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2001 Revisions to the Rank List of Michigan's Career and Technical Education Programs: Final Report

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***2001 Revisions
to The Rank List of
Michigan's Career And
Technical Education Programs***

Final Report

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June 2001

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Table of Contents

	<u>Page</u>
INTRODUCTION	1
METHODS	2
OCCUPATIONAL DESTINATIONS FOR CTE PROGRAMS	13
RESULTS	15
SOFTWARE AND DOCUMENTATION	30

List of Tables

	<u>Page</u>
1. Recommended CIP Rankings (Using SOC Median Wage and Number of Related Placements)	17
2. CIP Rankings (Using SOC Mean Wage)	20
3. CIP Rankings (Using SOC Median Wage)	22
4. CIP Rankings (Using SOC 10 th Percentile Wage)	24
5. CIP Rankings (Using CPS Mean Wage)	26
6. CIP Rankings (Using CPS Median Wage)	28
7. Rank Order Correlations	31

List of Figures

1. Descriptions of O*Net Job Zones	6
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APPENDIX

A CIP-to-Occupations Crosswalk	32
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INTRODUCTION

This report presents a discussion of issues involved in updating the state ranking of career and technical education (CTE) programs.¹ The purpose of the ranking is to guide the allocation of CTE funds to local education agencies. General elementary and secondary education is funded in Michigan through a per student foundation allowance. But career and technical education courses are more expensive than the average general education course, so the legislature appropriates additional monies for CTE, called added-cost funding. The added-cost funding does not fully cover all of the additional cost that local districts and area centers bear in offering CTE programs, however, so the funding must be allocated across districts and across programs. The legislature has stipulated that the added cost funds must be allocated according to the rank order of programs. The theoretical basis for the rank ordering is to support programs according to how successful they are at preparing students for high wage, high demand occupations. The highest ranked programs receive top priority, and added-cost funds are allocated to *programs* until the money is exhausted.

State administrators of CTE have attempted to recompute the state rankings about every 4–5 years. The most recent ranking was completed in 1997, so it is time for an update.² The last time the state ranking was completed, job opening data came from the 1994–2005 MESA statewide occupational forecasts, the wage data that were used were national median weekly earnings of wage and salary workers from the Current Population Survey (CPS), and placement data came from the 1997 follow-up survey of 1996 “vocational education graduates.” Much has changed since that ranking was computed. Just a few of those changes include the following: a new draft CIP system, the Occupational Employment Statistics (OES) program of the U.S. Bureau of Labor Statistics now

¹A companion report titled, “Documentation for the 2001 Rank Ordering of Michigan’s CTE Programs,” presents technical documentation of the update.

²Documented in Abel Feinstein, *Manual for Career Education Crosswalk and Ranking*, unpublished report, 1997.

produces median hourly wages by state by occupation (latest data available for 1999), OES has national occupational hourly wages for the 10th, 25th, 50th, 75th, and 90th percentiles, the year 2000 Current Population Survey is available with weekly wages by age by occupation, the Standard Occupational Classification (SOC) system has been updated, and the O*Net system has replaced the Dictionary of Occupational Titles (DOT). We have examined all of these changes, gathered much of the new data, and recomputed the rankings. This report documents the procedures that we have followed and presents the updated rank ordering.³

The next section of this report discusses a number of data issues that have been addressed in calculating the rank ordering. That section is followed by a presentation of the occupational crosswalk from CTE programs to occupations that is at the heart of the ranking procedure. Next is the results of the rank ordering, and finally we describe the formal software and documentation that we have developed to support the updated rank ordering.

METHODS

Three economic statistics are used in the ranking procedure to gauge high demand and high wages: (1) job openings, (2) wages, and (3) placements into related jobs or further education. The third factor—related placements—is measured through the annual career and technical education follow-up survey overseen by the Michigan Department of Career Development (MDCD). Controlling the data collection procedures allows MDCD to directly tie placements to CTE programs. Students who have completed CTE courses are surveyed approximately a year later and asked about their current postsecondary and employment status. If the students report that they are

³Actually as documented in this report, we have calculated several different rankings using alternative data sources. We give our recommendation and rationale for a preferred ranking below.

in a postsecondary program or employed, then they are queried about whether the program or employment is related to their CTE course. These self-reported related placements (in education or employment) are used as the third factor in calculating the state rankings.⁴ The first two factors rely on labor market data.

Labor market data, like wages and openings, are typically collected by occupation or by industry of employment. The state ranking procedure relies on occupational data since (wage earning) career and technical education courses tend to be viewed as developing general or specific occupational skills. The key elements of the ranking procedure, then, are (1) mapping programs as coded by the Classification of Instructional Programs (CIP) codes into occupations and (2) deciding what wage and what job openings data to use for each occupation.

Mapping CIP codes into occupational codes. In theory, mapping CIP codes and calculating openings and wages for the ranking procedure is simple. First, the occupations that are being trained for in each of the CTE courses, classified by their CIP code, are determined. For example, cosmetology, which is CIP 12.0403, trains students for employment in the following occupations:

- Barbers
- Hairdressers, Hairstylists, and Cosmetologists
- Makeup Artists, Theatrical and Performance
- Shampooers
- Skin Care Specialists

⁴An issue that must be decided regarding the related placements factor is whether to use number of related placements or percentage of related placements. For example, program A may be offered in only one or two locations in the State and have 20 completers, of whom 17 (85 percent) are in related education or employment. Program B may be offered extensively across the State and have 600 completers, of whom 450 (75 percent) are in related education or employment. If the number of related placements is used, then Program B would have the advantage (i.e., a lower ranking); if the percentage is used, then Program A would have the lower ranking. To some extent, the issue comes down to whether the calculation should favor smaller niche programs that meet a small market demand or larger, more numerous general programs that serve many students, and probably have a number of students enrolled for avocational reasons (e.g., auto mechanics, BST).

Then for each of the occupations in a CIP code, data on annual job openings by occupation are collected and added together to get a measure of job openings for that program. This yields job openings by program. Finally, for each CIP code, a weighted mean (or median) wage rate for all of the occupations related to the CTE course is calculated. In the cosmetology example, we would determine means (or medians) for each of the five occupations comprising the CIP code. We would then calculate a weighted average across the five occupations, where the weights might be the percent of employment of all five occupations accounted for by each occupation. The weighted mean (or median) would then be the wage factor in the state ranking procedure.

