In 2018 only 56 percent do (*page 11*).
- 11. In that period, both employment in New Jersey grew by 10 percent, though more rapidly for men than women, and non-whites than whites (<u>pages 12 & 13</u>).
- 12. Also, all the growth of non-white employment was in the private sector. Non-white public sector employment actually decreased, despite the rapid growth. Of the non-white pollution in New Jersey (*page 13*).
- 13. The white population of New Jersey is nonetheless more heavily represented in the workforce and the unions than the non-white population (*page 14*).
- 14. Between 1998 and 2018, the non-white share of the union movement fell slightly from 23 percent to 21 percent (*page 15*).
- 15. Meanwhile, the share of women in unions rose from 44 percent to 46 percent (*page 16*).
- 16. The best targets of opportunity for expanding worker voice in the New Jersey economy are the sizeable number of health practitioners and transportation workers, including material handlers at the proliferating distribution centers of the new "gig economy" (<u>page 17</u>).

US and NJ Union Density Today

There are 15 million union members in the United States, 665,000 of them in New Jersey. These figures represent 10.7 percent and 15.7 percent, respectively, of the entire US and NJ non-farm work force. This ratio of members to the workforce is known as "union density."

The pie chart below is a representation of the relative densities of the New Jersey and the US labor movements.

We follow the convention of reporting union density as a proportion of all non-farm employees. But this understates the movement's reach.



Across the country, at least onethird of the private sector and more than half of the public sector workforce is barred by law from union membership.* The relative size of those barred is shown on the left.

This ineligibility is due to excluding private sector managers, supervisors and independent contractor from the National Labor Relations Act, and to various state and municipal exclusions in the public sector.

In New Jersey, where there are

no significant restrictions on public sector unionization, the share of excluded workers is most likely a bit smaller.

Adjusted for eligibility, union density is closer to 16 percent, or one worker out of every seven, of the *eligible* workforce nationally and nearly 25 percent, or one worker out of every four, in New Jersey.

^{*} **SOURCE:** Dorothy Sue Cobble, "Making Postindustrial Unionism Possible," in *Restoring the Promise of American Labor Law*, S. Friedman, et.al., eds. (Ithaca, NY: ILR Press, 1994), 290.

Top 10 States by Union Density and Membership

Looking more closely at union density and membership by state, New Jersey ranks sixth among all the states in terms of density and seventh in terms of size.

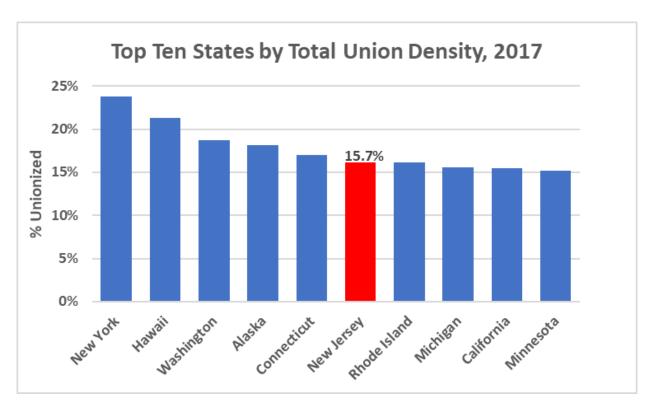


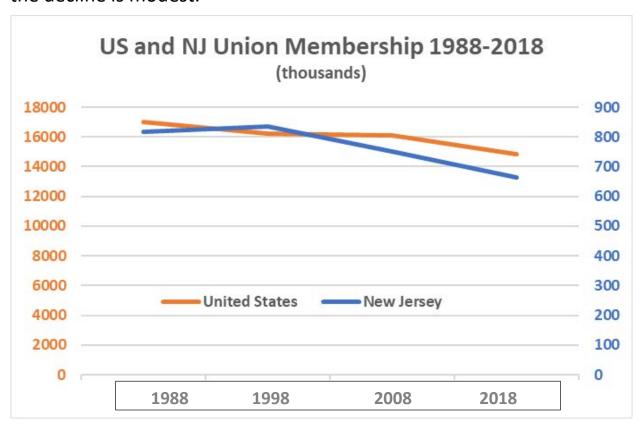
Table 2. Top Ten States by Total Union Members

Rank	State	Total # Union Members
1	California	2,489,184
2	New York	2,016,437
3	Illinois	828,066
4	Pennsylvania	664,702
5	Michigan	659,285
6	Ohio	634,474
7	New Jersey	628,734
8	Washington	582,749
9	Texas	542,242
10	Florida	479,315
	USA	14,811,500

(These estimates were arrived at by different methods and are slightly lower.)

Trends in US and NJ Union Membership, 1988-2018

The relative persistence of union membership is evident from the more recent data on union membership. We still see some decline. But compared to the loss of density due to continued employer resistance, the decline is modest.



Between 1988 and 2018, US union density fell from just over 17 to just under 15 million. During the same period, union membership in New Jersey fell from about 825,000 in 1998 to about 665,000 in 2017.

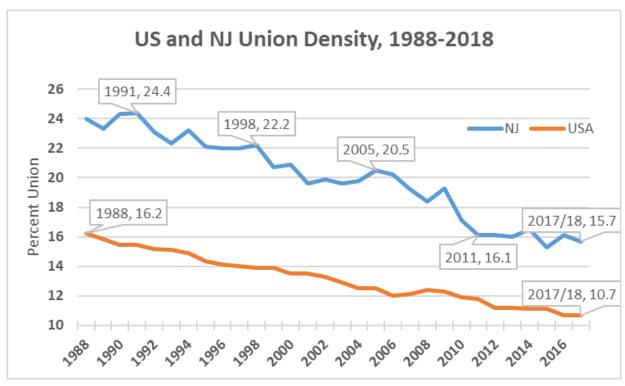
This decline is associated with the disappearance of good union jobs in manufacturing and other traditional centers of union strength, as well as the rapid growth of jobs in the non-unionized service sector.

Employer resistance and government inaction have made it much more difficult for service sector workers in the private sector to secure union voice and protection. In the public sector, in contrast, where workers have not had to contend with entrenched employer opposition, union organizing efforts have been markedly more successful.

Trends in US and NJ Union Density, 1988-2018

The effect of employer opposition to union expansion is evident in the trends in union density, which show a steeper decline than those in union membership.

The passage of the Taft-Hartley Act in 1947, which set the legal precedent for so-called right-to-work laws and restricted many of the tactics that workers could use to organize, made it harder for the unions to expand and grow as the economy expanded and grew.