What is easy in theory turns out to be rather complicated in practice. For example, agencies that collect occupational labor market data use, or have used in the past, different classification schemes for occupations. There are three predominant classification schemes. One scheme was developed by the Occupational Employment Statistics (OES) program of the U.S. Bureau of Labor Statistics (BLS). The classification scheme is referred to as OES codes. The U.S. Department of Labor, which includes the BLS, is developing a standardized system for collecting and reporting employment data that is based on occupations, called O*Net. Supporting O*Net is a classification scheme for occupations called the Standard Occupational Classification (SOC). The OES program is, in fact, now releasing data by SOC (and over the next few years, all federal agencies are supposed to begin using the SOC in order to standardize occupational coding). Finally, the U.S. Bureau of the Census collects occupational data from individuals in its survey and Census activities. This agency uses a third scheme that is referred to as Census occupations. The approach that we have followed is to develop a cross-walk between CIP codes and all three of the occupational coding schemes. However, we believe that the SOC will become the predominant occupational classification scheme, and so we recommend that it be relied upon.

A second complicating issue is what occupations to include in the mapping from CIP codes to occupations; i.e., how to identify occupations for which students trained in Michigan's CTE programs might become placed. For example, a student who takes courses in health occupations may ultimately become a physician, or a registered nurse, or a dental assistant, or an ambulance driver. All of these jobs are related to the health occupations program. However, the program is not directly preparing individuals to become physicians. Therefore we should not include physicians; they require much additional training before entering that occupation.

Whether to include registered nurses is a complicated issue. As with physicians, registered nurses generally require education beyond career and technical education at the secondary or associate's degree level. Consequently, it might be argued that they also should not be included as an occupation for which CTE students are being (immediately) prepared. However, as an indication of how education is changing, there is a two-year program at a community college in the state that has an intensive nursing program preparing students to become registered nurses. Since there are secondary programs articulated with this program, we have decided to include registered nursing as an occupation.

Dental technicians are clearly an occupation that CTE is preparing students for, and so it should be included. Finally, ambulance drivers do not require education or training beyond high school, and so we exclude them from related occupations for health occupations.

In general, we have relied on the O*Net Job Zone categories (see figure 1) as our basis for selecting the appropriate occupations for which CTE training is preparatory. We have automatically included Job Zone 2 and 3 occupations that are related to the CTE programs. As noted in the figure, job zone two occupations "usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be

Figure 1. Descriptions of O*Net Job Zones

NAME	EXPERIENCE	EDUCATION	JOB TRAINING	EXAMPLES	SVP RANGE
Job Zone One: Little or No Preparation Needed	No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a general office clerk even if he/she has never worked in an office before.	These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.	Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.	These occupations involve following instructions and helping others. Examples include bus drivers, forest and conservation workers, general office clerks, home health aides, and waiters/waitresses.	(Below 4.0)
Job Zone Two: Some Preparation Needed	Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a drywall installer might benefit from experience installing drywall, but an inexperienced person could still learn to be an installer with little difficulty.	These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.	Employees in these occupations need anywhere from a few months to one year of working with experienced employees.	These occupations often involve using your knowledge and skills to help others. Examples include drywall installers, fire inspectors, flight attendants, pharmacy technicians, salespersons (retail), and tellers.	(4.0 to < 6.0)
Job Zone Three: Medium Preparation Needed	Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.	Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.	Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.	These occupations usually involve using communication and organizational skills to coordinate, supervise, manage, or train others to accomplish goals. Examples include dental assistants, electricians, fish and game wardens, legal secretaries, personnel recruiters, and recreation workers.	(6.0 to < 7.0)

Figure 1. (Continued)

NAME	EXPERIENCE	EDUCATION	JOB TRAINING	EXAMPLES	SVP RANGE
Job Zone Four: Considerable Preparation Needed	A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.	Most of these occupations require a four-year bachelor's degree, but some do not.	Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.	Many of these occupations involve coordinating, supervising, managing, or training others. Examples include accountants, chefs and head cooks, computer programmers, historians, pharmacists, and police detectives.	(7.0 to < 8.0)
Job Zone Five: Extensive Preparation Needed	Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience. For example, surgeons must complete four years of college and an additional five to seven years of specialized medical training to be able to do their job.	A bachelor's degree is the minimum formal education required for these occupations. However, many also require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D. (law degree).	Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.	These occupations often involve coordinating, training, supervising, or managing the activities of others to accomplish goals. Very advanced communication and organizational skills are required. Examples include athletic trainers, lawyers, managing editors, physicists, social psychologists, and surgeons.	(8.0 and above)

needed.” Job zone three occupations “require training in vocational schools, related on-the-job experience, or an associate’s degree. Some may require a bachelor’s degree.” In addition to the Job Zone two and three occupations, we have included other occupations because MDCD program consultants indicated that CTE programs were preparing students for these occupations. In some cases, these were Job Zone 4, and in some cases, they were Job Zone 1.

Wage and job opening data. Once the appropriate occupations that comprise a program have been identified, we need to determine wage and job opening data for those occupations. A number of issues arise. One complicating factor is the geographic coverage of the labor market data. The purpose of the state ranking is to set a priority for using state funds for Michigan programs. Consequently, there is a strong case to be made for using Michigan as the geographic unit. However, the follow-up survey may include data about related placements for students who have become employed or who are attending colleges out of state. Furthermore, occupational opening or wage data may not be available for Michigan either because they are not collected on a state basis for some occupations, or there may be disclosure problems. Our approach has been to use Michigan wage and job openings data whenever possible, but in some cases, we have used national data.

Accounting period is another unit of measurement issue, particularly for wages. Most wage data with occupational detail measures hourly wages. However, some occupations simply do not offer wage payments by the hour, and so data are reported by week, month, or year. For example, pilots and teachers are usually paid by the year. For these types of occupations, we used the following factors to convert wages to an hourly basis: full-time workers are employed 2,000 hours per year and 40 hours per week.

Closely related to this problem is the fact that some agricultural wages (the occupation of farming where wages are usually of the form of self-employed farm income) are not collected nor

reported. We have followed the recommendation of the Feinstein (1997) report and use the most recent Census of Agriculture data for Michigan. In particular we use net cash return from agricultural sales for the farm unit plus average government payments per farm. We converted these annual data into hourly averages by assuming 2,000 work hours per year.

Another concern about wage data is the treatment of tip income. Both of the sources of information about wages that have been used in this study indicate that tip income has been added into base wages. However the SOC data come from employer reports, and the CPS data come from employee reports, so we can only assure accuracy of tip income to the extent that these reports are accurate.