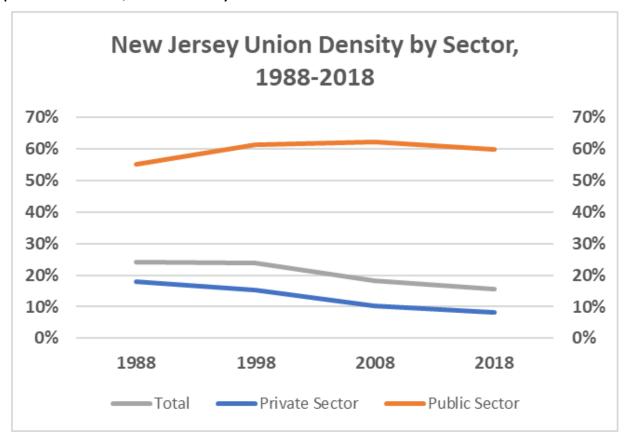


Unions have mostly been able to hold onto the gains they made during the first half of the 20th century. But they have had a harder time securing the right to "actual liberty of contract" and a voice at work for service workers, especially in the private sector.

As can be seen from the chart on the next page, in the public sector, where employers are less actively hostile to union representation, 50 percent or more of the workforce is organized. But in the private sector, where employers are more actively hostile and the law is less favorable, expansion has been stalled.

New Jersey Union Density, by Sector, 1988-2018

That employer opposition is the primary barrier to unionization is evident from the difference in union density between the public sector, where employees are afforded a freer choice to unionize, and the private sector, where they are not.



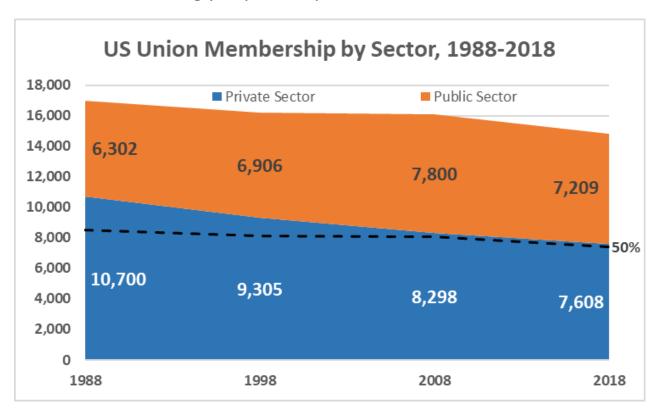
Union density in the New Jersey public sector since 1988 is equivalent to the density achieved in the private sector in the 1940s and 50s, before employers succeeded in hobbling union organizing efforts.

Until recently, these unions have also been both relatively stable and growing. There is no evidence that non-managerial employees would rather lose than keep their unions, where they have them, and plenty of evidence that they generally want to join them, where they do not.

The recent Supreme Court decision in *Janus v. AFSCME District 31*, which held mandatory agency fees unconstitutional, may affect this equation. One thing to watch will be how much of an effect the decision actually has on union membership and public sector density.

US Union Membership, by Sector, 1988-2018

Public employees were denied union representation and bargaining rights until the middle of the 20th century. But since then, they have become an increasingly important part of the union movement.



Between 1988 and the present, while private sector membership declined nationally from 10.7 million to 7.6 million, public sector membership grew from 6.3 to 7.3 million.

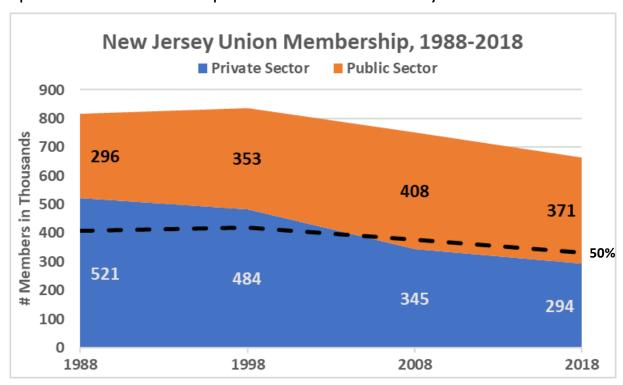
As a result, nearly half of all union members are now government employees, and a majority of them are women.*

We look more closely at the profile of public sector workers and union members in New Jersey below.

^{*} For an excellent overview of the national scene, see Julia Wolfe and John Schmidt, <u>"A profile of union workers in state and local government Key facts about the sector for followers of Janus v. AFSCME Council 31,"</u> Economic Policy Institute, June 7, 2018.

NJ Union Membership, by Sector, 1988-2018

Between 1988 and 2018, overall union membership in New Jersey fell from about 820,000 to 665,000. But while private sector union membership fell by 43 percent during this 30-year period, public sector membership increased by 25 percent. Public sector unions now represent more than 50 percent of the New Jersey labor movement.



One of the primary reasons unions are growing in the public sector is that employer hostility is a less prominent factor in the decision to form a union. Government workers in NJ have more freedom to unionize.

But this freer choice is not universally enjoyed. The right to union representation and to collective bargaining in the public sector varies from state to state, with some encouraging them more than others.*

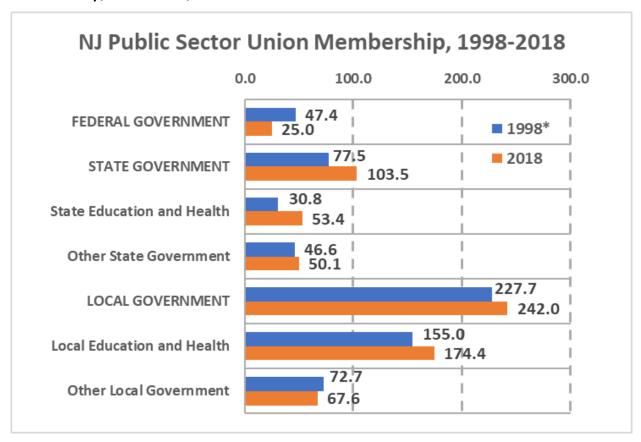
The muted effect of free choice in the face of private employer opposition is starkly evident in the membership trends depicted on the last two pages. At least 50 percent of NJ public employees have been stably unionized since 1988. In the private sector, however, density has fallen from 18 percent to 8 percent today.

^{*}See Todd E. Vachon and Michael Wallace, "Public Sector Unionism," *Sociology of Work: An Encyclopedia*, Vicki Smith, ed. (Los Angeles, CA: Sage, 2013), 917-921.

Change in NJ Public Sector Union Membership

Public sector union membership in New Jersey grew from 296,000 in 1988 to a peak of 408,000 in 2008, before austerity measures credited to recession caused a decline to its current total of 371,000. Still, a 25 percent increase overall.

Different levels of government and occupations were affected differently, however, as can be seen from the chart below.