Another issue related to wages is the universe of individuals for whom we calculate the wage statistic to be used in the ranking computation. An unknown aspect about the computation is the intent of the legislature in its charge to rank programs based on wages. Should the ranking be based on entry-level wages, wage levels that might be expected over a lifetime, or an average of everyone who happens to be in the occupation at a particular point in time? Some occupations have high entry-level wages, but rather slow growth over time, resulting in modest average wages for the occupation as a whole (e.g., public administration, teachers). Some occupations may have a very experienced, older work force, so that average wages are relatively high, but entry-level wages are not (e.g., automobile assemblers). The Feinstein (1997) report suggested that entry-level wages was most appropriate, and it recommended using national average wage data for full-time workers aged 18–35 (from the Current Population Survey (CPS)). We have collected those data and calculate the rankings using them, although that is not our preferred recommendation.

Another way to proxy entry-level wages is to use the decile wage measures included in the SOC data. The SOC data include U.S. occupational wages at the 10th, 25th, 50th, 75th, and 90th

percentiles. It may be argued that the 10th percentile data proxies entry-level wages in an occupation. Again, we have collected these data and computed the rankings using them for the wage factor, but that is not our recommended ranking.

A final issue to confront is which centrality statistic to use to characterize the wage distribution for an occupation—mean or median? The SOC program reports both for most occupations for Michigan and for the U.S. Median wages are the 50th percentile: half of the incumbent workers have higher wages and half have lower. Means are the arithmetic averages. We have collected both sets of data and calculated the rankings using each, but our preference is to use medians because mean wages may be skewed by outliers that for one reason or another have exceptionally large values.

Aggregation of wages and job opening data across occupations. In general, CTE programs prepare students for more than one occupation, so there will be multiple occupations for each CIP program code. The rank ordering calculation requires a single wage and a single estimate of job openings for each CIP, so the occupational wage and job openings data must be aggregated or averaged. The job openings data are easily aggregated. The data that we use are forecasts of annual job openings for the State by OES occupational detail that are developed by the State Labor Market Information (LMI) office. If the State has produced annual forecasts for all of the occupations that comprise a CIP, then aggregation is a simple matter of adding up the openings across the occupations. If the State has used an occupational classification for which only a subset of occupations are in the CIP, then we estimate openings for the subset of occupations by pro-rating the entire occupation according to national employment shares.

For example, the Drafting program (CIP code 48.0101) includes the OES occupation Surveying & Mapping Technicians (OES code 22521). In the Michigan LMI projections, Surveying

& Mapping Technicians are combined with Surveying & Mapping Scientists to form the occupation Survey/Map Scientists, Techs. (LMI code 22310). Because only the technicians are included in the crosswalk for Drafting, only the share of openings for technicians should be included. Using 1998 OES estimates for the nation, the following employment estimates are obtained:

OES/LMI code	OES/LMI title	National employment	Share of employment
22311	Surveying & Mapping Scientists	38,850	0.39
22521	Surveying & Mapping Technicians	59,550	0.61
22310 (LMI code)	Survey/Map Scientists, Techs	98,400	

Dividing the OES occupation employment by the total employment for the combined LMI occupation gives the share of employment for each individual OES code included within the LMI code. In this example, Drafting would receive 61 percent of the openings for LMI code 22310.

To compute a single wage for each CIP code, we calculate a weighted average of the occupational wages that comprise the CIP. The weights are national employment shares. For example, Agricultural Mechanics (CIP 01.0201) prepares students for three SOC occupations: Farm equipment mechanics (SOC Code 49-3041), Outdoor power equipment and other small engines (SOC Code 49-3053), and Maintenance and repair workers, general (SOC Code 49-9042). The Michigan mean and median wages for 1999 for these occupations and the national employment levels are as follows:

SOC Code	SOC Title	National Employment	Mean	Median
49-3041	Farm equipment and mechanics	40,490	\$12.33	\$11.94
49-3053	Outdoor power equipment and other small engines	26,550	10.17	8.60
49-9042	Maintenance and repair workers, general	<u>1,201,690</u>	<u>13.83</u>	<u>12.83</u>
TOTAL for CIP		1,268,730	\$13.71	\$12.71

The mean SOC wage for this CTE program is $\$13.71 = (40,490 / 1,268,730) * 12.33 + (26,550 / 1,268,730) * 10.17 + (1,201,690 / 1,268,730) * 13.83$. The median wage for the CIP would be calculated similarly.⁵

So, in summary, we have addressed the problem of multiple occupational classification schemes by developing matrices that crosswalk from CIP codes to all three alternatives. However, we believe that the SOC program will become the predominant system in the future, so we recommend primary reliance on it. We have based our identification of the occupations for which the CTE programs are training students on the SOC job zone classification system. In particular, we have used occupations classified as Job Zone 2 or Job Zone 3, and then supplemented that list with other occupations when we had specific information.

Because there are many alternative sources of wage data, we have set up a system that allows the rankings to be calculated several different ways. All together, we believe there are five defensible wage measures. Two of them use Michigan as the geographic unit. The SOC data system

⁵In general the weighted sum of means will end up being a mean for the total population, whereas a weighted sum of medians will not, in general, be the overall median. So statistical purists may not like the notion of calculating such a statistic. However, we justify it on two grounds. First, calculating the weighted sum for means using national occupational totals requires a very strong assumption, namely that the distribution across occupations in Michigan is identical to the U.S. distribution. Since that assumption is unlikely to hold in general, there is “noise” in the weighted sum of means. Any error that might be introduced into the process of taking a weighted sum of medians may be minor compared to the error that gets introduced by using the national distribution. Second, in many cases, the set of occupations for a program is dominated by a single occupation. Then the weighted median comes very close to be the overall median.

has mean wages and median wages by occupation for Michigan workers, which are calculated for all workers in the occupation. The other three wage measures are intended to estimate entry-level wages. The first two are mean and median weekly earnings from the CPS for individuals aged 18–35. The third is the 10th percentile of national wages by occupation from the SOC data system. All of the wage measures include tip income, and we use 2,000 hours per year and 40 hours per week to estimate hourly wages from data that are reported using a different accounting period. The CPS collects weekly farm income that we use for the occupation of farm operator. The SOC data do not include wages for farmers. In that case, we use data from the Census of Agriculture converted to an hourly basis (using an assumption of 2,000 work hours per year) to complete our calculations for means and medians.

OCCUPATIONAL DESTINATIONS FOR CTE PROGRAMS

Most of the effort involved in determining the state ranking was invested in identifying the occupations for which CTE programs are training. Once the occupations had been identified, it was a fairly straightforward matter of calculating job openings and an average wage for each of the CTE programs (by CIP code). To the extent possible, we relied on objective prior studies or official crosswalks and tried to minimize the number of ad hoc modifications to them. We found that some modifications were necessary, however, to fit Michigan’s CTE offerings and economic circumstances. The success of the mapping from CIP codes to occupations would theoretically best be judged by the extent to which individuals who are familiar with CTE programs could scan through the list of occupations that we have assigned to that program and find few problems such as occupations that don’t belong or occupations that have been overlooked. In fact, we performed

this exercise by having the MDCD Program Consultants review and approve the lists of occupations assigned to their programs.

The appendix to this report contains the crosswalk that we have developed. The basis for this table is the National Crosswalk Center's OES-to-CIP crosswalk. We then used the SOC-to-OES crosswalk to produce a CIP-to-SOC crosswalk by matching OES occupations. Job zone information from the O*Net database was added by matching SOC occupations. A brief review of OES and SOC occupation listings resulted in the addition of SOC or OES occupations to several CIP programs. For example, the OES-to-CIP crosswalk included Agricultural, Biological, and Chemical Scientists and Technicians in the Agriscience and Natural Resources Education program (CIP code 02.9999), however it did not include many farming or other agriculture-related occupations found in the OES classification system. Many of these occupations were included in the rankings developed by Feinstein (1997) and were added to the crosswalk. Other occupations were added or deleted as a result of comments by the MDCD Program Consultants.

A Census-to-OES crosswalk was then created from the National Crosswalk Center's XWALK43.mdb file and used to produce a CIP-to-Census crosswalk by matching OES occupations. The Census occupations were reviewed based on the SOC occupations contained in the CIP, and occupations that seemed inappropriate were removed from the crosswalk. Modified OES codes used for the openings data were also added where codes were different from those of OES occupations already in the crosswalk. This was done by comparing titles from OES occupations in the crosswalk that had no openings data to the occupation titles provided with the openings data. Thorough documentation of the crosswalk procedures can be found in the companion document to this report.

RESULTS

As noted above, we calculated the rankings using several different data sources for each of the factors. All of the calculations use annual job opening data by occupation for Michigan as projected by the labor market information staff at the MDCLD. The projections cover a 10-year period from 1996–2006, and are based on national projections supplied by the U.S. Department of Labor.⁶ It is important to use job openings by occupation data to guide the prioritization of CTE programs, rather than trends in employment by occupation. Job openings are generated by growth in employment in an occupation and by the amount of turnover (quits, dismissals, or retirements). The latter would not be included in employment trends. The correlation between employment growth and job openings is relatively small. Some occupations have substantial amounts of turnover despite relatively slow growth in employment; other occupations are rapidly growing, but have relatively little turnover. From the perspective of a CTE student, what is important is the likelihood of being hired, and it doesn't matter whether the hiring emanates from growth in an occupation or from replacement hiring.

We used two alternative measures of related placements. One is the related placement rate, calculated as the percentage of CTE completers who report being in related employment or education, and the other is the actual number of individuals in a related placement (i.e., the numerator of the first measure.) Programs will end up at about the same place in the two alternative rank orderings if they either are (1) large, numerous programs that have very high placement rates, or (2) small programs that do not have high placement rates. Small (“niche”) programs that have a high placement rate will end up favored in the rank orderings (that is, have a lower rank) relative to a larger program that places relatively fewer students in related opportunities when the placement

⁶As this report is written, projections for the period 1998–2008 are scheduled to be available soon.

rate is used. And vice versa for the actual number of placements. In each of the tables below that present the details of the rank orderings, we have presented the results for both alternatives.

As described above, several different wage measures could be used for rank ordering occupations by wages earned. We have used five—means and medians for Michigan as reported in the SOC data, the 10th percentile for the U.S. from the SOC data, and means and medians for individuals aged 18–35 from the CPS. The methods section of this report describes the advantages and disadvantages of each of these wage measures. The first two use Michigan as the geographic unit, but are generated by all incumbents in an occupation, not just entry-level workers. The CPS data are limited to individuals aged 18–35 to proxy for entry-level wages, but they are national data and they are reported in weekly earnings rather than hourly wages. Finally, the 10th percentile of hourly wages from the SOC program are intended to proxy for entry-level wages, but they are national in scope and using the 10th percentile is rather arbitrary.

Table 1 presents our preferred rank ordering. It uses median wages for Michigan workers from the SOC data and the number of related placements. This rank ordering relies on median wages rather than means. Means of wage distributions may get skewed by outliers, so medians are a better centrality measure. Furthermore, this alternative uses Michigan wages, albeit for all workers, which are more relevant for students being prepared for careers in Michigan’s CTE programs. National wage measures may get skewed in some occupations by workers in other parts of the country or by extremely high or low relative wages in other parts of the country. Finally, we prefer number of related placements to placement rates because it favors larger, more numerous programs across the state. In our opinion, MDCCD should be favoring programs that benefit students throughout the state. Furthermore, MDCCD should recognize and value the non-occupational benefits that students may be receiving from programs. A large number of students may be enrolling in a

Table 1. Recommended CIP Rankings (Using SOC Median Wage and Number of Related Placements)

CIP code	Program Name	Openings Rank	SOC Median Wage Rank	Related Placement Rank	Sum Rank	Final Rank
52.99991	INFORMATION TECHNOLOGY SERVICES	7	4	5	16	1
51.9999	HEALTH	4	17	3	24	2
46.9900	CONSTRUCTION TRADES	5	13	6	24	3
52.99994	BUSINESS AND ADMINISTRATIVE SERVICES	2	30	1	33	4
52.99992	WHOLESALE/RETAIL SALES AND SERVICES	1	31	2	34	5
48.9999	MANUFACTURING TECHNOLOGY	3	18	17	38	6
52.99993	FINANCIAL SERVICES	16	15	9	40	7
48.0199	DRAFTING AND DESIGN TECHNOLOGY	19	7	15	41	8
48.0101	DRAFTING	26	6	10	42	9
43.9999	PUBLIC SAFETY/PROTECTIVE SERVICES	14	9	21	44	10
47.0604	AUTOMOBILE TECHNICIAN	28	16	4	48	11
46.0301	ELECTRIC AND POWER TRANSMISSION INSTALLER	27	2	22	51	12
48.0503	MACHINE TOOL OPERATION/MACHINE SHOP	12	27	14	53	13
20.0499	HOSPITALITY AND FOOD SERVICES	7	40	7	54	14
09.0701	RADIO AND TELEVISION	21	11	23	55	15
02.9999	AGRISCIENCE AND NATURAL RESOURCES EDUCATION	11	38	8	57	16
47.0101	ELECTRICAL AND ELECTRONICS REPAIR	20	26	12	58	17
47.0603	COLLISION REPAIR TECHNICIAN	36	5	19	60	18
46.9999	CONSTRUCTION/BUILDING MAINTENANCE	15	25	20	60	19
15.0607	PLASTICS	6	21	34	61	20
47.9999	TRANSPORTATION SERVICES AND TECHNOLOGY	10	28	25	63	21
48.0201	GRAPHICS AND PRINTING COMMUNICATIONS	25	29	11	65	22
49.0101	AIR TRANSPORTATION	34	3	29	66	23
47.0399	INDUSTRIAL EQUIPMENT MAINTENANCE & REPAIR	13	22	32	67	24
48.0508	WELDING, BRAZING & SOLDERING	30	20	18	68	25
47.0699	MECHANICS CLUSTER	17	10	43	70	26
15.0699	INDUSTRIAL PRODUCTION TECHNOLOGIES/TECHNICIANS, OTHER	24	8	41	73	27
47.0201	HEATING, AIR CONDITIONING & REFRIGERATION	37	12	27	76	28
01.0201	AGRICULTURAL MECHANICS	18	32	28	78	29
20.0299	CHILD AND ADULT CARE SERVICES	23	44	13	80	30
20.0601	BUILDING & HOME MAINTENANCE AND SERVICES	9	41	31	81	31
49.0306	MARINE MECHANICS	44	1	39	84	32