Between 1998 and 2018, federal union membership fell by 47 percent, while state and local union membership grew by 33 percent and 6 percent, respectively.

The bulk of these increases were in education and health care, which added 23,400 members at the state level and 19,400 members at the local level.

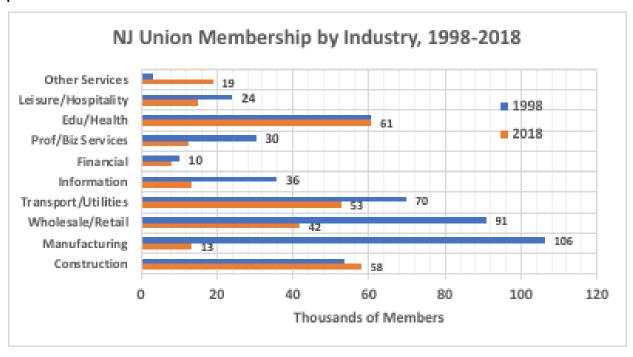
The trends in private sector unionization present a different picture, however, as can be seen on the next page.

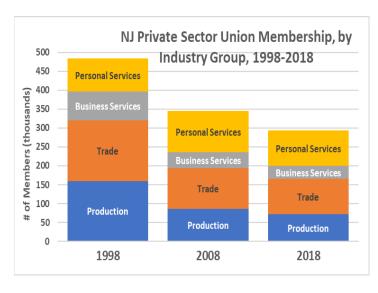
NJ Private Sector Union Membership, by Industry

Between 1998 and 2018, private sector union membership in New Jersey fell by nearly 40 percent, from 484,000 to 294,000.

Moreover, union membership generally fell faster than employment. In short, high-wage union jobs were vulnerable to the changing economy.

This difference was especially evident in manufacturing, where employment fell by 34 percent, while union membership fell by 90 percent.





manufacturing.

These shifts produced a smaller, slightly different profile for private sector unions.

Personal Services = education, health, leisure, hospitality and other.

Business Services = information, financial and professional services.

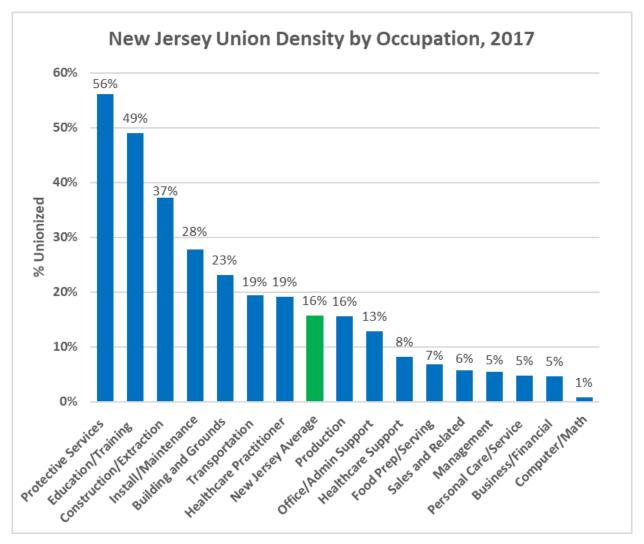
Trade = wholesale, retail, utilities and transportation and utilities.

Production = construction and

Which NJ Occupations are the Most Unionized?

Another interesting angle on the state of the New Jersey union movement is afforded by data on the union density of different occupational categories.

As can be seen from the chart below, some jobs are more heavily unionized than others.



Note: The data include both private- and public-sector workers.

There is also a clear pattern to this distribution. Non-managerial employees who enjoy greater autonomy, like teachers, construction workers and drivers, or are concerned with personal well-being, like the protective services and healthcare practitioners, are more heavily unionized than those with less autonomy or closer supervision.

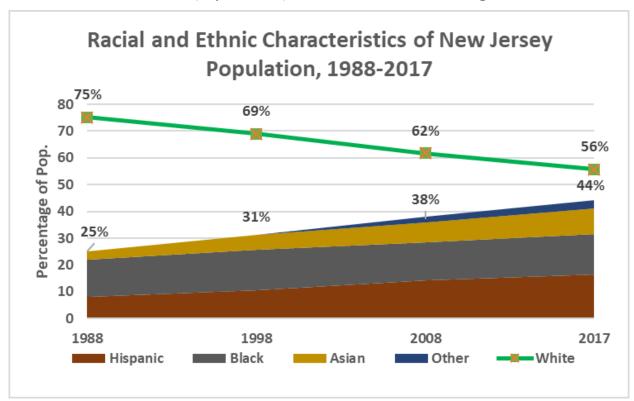
Racial and Ethnic Distribution of New Jersey Population, 1988-2017

The population of New Jersey is also changing.

Thirty years ago, three-quarters of the state's residents identified themselves as non-Hispanic whites. Today, the proportion who do so is barely more than half.

Over the same 30 years, the proportion who identify themselves as Black has stayed at 15 percent, while those identifying as Hispanic has doubled from 8 percent to 16 percent, and those identifying as Asian has risen from 3 percent to 10 percent.

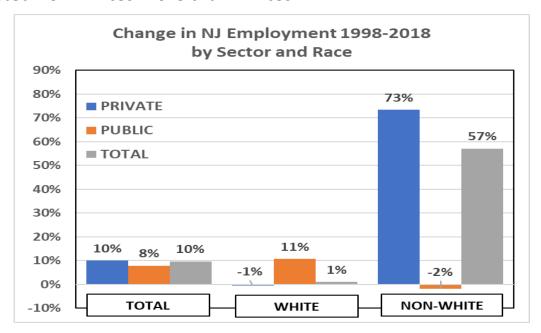
Also, a small number (3 percent) fit none of these categories.



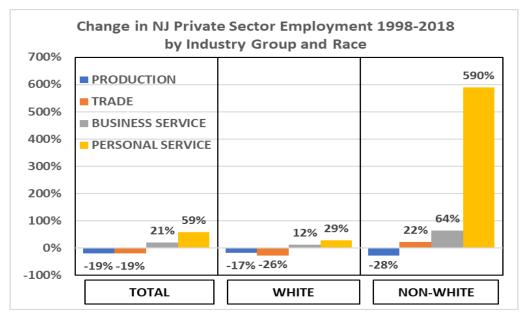
The changing racial and ethnic makeup of the population is also reflected in the employment and union density figures we have been exploring, as can be seen on the next page.

Change in New Jersey Employment, 1998-2018 By Race and Private Industry Group

The change in private and public sector employment by race is shown below. Public sector employment expanded the most for whites, private sector for non-whites. In other words, public sector cutbacks affected non-whites more than whites.

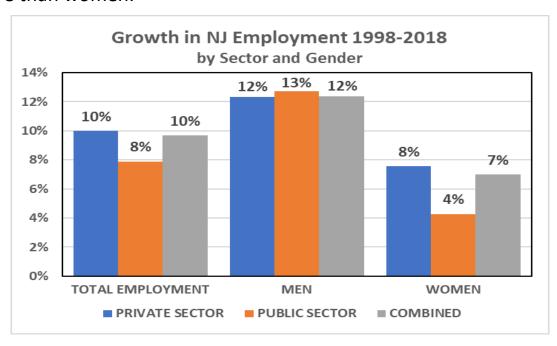


The private sector gain for non-whites was in service jobs, a few in better paying business services, most in lower-wage personal services.

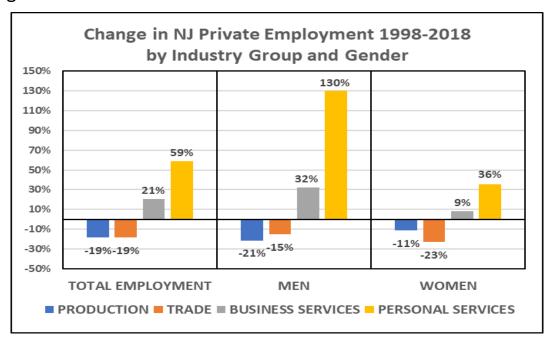


Change in New Jersey Employment, 1998-2018 By Gender and Private Industry Group

The change in private and public sector employment by gender is shown below. Both men and women saw employment gains, but men more than women.



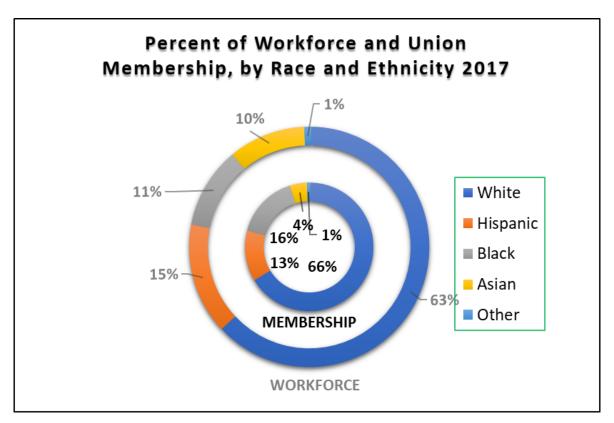
In the private sector, the industry composition of the workforce changed more for men than it did for women.



Racial and Ethnic Distribution of New Jersey Workforce and Union Membership in 2017

The share of different racial and ethnic groups in the workforce roughly mirrors their share in the population. But there are striking differences between the composition of the workforce and union membership.

The outer ring of the graph below represents the share of different groups in the New Jersey workforce. The inner ring represents their share in the state's estimated number of union members.

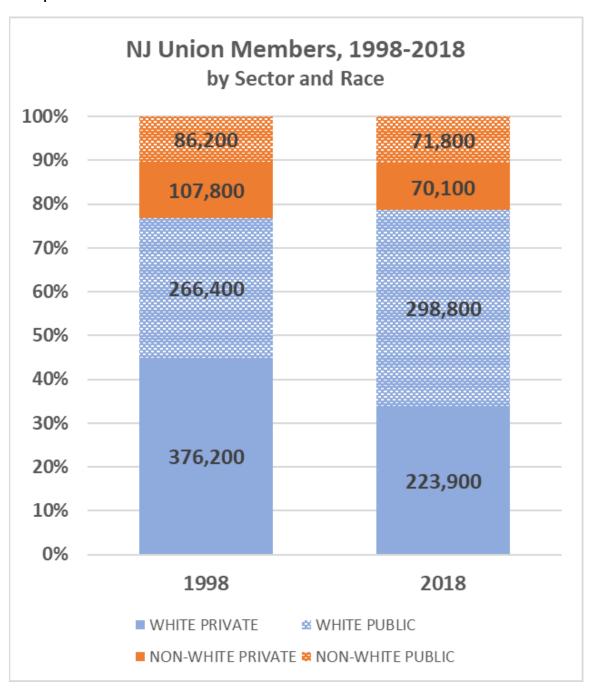


Black workers are significantly more likely and white workers slightly more likely to belong to unions than other groups, while Asian workers are much less likely, and Hispanics slightly less likely, to do so.

The balance shifts when we look at the population share of different groups as presented on the previous page and compare it to their share of the workforce in the outer ring here. Whites are a larger share of the workforce than they are of the population (56 percent), while blacks (at 11 percent and 15 percent, respectively), are a smaller share, reflecting the higher rates of unemployment in black communities.

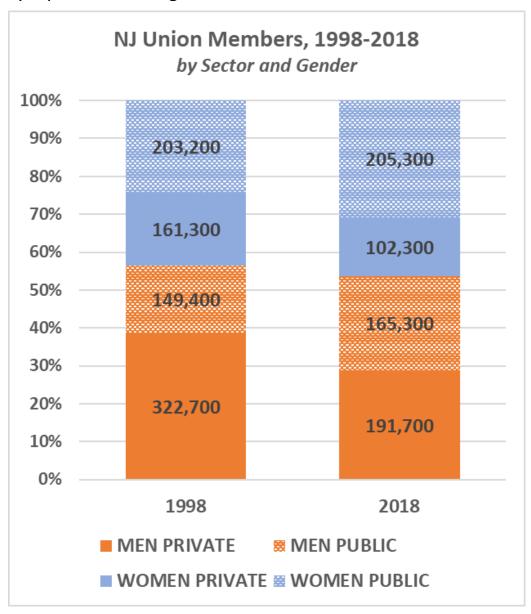
NJ Union Membership by Sector and Race

There were also significant changes in the distribution of union membership between 1998 and 2018. White public sector union membership grew by 12 percent, even as membership fell for whites in the private sector and for non-whites in both sectors.



NJ Union Membership by Sector and Gender

There were also significant differences between men and women with respect to union membership. From 1998 to 2018, private sector membership dropped 40 percent among men and 37 percent among women, while public sector membership grew 11 percent among men but only 1 percent among women.