Table 1. (Continued)

CIP code	Program Name	Openings Rank	SOC Median Wage Rank	Related Placement Rank	Sum Rank	Final Rank
47.0605	MEDIUM/HEAVY TRUCK TECHNICIAN	41	14	30	85	33
48.0299	VISUAL IMAGING TECHNOLOGY	29	34	24	87	34
12.0403	COSMETOLOGY	31	43	16	90	35
20.0501	COMMERCIAL PAINTING/INTERIOR TREATMENT SERV.	33	24	37	94	36
20.0301	CLOTHING AND TEXTILES PRODUCTION AND SERVICES	22	37	36	95	37
47.0401	HYDRAULICS & PNEUMATICS	40	19	38	97	38
47.0106	MAJOR APPLIANCE REPAIR	42	23	39	104	39
47.0199	ELECTROMECHANICAL TECHNOLOGY	38	35	32	105	40
47.0606	SMALL ENGINE REPAIR	43	39	26	108	41
48.0701	WOODWORKING & FURNITURE MAKING	39	36	35	110	42
47.0408	WATCH REPAIR	35	33	42	110	43
13.0101	EDUCATION, GENERAL	32	42	43	117	44

CTE program, despite relatively lower placement rates, because the program provides knowledge or skills that the students value, even though they may not ply those skills in the work force (e.g., auto mechanics or computer software).

In table 1, the top-ranked program, “Information Technology Services,” is among the top 10 ranked programs for all three factors. However, the next four programs, “Health,” “Construction Trades,” “Business and Administrative Services,” and “Wholesale/ Retail Sales and Services,” are all ranked highly for openings and related placements, but have modest wages. These occupations have the first blade of the “high demand, high wages” scissors, but not the second. On the other hand, a number of programs have high wages, but not high demand—“Drafting,” “Public Safety/Protective Services,” “Electric and Power Transmission Installer,” and “Air Transportation.”

Tables 2 through 6 provide the rank orderings for all of the alternatives that we calculated. Each table provides the rank ordering for job openings and wages for each CIP code, the rank ordering for number of related placement rates, the rank ordering for percentage of related placements, and the overall rank ordering. (Note that when we are computing the overall rank ordering, we break ties by using a hierarchy of component rankings. When there are ties in the overall rank ordering, we assign a lower ranking to the CIP that has a lower ranking for related placements. If there are three or more programs tied and related placements rank is not sufficient to resolve the ties, then we rely on the ranking for job openings.)

The format for tables 2 through 6 is the same. The fifth column of data after the program name gives the ranking from 1 to 44 for each program when number of related placements is used, and the sixth column (rightmost) gives the ranking when percent of related placements is used. As would be expected, the choice of using number of related placements or rate of related placements does make a significant difference. In each of the tables, about half of the programs have rankings

Table 2. CIP Rankings (Using SOC Mean Wage)

CIP code	Program Name	Openings Rank	SOC Mean Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
52.99991	INFORMATION TECHNOLOGY SERVICES	7	5	5	6	1	1
46.9900	CONSTRUCTION TRADES	5	13	6	15	2	4
52.99992	WHOLESALE/RETAIL SALES AND SERVICES	1	23	2	16	3	7
51.9999	HEALTH	4	21	3	24	4	9
52.99994	BUSINESS AND ADMINISTRATIVE SERVICES	2	32	1	6	5	6
52.99993	FINANCIAL SERVICES	16	11	9	6	6	3
48.9999	MANUFACTURING TECHNOLOGY	3	19	17	9	7	2
48.0199	DRAFTING AND DESIGN TECHNOLOGY	19	7	15	27	8	12
48.0101	DRAFTING	26	6	10	22	9	13
47.0604	AUTOMOBILE TECHNICIAN	28	15	4	29	10	28
09.0701	RADIO AND TELEVISION	21	3	23	35	11	17
43.9999	PUBLIC SAFETY/PROTECTIVE SERVICES	14	14	21	28	12	15
46.0301	ELECTRIC AND POWER TRANSMISSION INSTALLER	27	2	22	17	13	8
48.0503	MACHINE TOOL OPERATION/MACHINE SHOP	12	27	14	14	14	11
20.0499	HOSPITALITY AND FOOD SERVICES	7	40	7	21	15	24
02.9999	AGRISCIENCE AND NATURAL RESOURCES EDUCATION	11	39	8	30	16	33
15.0607	PLASTICS	6	20	34	41	17	21
46.9999	CONSTRUCTION/BUILDING MAINTENANCE	15	26	20	12	18	10
47.0101	ELECTRICAL AND ELECTRONICS REPAIR	20	30	12	10	19	18
48.0201	GRAPHICS AND PRINTING COMMUNICATIONS	25	28	11	37	20	39
47.0603	COLLISION REPAIR TECHNICIAN	36	9	19	34	21	32
47.9999	TRANSPORTATION SERVICES AND TECHNOLOGY	10	29	25	23	22	19
48.0508	WELDING, BRAZING & SOLDERING	30	17	18	19	23	20
49.0101	AIR TRANSPORTATION	34	4	29	32	24	26
47.0399	INDUSTRIAL EQUIPMENT MAINTENANCE & REPAIR	13	22	32	3	25	5
47.0699	MECHANICS CLUSTER	17	10	43	43	26	27
15.0699	INDUSTRIAL PRODUCTION TECHNOLOGIES/TECHNICIANS, OTHER	24	8	41	36	27	25
47.0201	HEATING, AIR CONDITIONING & REFRIGERATION	37	12	27	31	28	34
01.0201	AGRICULTURAL MECHANICS	18	33	28	5	29	14
20.0299	CHILD AND ADULT CARE SERVICES	23	44	13	20	30	38
20.0601	BUILDING & HOME MAINTENANCE AND SERVICES	9	41	31	26	31	29
49.0306	MARINE MECHANICS	44	1	39	33	32	31