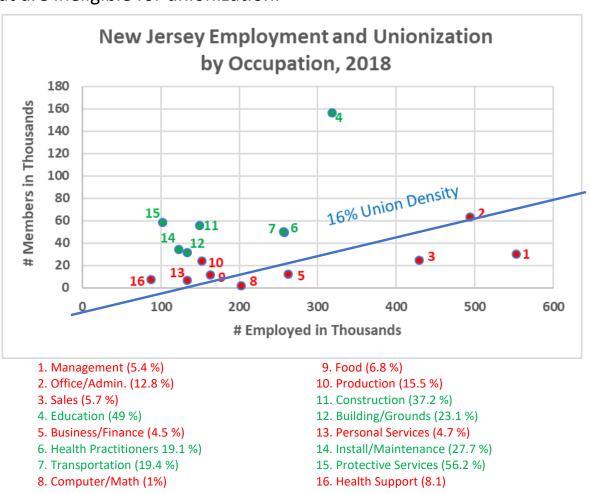


As a result of these shifts, even though men are still a small majority of all NJ unionists (54 percent), a majority of New Jersey union members (56 percent) are public employees and the modal or most common member of the movement is a female public servant.

The Occupational Distribution of Employment and Unionization in New Jersey

Here is a final look at the distribution of union jobs in New Jersey, which includes information about the relative size of each occupational category.

The categories themselves are listed below, with the estimated density of union representation in the category. The largest occupations, in management, office, and sales have the lowest unionization rates. These occupations also have a large proportion of job classifications that are ineligible for unionization.



The best targets of opportunity for expanding worker voice in the New Jersey economy are obviously health practitioners (6) and transportation workers (7), which include material handlers at a growing number of distribution centers.

DATA APPENDIX

APPENDIX 1. New Jersey Employment and Unionization by Industry and Sector, 1998-2018	nt and Un	ionization	by Industr	y and Sect	or, 1998-2	018
	ſN	NJ Employment	ent	NJ Uni	NJ Union Membership	ership
PRIVATE SECTOR INDUSTRY	*8661	2008	2018	*8661	2008	2018
CONSTRUCTION	154.3	225.6	202.4	23.5	52.6	58.0
MANUFACTURING	495.6	423.3	327.3	106.3	33.3	13.4
WHOLESALE/RETAIL	740.1	550.0	544.1	8.06	70.9	41.7
TRANSPORTATION/UTILITIES	198.6	174.9	220.3	8.69	37.6	52.7
INFORMATION	156.6	122.6	103.8	35.7	20.4	13.4
FINANCIAL	311.9	350.2	406.2	10.1	5.4	7.9
PROFESSIONAL/BUSINESS SERVICES	413.3	497.3	555.8	30.3	15.0	12.6
EDUCATION/HEALTH SERVICES	472.4	586.6	668.4	60.5	74.1	9.09
LEISURE/HOSPITALITY	181.5	320.0	304.8	24.1	29.0	14.9
OTHER SERVICES (except Pub. Admin.)	75.9	146.1	186.5	3.1	6.4	18.9
TOTAL PRIVATE SECTOR	3228.9	3396.9	3519.7	484.0	344.8	294.0
GOVERNMENT/PUBLIC SECTOR	1998*	2008	2018	1998*	2008	2018
Federal Government	94.1	75.0	71.0	47.4	35.8	25.0
State Government	140.0	155.6	171.1	77.5	9.68	103.5
Education and Health	59.3	75.0	88.5	30.8	39.2	53.4
Other State Government	80.7	9.08	82.6	46.6	50.4	50.1
Local Government	338.4	420.9	375.6	227.7	282.1	242.0
Education and Health	207.9	266.5	239.5	155.0	192.5	174.4
Other Local Government	130.5	154.5	136.0	72.7	9.68	67.6
TOTAL PUBLIC SECTOR	572.4	651.6	617.6	352.6	407.5	370.56
TOTAL NONFARM	3801.3	4048.5	4137.3	9.988	752.3	664.5

† Union membership and density estimates for management occupations are less reliable as the sample size was * Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census, recoding was completed according to U.S. Census recommendations. See Scopp, Thomas S. 2003. "The Relationship Between the 1990 Census and Census 2000 https://www.census.gov/content/dam/Census/library/working-papers/2003/demo/techpaper2000.pdf. Industry and Occupation Classification Systems ." Technical Paper #65: U.S. Census Bureau.

often less than 100.

APPENDIX 1a.		ersey Emp	loymenta	nd Unioni	zation by	Industry, S	New Jersey Employment and Unionization by Industry, Sector and Gender, 1998-2018	Gender, 19	998-2018			
			NJ Empl	NJ Employment				N	NJ Union Membership	embershi	d	
		Men			Women			Men			Women	
PRIVATE SECTOR INDUSTRY	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018
PRODUCTION INDUSTRIES	468.0	450.1	368.5	182.0	198.7	161.2	130.3	76.3	64.2	29.5	9.7	7.1
TRADE INDUSTRIES	529.9	408.1	449.6	408.8	316.8	314.9	113.2	77.3	67.7	47.3	31.1	26.8
BUSINESS SERVICE INDUSTRIES	457.6	534.0	605.2	424.2	436.2	460.5	47.3	32.2	28.3	28.7	8.6	5.5
PERSONAL SERVICE INDUSTRIES	179.1	329.8	412.5	9:055	722.9	747.2	31.8	46.2	31.5	55.9	63.4	67.9
TOTAL PRIVATE SECTOR	1634.6	1722.0	1835.8	1565.6	1674.6	1683.9	322.7	232.0	191.7	161.3	112.8	102.3
		Men			Women			Men			Women	
GOVERNMENT/PUBLIC SECTOR	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018
Federal Government [†]	26.9	50.4	39.2	37.2	24.6	31.7	28.5	56.9	14.2	19.0	9.0	10.9
State Government	55.4	9.19	83.5	84.6	94.0	87.6	29.3	38.1	55.1	48.2	51.5	48.4
Education and Health†	18.2	22.4	30.0	41.1	52.6	58.4	10.3	11.3	16.7	20.6	27.9	36.7
Other State Government	49.1	39.7	53.4	31.6	41.4	29.2	31.1	26.9	38.4	15.5	23.5	11.7
Local Government	132.8	173.5	153.6	505.6	247.4	222.0	91.7	118.7	96.0	136.0	163.5	146.1
Education and Health	49.8	78.4	58.4	158.1	188.1	181.1	38.7	57.1	43.4	116.2	135.5	131.0
Other Local Government	77.1	95.1	95.1	53.4	59.3	40.9	42.2	61.6	56.8	30.5	28.0	10.9
TOTAL PUBLIC SECTOR	245.1	285.5	276.3	327.4	366.1	341.3	149.4	183.6	165.3	203.2	223.9	205.3
TOTAL NONFARM	1879.7	2007.4	2112.1	1892.9	2040.7	2025.2	472.1	415.6	357.0	364.5	336.7	307.6

* Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census, recoding was completed according to U.S. Census recommendations. See Scopp, Thomas S. 2003. "The Relationship Between the 1990 Census and Census 2000 Industry and Occupation Classification Systems ." Technical Paper #65: U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/workingpapers/2003/demo/techpaper2000.pdf.