Table 2. (Continued)

CIP code	Program Name	Openings Rank	SOC Mean Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
48.0299	VISUAL IMAGING TECHNOLOGY	29	34	24	40	33	41
47.0605	MEDIUM/HEAVY TRUCK TECHNICIAN	41	16	30	11	34	23
12.0403	COSMETOLOGY	31	42	16	13	35	37
20.0301	CLOTHING AND TEXTILES PRODUCTION AND SERVICES	22	35	36	2	36	16
20.0501	COMMERCIAL PAINTING/INTERIOR TREATMENT SERV.	33	24	37	25	37	35
47.0401	HYDRAULICS & PNEUMATICS	40	18	38	42	38	40
47.0199	ELECTROMECHANICAL TECHNOLOGY	38	36	32	3	39	30
47.0106	MAJOR APPLIANCE REPAIR	42	25	39	1	40	22
47.0606	SMALL ENGINE REPAIR	43	38	26	39	41	44
47.0408	WATCH REPAIR	35	31	42	18	42	36
48.0701	WOODWORKING & FURNITURE MAKING	39	37	35	38	43	42
13.0101	EDUCATION, GENERAL	32	43	43	43	44	43

Table 3. CIP Rankings (Using SOC Median Wage)

CIP code	Program Name	Openings Rank	SOC Median Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
52.99991	INFORMATION TECHNOLOGY SERVICES	7	4	5	6	1	1
51.9999	HEALTH	4	17	3	24	2	7
46.9900	CONSTRUCTION TRADES	5	13	6	15	3	3
52.99994	BUSINESS AND ADMINISTRATIVE SERVICES	2	30	1	6	4	6
52.99992	WHOLESALE/RETAIL SALES AND SERVICES	1	31	2	16	5	9
48.9999	MANUFACTURING TECHNOLOGY	3	18	17	9	6	2
52.99993	FINANCIAL SERVICES	16	15	9	6	7	4
48.0199	DRAFTING AND DESIGN TECHNOLOGY	19	7	15	27	8	13
48.0101	DRAFTING	26	6	10	22	9	14
43.9999	PUBLIC SAFETY/PROTECTIVE SERVICES	14	9	21	28	10	10
47.0604	AUTOMOBILE TECHNICIAN	28	16	4	29	11	28
46.0301	ELECTRIC AND POWER TRANSMISSION INSTALLER	27	2	22	17	12	8
48.0503	MACHINE TOOL OPERATION/MACHINE SHOP	12	27	14	14	13	12
20.0499	HOSPITALITY AND FOOD SERVICES	7	40	7	21	14	22
09.0701	RADIO AND TELEVISION	21	11	23	35	15	21
02.9999	AGRISCIENCE AND NATURAL RESOURCES EDUCATION	11	38	8	30	16	33
47.0101	ELECTRICAL AND ELECTRONICS REPAIR	20	26	12	10	17	16
47.0603	COLLISION REPAIR TECHNICIAN	36	5	19	34	18	29
46.9999	CONSTRUCTION/BUILDING MAINTENANCE	15	25	20	12	19	11
15.0607	PLASTICS	6	21	34	41	20	24
47.9999	TRANSPORTATION SERVICES AND TECHNOLOGY	10	28	25	23	21	18
48.0201	GRAPHICS AND PRINTING COMMUNICATIONS	25	29	11	37	22	39
49.0101	AIR TRANSPORTATION	34	3	29	32	23	26
47.0399	INDUSTRIAL EQUIPMENT MAINTENANCE & REPAIR	13	22	32	3	24	4
48.0508	WELDING, BRAZING & SOLDERING	30	20	18	19	25	25
47.0699	MECHANICS CLUSTER	17	10	43	43	26	27
15.0699	INDUSTRIAL PRODUCTION TECHNOLOGIES/TECHNICIANS, OTHER	24	8	41	36	27	23
47.0201	HEATING, AIR CONDITIONING & REFRIGERATION	37	12	27	31	28	34
01.0201	AGRICULTURAL MECHANICS	18	32	28	5	29	15
20.0299	CHILD AND ADULT CARE SERVICES	23	44	13	20	30	38
20.0601	BUILDING & HOME MAINTENANCE AND SERVICES	9	41	31	26	31	31
49.0306	MARINE MECHANICS	44	1	39	33	32	32

Table 3. (Continued)

CIP code	Program Name	Openings Rank	SOC Median Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
47.0605	MEDIUM/HEAVY TRUCK TECHNICIAN	41	14	30	11	33	20
48.0299	VISUAL IMAGING TECHNOLOGY	29	34	24	40	34	41
12.0403	COSMETOLOGY	31	43	16	13	35	37
20.0501	COMMERCIAL PAINTING/INTERIOR TREATMENT SERV.	33	24	37	25	36	35
20.0301	CLOTHING AND TEXTILES PRODUCTION AND SERVICES	22	37	36	2	37	17
47.0401	HYDRAULICS & PNEUMATICS	40	19	38	42	38	40
47.0106	MAJOR APPLIANCE REPAIR	42	23	39	1	39	19
47.0199	ELECTROMECHANICAL TECHNOLOGY	38	35	32	3	40	30
47.0606	SMALL ENGINE REPAIR	43	39	26	39	41	44
48.0701	WOODWORKING & FURNITURE MAKING	39	36	35	38	42	42
47.0408	WATCH REPAIR	35	33	42	18	43	36
13.0101	EDUCATION, GENERAL	32	42	43	43	44	43

Table 4. CIP Rankings (Using SOC 10th Percentile Wage)