† Union membership and density estimates for management occupations are less reliable as the sample size was often less than 100.

APPENDIX 1b.		Jersey En	nploymen	t and Unio	nization b	y Industry	New Jersey Employment and Unionization by Industry, Sector and Age, 1998-2018	d Age, 199	8-2018			
			NJ Empl	NJ Employment				N	J Union M	NJ Union Membership	d	
	15	15-39 years old	ld	40	40-65 years old	pld	15	15-39 years old	old	-017	40-65 years old	ld
PRIVATE SECTOR INDUSTRY	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	*8661	2008	2018
PRODUCTION INDUSTRIES	293.4	268.2	196.3	326.6	380.7	333.4	55.9	22.6	24.6	104.0	63.4	46.8
TRADE INDUSTRIES	565.5	355.5	354.3	373.1	369.4	410.2	85.3	41.9	37.8	75.2	9.99	56.7
BUSINESS SERVICE INDUSTRIES	469.2	430.8	439.2	412.6	539.3	626.6	29.5	12.9	11.0	46.5	27.9	22.8
PERSONAL SERVICE INDUSTRIES	374.7	516.7	522.0	355.0	536.0	637.7	26.3	39.7	27.5	61.4	8.69	6.99
TOTAL PRIVATE SECTOR	1702.9	1571.2	1511.8	1497.3	1825.4	2007.9	196.9	117.1	100.9	287.1	7.7.2	193.1
	15	15-39 years old	pļ	40	40-65 years old	plo	15	15-39 years old	Plo	-017	40-65 years old	PI
GOVERNMENT/PUBLIC SECTOR	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	*8661	2008	2018
Federal Government [†]	39.5	20.2	26.7	54.6	54.8	44.2	20.5	7.8	9.5	56.9	28.0	15.9
State Government	49.0	58.2	62.9	6.06	97.4	105.2	22.9	33.6	40.1	54.5	26.0	63.4
Education and Health†	20.6	26.9	39.2	38.7	48.1	49.2	7.1	12.3	23.4	23.7	26.9	30.0
Other State Government [†]	38.6	31.3	28.4	42.1	49.3	54.2	18.7	21.3	16.7	28.0	29.1	33.4
Local Government	122.5	132.1	124.3	215.9	288.8	251.2	79.0	87.3	80.1	148.6	194.8	161.9
Education and Health	60.1	9.08	77.6	147.9	185.8	161.9	42.7	53.7	57.6	112.3	138.8	116.9
Other Local Government	65.2	51.5	46.7	65.2	103.0	89.3	28.1	33.6	22.5	44.6	26.0	45.1
TOTAL PUBLIC SECTOR	211.1	210.5	216.9	361.4	441.1	400.7	122.5	128.7	129.4	230.0	278.8	241.2
TOTAL NONFARM	1914.0	1781.6	1728.7	1858.7	2266.5	2408.6	319.5	245.8	230.3	517.1	506.5	434.4

* Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census, recoding was completed according to U.S. Census recommendations. See Scopp, Thomas S. 2003. "The Relationship Between the 1990 Census and Census 2000 Industry and Occupation Classification Systems ." Technical Paper #65: U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/workingpapers/2003/demo/techpaper2000.pdf.

† Union membership and density estimates for management occupations are less reliable as the sample size was often less than 100.

APPENDIX 1c.		Jersey Em	ployment	and Unior	nization by	/ Industry,	New Jersey Employment and Unionization by Industry, Sector and Race, 1998-2018	l Race, 199	8-2018			
			NJ Employment	oyment				Z	NJ Union Membership	embershi	d	
		White		N	Non-White			White		V	Non-White	
PRIVATE SECTOR INDUSTRY	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	*866 T	2008	2018
PRODUCTION INDUSTRIES	540.1	555.2	450.3	109.9	93.6	79.5	121.0	77.3	61.8	38.8	9.8	9.5
TRADE INDUSTRIES	787.3	600.3	580.2	151.3	124.6	184.2	136.5	93.4	66.1	24.0	15.0	28.3
BUSINESS SERVICE INDUSTRIES	726.7	774.6	811.5	155.1	195.6	254.3	29.7	32.2	27.6	16.3	8.6	6.3
PERSONAL SERVICE INDUSTRIES	690.3	811.0	887.3	39.5	241.7	272.4	61.4	73.1	68.4	26.3	36.5	26.0
TOTAL PRIVATE SECTOR	2744.4	2741.1	2729.3	455.8	655.5	790.4	378.6	276.0	223.9	105.4	68.7	70.1
		White		2	Non-White			White		V	Non-White	
GOVERNMENT/PUBLIC SECTOR	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	*866 T	2008	2018
Federal Government [†]	66.4	26.0	50.9	7.72	19.0	20.0	30.8	28.0	15.9	16.6	7.8	9.2
State Government	94.9	118.7	124.3	45.1	36.9	46.7	20.6	71.7	72.6	26.9	17.9	30.9
Education and Health†	42.7	26.0	61.8	16.6	19.0	26.7	21.3	32.5	33.4	9.5	6.7	20.0
Other State Government	31.6	62.7	62.6	49.1	17.9	20.0	15.5	39.2	39.2	31.1	11.2	10.9
Local Government	285.2	368.3	318.8	53.2	52.6	56.7	185.0	254.1	210.3	42.7	28.0	31.7
Education and Health	172.4	241.8	212.0	35.6	24.6	27.5	124.9	180.2	152.7	30.0	12.3	21.7
Other Local Government	92.9	126.5	106.8	37.6	28.0	29.2	53.9	73.9	57.6	18.8	15.7	10.0
TOTAL PUBLIC SECTOR	446.5	543.0	494.1	125.9	108.6	123.5	266.4	353.8	298.8	86.2	53.7	71.8
TOTAL NONFARM	3190.9	3284.1	3223.4	581.7	764.0	913.9	642.0	629.8	522.8	191.6	122.5	141.9

Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census, recoding was completed according to U.S. Census recommendations. See Scopp, Thomas S. 2003. "The Relationship Between the 1990 Census and Census 2000 Industry and Occupation Classification Systems ." Technical Paper #65: U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/workingpapers/2003/demo/techpaper2000.pdf.

† Union membership and density estimates for management occupations are less reliable as the sample size was often less than 100.