CIP code	Program Name	Openings Rank	SOC 10th Percentile Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
51.9999	HEALTH	4	6	3	24	1	5
52.99991	INFORMATION TECHNOLOGY SERVICES	7	1	5	6	2	1
52.99994	BUSINESS AND ADMINISTRATIVE SERVICES	2	19	1	6	3	2
46.9900	CONSTRUCTION TRADES	5	11	6	15	4	3
52.99992	WHOLESALE/RETAIL SALES AND SERVICES	1	34	2	16	5	11
52.99993	FINANCIAL SERVICES	16	13	9	6	6	6
48.0101	DRAFTING	26	2	10	22	7	10
48.0199	DRAFTING AND DESIGN TECHNOLOGY	19	4	15	27	8	12
48.9999	MANUFACTURING TECHNOLOGY	3	21	17	9	9	4
43.9999	PUBLIC SAFETY/PROTECTIVE SERVICES	14	9	21	28	10	13
47.0101	ELECTRICAL AND ELECTRONICS REPAIR	20	16	12	10	11	8
46.0301	ELECTRIC AND POWER TRANSMISSION INSTALLER	27	3	22	17	12	9
20.0499	HOSPITALITY AND FOOD SERVICES	7	39	7	21	13	22
48.0503	MACHINE TOOL OPERATION/MACHINE SHOP	12	28	14	14	14	14
02.9999	AGRISCIENCE AND NATURAL RESOURCES EDUCATION	11	38	8	30	15	30
47.0604	AUTOMOBILE TECHNICIAN	28	26	4	29	16	33
48.0201	GRAPHICS AND PRINTING COMMUNICATIONS	25	25	11	37	17	38
47.9999	TRANSPORTATION SERVICES AND TECHNOLOGY	10	27	25	23	18	18
15.0607	PLASTICS	6	22	34	41	19	23
48.0508	WELDING, BRAZING & SOLDERING	30	17	18	19	20	21
46.9999	CONSTRUCTION/BUILDING MAINTENANCE	15	30	20	12	21	15
49.0101	AIR TRANSPORTATION	34	5	29	32	22	25
47.0399	INDUSTRIAL EQUIPMENT MAINTENANCE & REPAIR	13	24	32	3	23	7
47.0699	MECHANICS CLUSTER	17	12	43	43	24	26
47.0603	COLLISION REPAIR TECHNICIAN	36	18	19	34	25	39
09.0701	RADIO AND TELEVISION	21	31	23	35	26	37
15.0699	INDUSTRIAL PRODUCTION TECHNOLOGIES/TECHNICIANS, OTHER	24	10	41	36	27	24
47.0201	HEATING, AIR CONDITIONING & REFRIGERATION	37	14	27	31	28	32
47.0605	MEDIUM/HEAVY TRUCK TECHNICIAN	41	8	30	11	29	17
20.0299	CHILD AND ADULT CARE SERVICES	23	44	13	20	30	36
20.0601	BUILDING & HOME MAINTENANCE AND SERVICES	9	41	31	26	31	29
01.0201	AGRICULTURAL MECHANICS	18	36	28	5	32	16

Table 4. (Continued)

CIP code	Program Name	Openings Rank	SOC 10th Percentile Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
20.0501	COMMERCIAL PAINTING/INTERIOR TREATMENT SERV.	33	15	37	25	33	27
48.0299	VISUAL IMAGING TECHNOLOGY	29	33	24	40	34	40
12.0403	COSMETOLOGY	31	43	16	13	35	35
49.0306	MARINE MECHANICS	44	7	39	33	36	34
20.0301	CLOTHING AND TEXTILES PRODUCTION AND SERVICES	22	40	36	2	37	20
47.0606	SMALL ENGINE REPAIR	43	32	26	39	38	43
47.0401	HYDRAULICS & PNEUMATICS	40	23	38	42	39	41
47.0106	MAJOR APPLIANCE REPAIR	42	20	39	1	40	19
47.0199	ELECTROMECHANICAL TECHNOLOGY	38	35	32	3	41	28
47.0408	WATCH REPAIR	35	29	42	18	42	31
48.0701	WOODWORKING & FURNITURE MAKING	39	37	35	38	43	42
13.0101	EDUCATION, GENERAL	32	42	43	43	44	44

Table 5. CIP Rankings (Using CPS Mean Wage)

CIP code	Program Name	Openings Rank	CPS Mean Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
52.99991	INFORMATION TECHNOLOGY SERVICES	7	1	5	6	1	1
52.99994	BUSINESS AND ADMINISTRATIVE SERVICES	2	12	1	6	2	2
46.9900	CONSTRUCTION TRADES	5	20	6	15	3	5
52.99992	WHOLESALE/RETAIL SALES AND SERVICES	1	31	2	16	4	8
52.99993	FINANCIAL SERVICES	16	9	9	6	5	4
48.0199	DRAFTING AND DESIGN TECHNOLOGY	19	4	15	27	6	9
51.9999	HEALTH	4	34	3	24	7	18
48.0101	DRAFTING	26	7	10	22	8	12
47.0604	AUTOMOBILE TECHNICIAN	28	14	4	29	9	24
48.9999	MANUFACTURING TECHNOLOGY	3	33	17	9	10	6
43.9999	PUBLIC SAFETY/PROTECTIVE SERVICES	14	19	21	28	11	16
01.0201	AGRICULTURAL MECHANICS	18	8	28	5	12	3
20.0499	HOSPITALITY AND FOOD SERVICES	7	41	7	21	13	22
02.9999	AGRISCIENCE AND NATURAL RESOURCES EDUCATION	11	39	8	30	14	31
47.0101	ELECTRICAL AND ELECTRONICS REPAIR	20	26	12	10	15	14
46.9999	CONSTRUCTION/BUILDING MAINTENANCE	15	24	20	12	16	10
48.0201	GRAPHICS AND PRINTING COMMUNICATIONS	25	27	11	37	17	39
48.0503	MACHINE TOOL OPERATION/MACHINE SHOP	12	37	14	14	18	20
09.0701	RADIO AND TELEVISION	21	21	23	35	19	28
15.0699	INDUSTRIAL PRODUCTION TECHNOLOGIES/TECHNICIANS, OTHER	24	2	41	36	20	19
48.0508	WELDING, BRAZING & SOLDERING	30	23	18	19	21	25
47.9999	TRANSPORTATION SERVICES AND TECHNOLOGY	10	36	25	23	22	23
47.0606	SMALL ENGINE REPAIR	43	3	26	39	23	36
46.0301	ELECTRIC AND POWER TRANSMISSION INSTALLER	27	25	22	17	24	21
48.0299	VISUAL IMAGING TECHNOLOGY	29	22	24	40	25	40
47.0201	HEATING, AIR CONDITIONING & REFRIGERATION	37	11	27	31	26	30
47.0399	INDUSTRIAL EQUIPMENT MAINTENANCE & REPAIR	13	30	32	3	27	7
15.0607	PLASTICS	6	35	34	41	28	34
47.0699	MECHANICS CLUSTER	17	16	43	43	29	27
47.0605	MEDIUM/HEAVY TRUCK TECHNICIAN	41	6	30	11	30	15
20.0299	CHILD AND ADULT CARE SERVICES	23	44	13	20	31	38
49.0101	AIR TRANSPORTATION	34	17	29	32	32	35