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	APPENDI)	APPENDIX 1d. New Jersey	_	oyment an	d Unioniza	ation by Inc	Employment and Unionization by Industry, Sector and Detailed Race, 1998-2018	or and Det	ailed Race,	1998-2018		
						NJ Employment	oyment					
	Non-	Non-Hispanic White	/hite	S!H	Hispanic White	te		Black		¥	Asian/Pacific	O
•	1998*	2008	2018	*8661	2008	2018	*8661	2008	2018	*8661	2008	2018
PRIVATE SECTOR	2316.1	2097.9	2175.9	340.6	641.3	552.6	399.4	293.2	369.9	173.1	364.1	419.5
PUBLIC SECTOR	398.4	475.8	428.1	41.9	67.2	66.0	112.2	87.5	94.3	19.7	21.1	29.2
TOTAL NONFARM	2714.5	2573.7	2604.0	385.5	708.5	618.6	511.7	380.7	464.2	192.8	385.2	448.8
					N	J Union M	NJ Union Membership	C				
	Non-	Non-Hispanic White	/hite	S!H	Hispanic White	te		Black		¥	Asian/Pacific	0
	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018
PRIVATE SECTOR	296.3	210.5	179.7	6'62	65.5	44.1	85.3	39.8	53.6	22.5	29.0	16.6
PUBLIC SECTOR	243.5	300.4	258.7	22.9	40.3	40.1	75.1	54.4	55.9	11.1	12.3	15.9
TOTAL NONFARM	539.8	510.9	438.4	102.8	105.8	84.2	160.4	94.2	109.5	33.6	41.3	32.4

* Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census, recoding was completed according to U.S. Census recommendations. See Scopp, Thomas S. 2003. "The Relationship Between the 1990 Census and Census 2000 Industry and Occupation Classification Systems ." Technical Paper #65: U.S. Census Bureau.

† Union membership and density estimates for management occupations are less reliable as the sample size was often less than 100.

APPENDIX 2. New Jersey Employment and Unionization by Occupation and Sector, 1998-2018	d Unioniza	ition by O	cupation	and Sector,	1998-2018	3
OCCUPATION	Z	NJ Employment	ent	NJ Uni	NJ Union Membership	ership
PRIVATE SECTOR	1998	8007	2018	1998	2008	2018
Management	501.8	408.3	504.7	11.7	11.7	15.2
Professional	552.1	881.8	1049.2	45.9	76.4	57.9
Service	404.3	553.4	506.8	29.6	53.0	40.4
Office	1001.0	933.5	835.2	87.9	58.3	44.2
Production	769.8	619.9	623.3	283.2	141.1	126.4
PRIVATE SECTOR TOTAL	3228.9	3396.9	3519.7	488.2	340.5	284.1
	Z	NJ Employment	ent	NJ Uni	NJ Union Membership	ership
PUBLIC SECTOR	1998	2008	2018	1998	2008	2018
Management	85.9	35.8	46.8	37.9	13.2	15.3
Professional	212.9	316.9	311.3	147.0	212.8	206.6
Service	105.4	126.5	117.7	64.0	79.4	76.5
Office	117.0	117.5	86.0	71.9	65.1	45.1
Production	51.2	54.9	55.9	31.7	30.9	34.0
PUBLIC SECTOR TOTAL	572.4	651.6	617.6	352.6	401.4	377.5
TOTAL NON-FARM	3801.3	4048.5	4137.3	928.7	800.2	664.5

recommendations. See Scopp, Thomas S. 2003. "The Relationship Between the 1990 Census and Census 2000 Industry and * Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census, recoding was completed according to U.S. Census https://www.census.gov/content/dam/Census/library/working-papers/2003/demo/techpaper2000.pdf. Occupation Classification Systems ." Technical Paper #65: U.S. Census Bureau.

† Union membership and density estimates for management occupations are less reliable as the sample size was often less than 100.

				PRIVATE SECTOR	SECTOR							
			NJ Emp	NJ Employment				Ŋ	J Union M	NJ Union Membership	d	
		Men			Women			Men			Women	
OCCUPATIONAL CATEGORY	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018
Management †	283.9	248.2	303.1	217.9	160.1	201.6	7.8	7.02	9.1	3.9	4.7	6.1
Professional	255.9	400.6	492.7	296.2	481.2	526.5	17.9	32.9	17.5	28.0	43.5	40.4
Service	139.7	233.8	218.8	264.6	319.6	288.0	28.2	26.5	23.6	31.3	26.5	16.8
Office	348.8	325.4	321.1	652.1	608.1	514.1	34.0	31.8	22.8	53.8	26.5	21.3
Production	623.0	515.7	501.4	146.8	104.2	122.0	237.5	127.3	109.7	45.6	13.8	16.8
TOTAL PRIVATE SECTOR	1651.2	1723.8	1837.1	1577.7	1673.1	1682.2	325.5	225.5	182.8	162.7	115.0	101.3
				PUBLIC SECTOR	SECTOR							
			NJ Emp	NJ Employment				Ž	Union M	NJ Union Membership	a.	
		Men			Women			Men			Women	
OCCUPATIONAL CATEGORY	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018
Management †	48.6	22.4	20.9	37.3	13.4	25.9	22.1	7.92	5.1	15.8	5.3	10.2
Professional	58.6	96.3	91.8	154.4	220.6	219.5	33.2	64.0	52.7	113.8	148.9	153.9
Service	68.9	82.9	6.06	36.5	43.7	26.7	9.05	57.3	65.5	13.4	22.1	11.0
Office	25.3	40.3	23.4	91.7	77.2	62.6	16.6	28.7	16.2	55.3	36.4	28.9
Production	42.3	43.7	49.2	8.9	11.2	6.7	26.7	22.0	28.9	5.0	8.8	5.1
TOTAL PUBLIC SECTOR	243.7	285.5	276.2	328.7	366.1	341.4	149.2	179.9	168.3	203.4	221.5	209.2
				TOTAL	_AL							
			NJ Emp	NJ Employment				Z	J Union M	NJ Union Membership	d	
		Men			Women			Men			Women	
ALL OCCUPATIONAL CATEGORIES	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018
TOTAL NONFARM	1894.9	2009.3	2113.4	1906.4	2039.2	2023.6	474.7	405.5	351.1	366.1	336.4	310.5
L		and the second	7 7			- 11 - 1 - 1 - 1	1			00 - 11 - 1		:

* Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census, recoding was completed according to U.S. Census recommendations. See Scopp, Thomas S. 2003. "The Relationship Between the 1990 Census and Census 2000 Industry and Occupation Classification Systems." Technical Paper #65: U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/working-papers/2003/demo/techpaper2000.pdf.

† Union membership and density estimates for management occupations are less reliable as the sample size was often less than 100.

APPENDIX 2b. New Jersey Employment and Unionization by Occupational Category, Sector, and Age, 1998-2018	y Emplo	yment a	nd Unio	nization	by Occ	upationa	al Catego	ry, Sect	or, and	Age, 199	98-2018	
			Ь	PRIVATE SECTOR	SECTOR							
			NJ Empl	NJ Employment				Z	Union M	NJ Union Membership	0	
		15-39			40-65			15-39			40-65	
OCCUPATIONAL CATEGORY	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018
Management †	224.9	146.1	149.4	6'9/7	262.2	355.3	2.3	2.3	3.0	9.4	9.3	12.2
Professional	290.0	401.7	480.1	262.1	480.2	569.1	20.2	30.8	21.3	25.7	45.6	36.6
Service	234.3	305.6	258.5	169.9	247.7	248.3	25.1	19.1	13.0	34.5	34.0	27.4
Office	564.3	448.5	371.7	436.6	484.9	463.5	42.8	23.3	19.8	45.1	35.0	24.4
Production	383.3	266.4	251.5	386.5	353.5	371.8	114.9	40.3	37.3	168.3	100.8	89.1
TOTAL PRIVATE SECTOR	1696.9	1568.4	1511.3	1532.0	1828.5	2008.4	205.3	115.8	94.5	283.0	224.7	189.6
				PUBLIC SECTOR	SECTOR							
			NJ Empl	NJ Employment				Z	Union M	NJ Union Membership		
		15-39			40-65			15-39			40-65	
Vac Ontario in the contraction of	*0007	0000	0.000	*0004	0000	0700	*0004	2000	0,500	*0007	0000	2040
OCCUPATIONAL CATEGORY	.0661	2000	2010	OGGT	2000	2010	1930	2000	2010	.0661	2000	70T0
Management †	20.2	11.2	8.3	9.59	24.6	38.4	5.3	4.4	3.4	32.6	8. 8.	11.9
Professional	72.8	96.3	120.2	140.1	220.6	191.1	38.7	2.09	74.0	108.3	152.2	132.6
Service	50.7	52.6	49.2	54.7	73.9	68.4	34.8	35.3	29.8	29.2	44.1	46.8
Office	45.1	32.5	25.9	71.9	85.1	60.1	28.5	17.6	13.6	43.5	47.4	31.5
Production	20.3	17.9	15.0	30.9	37.0	40.9	0.9	5.6	6.1	25.7	25.3	27.9
TOTAL PUBLIC SECTOR	209.2	210.5	218.7	363.2	441.1	398.9	113.3	123.6	126.9	239.3	277.8	250.6
				TOTAL	'AL							
			NJ Empl	NJ Employment				Z	Union M	NJ Union Membership	c	
		15-39			40-65			15-39			40-65	
ALL OCCUPATIONAL CATEGORIES	1998*	2008	2018	*8661	2008	2018	1998*	2008	2018	1998*	2008	2018
TOTAL NONFARM	1906.1	1778.9	1729.9	1895.2	2269.6	2407.4	318.5	239.4	221.3	522.3	502.5	440.3
* Comparisons of 1998 estimates to later years shoul	of plunds s	made with	railtion ac	there were	change m	d he made with caution as there were changes made to the ACS occurrational classification system after the 2000 Census	S occupativ	nnal classifi	cation cve	tem after th	a 2000 Cans	511

* Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census, recoding was completed according to U.S. Census recommendations. See Scopp, Thomas S. 2003. "The Relationship Between the 1990 Census and Census 2000 Industry and Occupation Classification Systems." Technical Paper #65: U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/workingpapers/2003/demo/techpaper2000.pdf.

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APPENDIX 2c. New Jersey Employment and Unionization by Occupational Category, Sector, and Race, 1998-2018	/ Employ	ment an	d Unior	nization	by Occu	pational	Catego	ry, Sect	or, and F	Race, 199	98-2018	
			Ь	PRIVATE SECTOR	SECTOR							
			NJ Empl	NJ Employment				Z	J Union M	NJ Union Membership	•	
		White		2	Non-White			White		Z	Non-White	
OCCUPATIONAL CATEGORY	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018
Management †	429.7	349.2	404.1	72.1	59.1	100.6	9.5	9.5	12.0	2.5	2.5	3.2
Professional	445.9	639.1	754.8	106.2	242.8	294.4	33.4	57.3	42.7	12.4	19.1	15.2
Service	311.9	423.6	385.0	92.3	129.8	121.8	41.5	30.8	26.7	18.0	22.3	13.7
Office	829.3	794.3	655.3	171.7	139.2	179.9	64.1	49.8	33.5	23.8	8.5	10.7
Production	637.2	534.0	529.8	132.6	85.9	93.6	228.9	123.0	104.3	54.3	18.0	22.1
TOTAL PRIVATE SECTOR	2654.0	2740.2	2729.0	574.9	656.7	790.7	377.2	270.1	219.2	111.0	70.4	64.9
				PUBLIC SECTOR	SECTOR							
			NJ Empl	NJ Employment				Z	U Union M	NJ Union Membership		
		White			Non-White			White		Z	Non-White	
OCCUPATIONAL CATEGORY	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018	1998*	2008	2018
Management †	64.8	28.9	36.7	21.1	6.9	10.0	30.0	10.4	12.1	8.0	2.8	3.2
Professional	153.3	266.7	248.7	59.6	50.1	62.6	107.2	188.5	164.1	39.9	24.3	42.5
Service	76.1	100.8	100.1	29.3	25.8	17.5	44.7	67.9	66.3	19.4	16.5	10.2
Office	86.2	97.4	64.3	30.8	20.1	21.7	52.5	50.1	34.9	19.4	14.9	10.2
Production	42.3	44.8	44.2	8.9	10.1	11.7	25.7	27.5	27.2	6.1	3.3	6.8
TOTAL PUBLIC SECTOR	422.6	538.6	494.1	149.8	113.0	123.5	259.9	339.5	304.6	92.7	61.9	72.9
				TOTAL	AL							
			NJ Empl	NJ Employment				Z	J Union M	NJ Union Membership	•	
		White		_	Non-White	a :		White		Z	Non-White	
ALL OCCUPATIONAL CATEGORIES	1998*	2008	2018	*8661	2008	2018	1998*	2008	2018	1998*	2008	2018
TOTAL NONFARM	3076.6	3278.8	3223.1	724.7	7.697	914.2	637.1	9.609	523.7	203.7	132.3	137.9
* Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census.	e should be	made with	caution as	there were	changes ma	de to the AC	3S occupation	onal classif	fication svs	tem after th	- 2000 Cens	IS.

* Comparisons of 1998 estimates to later years should be made with caution as there were changes made to the ACS occupational classification system after the 2000 Census, recoding was completed according to U.S. Census recommendations. See Scopp, Thomas S. 2003. "The Relationship Between the 1990 Census and Census 2000 Industry and Occupation Classification Systems ." Technical Paper #65: U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/workingpapers/2003/demo/techpaper2000.pdf.

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