Table 5. (Continued)

CIP code	Program Name	Openings Rank	CPS Mean Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
20.0601	BUILDING & HOME MAINTENANCE AND SERVICES	9	43	31	26	33	29
47.0199	ELECTROMECHANICAL TECHNOLOGY	38	15	32	3	34	13
47.0603	COLLISION REPAIR TECHNICIAN	36	32	19	34	35	42
20.0501	COMMERCIAL PAINTING/INTERIOR TREATMENT SERV.	33	18	37	25	36	26
49.0306	MARINE MECHANICS	44	5	39	33	37	33
12.0403	COSMETOLOGY	31	42	16	13	38	37
47.0401	HYDRAULICS & PNEUMATICS	40	13	38	42	39	41
47.0106	MAJOR APPLIANCE REPAIR	42	10	39	1	40	11
20.0301	CLOTHING AND TEXTILES PRODUCTION AND SERVICES	22	38	36	2	41	17
48.0701	WOODWORKING & FURNITURE MAKING	39	28	35	38	42	43
47.0408	WATCH REPAIR	35	29	42	18	43	32
13.0101	EDUCATION, GENERAL	32	40	43	43	44	44

Table 6. CIP Rankings (Using CPS Median Wage)

CIP code	Program Name	Openings Rank	CPS Median Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
52.99994	BUSINESS AND ADMINISTRATIVE SERVICES	2	7	1	6	1	2
52.99991	INFORMATION TECHNOLOGY SERVICES	7	1	5	6	2	1
46.9900	CONSTRUCTION TRADES	5	21	6	15	3	5
52.99993	FINANCIAL SERVICES	16	10	9	6	4	3
51.9999	HEALTH	4	31	3	24	5	16
48.0199	DRAFTING AND DESIGN TECHNOLOGY	19	4	15	27	6	8
52.99992	WHOLESALE/RETAIL SALES AND SERVICES	1	37	2	16	7	10
48.0101	DRAFTING	26	9	10	22	8	15
47.0604	AUTOMOBILE TECHNICIAN	28	15	4	29	9	25
43.9999	PUBLIC SAFETY/PROTECTIVE SERVICES	14	12	21	28	10	11
48.9999	MANUFACTURING TECHNOLOGY	3	32	17	9	11	7
20.0499	HOSPITALITY AND FOOD SERVICES	7	43	7	21	12	24
01.0201	AGRICULTURAL MECHANICS	18	11	28	5	13	4
02.9999	AGRISCIENCE AND NATURAL RESOURCES EDUCATION	11	39	8	30	14	30
47.0101	ELECTRICAL AND ELECTRONICS REPAIR	20	26	12	10	15	13
48.0201	GRAPHICS AND PRINTING COMMUNICATIONS	25	24	11	37	16	38
48.0503	MACHINE TOOL OPERATION/MACHINE SHOP	12	35	14	14	17	18
46.9999	CONSTRUCTION/BUILDING MAINTENANCE	15	28	20	12	18	12
48.0508	WELDING, BRAZING & SOLDERING	30	18	18	19	19	22
15.0699	INDUSTRIAL PRODUCTION TECHNOLOGIES/TECHNICIANS, OTHER	24	2	41	36	20	20
09.0701	RADIO AND TELEVISION	21	25	23	35	21	31
46.0301	ELECTRIC AND POWER TRANSMISSION INSTALLER	27	22	22	17	22	21
47.9999	TRANSPORTATION SERVICES AND TECHNOLOGY	10	36	25	23	23	23
47.0606	SMALL ENGINE REPAIR	43	3	26	39	24	36
47.0201	HEATING, AIR CONDITIONING & REFRIGERATION	37	8	27	31	25	29
47.0399	INDUSTRIAL EQUIPMENT MAINTENANCE & REPAIR	13	27	32	3	26	6
15.0607	PLASTICS	6	34	34	41	27	32
47.0699	MECHANICS CLUSTER	17	14	43	43	28	27
48.0299	VISUAL IMAGING TECHNOLOGY	29	23	24	40	29	40
47.0605	MEDIUM/HEAVY TRUCK TECHNICIAN	41	5	30	11	30	14
20.0299	CHILD AND ADULT CARE SERVICES	23	44	13	20	31	39
20.0601	BUILDING & HOME MAINTENANCE AND SERVICES	9	41	31	26	32	28

Table 6. (Continued)

CIP code	Program Name	Openings Rank	CPS Median Wage Rank	Related Placement Rank	Percent Related Placement Rank	Final Rank, Related Placement	Final Rank, Percent Related Placement
49.0101	AIR TRANSPORTATION	34	19	29	32	33	35
47.0199	ELECTROMECHANICAL TECHNOLOGY	38	13	32	3	34	9
20.0501	COMMERCIAL PAINTING/INTERIOR TREATMENT SERV.	33	16	37	25	35	26
47.0603	COLLISION REPAIR TECHNICIAN	36	33	19	34	36	42
12.0403	COSMETOLOGY	31	42	16	13	37	37
49.0306	MARINE MECHANICS	44	6	39	33	38	34
20.0301	CLOTHING AND TEXTILES PRODUCTION AND SERVICES	22	38	36	2	39	19
47.0401	HYDRAULICS & PNEUMATICS	40	20	38	42	40	41
47.0106	MAJOR APPLIANCE REPAIR	42	17	39	1	41	17
48.0701	WOODWORKING & FURNITURE MAKING	39	30	35	38	42	43
47.0408	WATCH REPAIR	35	29	42	18	43	33
13.0101	EDUCATION, GENERAL	32	40	43	43	44	44

that are close to each other in the final two columns (within plus/minus 3), and about half are quite different.

The stability of the rank orderings with respect to which of the measures that we use for the factors is quite important. If the rankings were highly stable, then it wouldn't matter which wage measure or which placement measure were used. In examining the five tables, however, we find that the rankings do vary somewhat. We find that 16 different programs are ranked at least once in the top 10. But four programs are ranked in the top ten for all of the rankings—"Information Technology," "Construction Trades," "Business and Administrative Services," and "Financial Services." One way to measure the stability of the rankings is by calculating the rank order correlations. If two rankings were identical, then the rank order correlation for them would be 1.0. Table 7 lists the rank order correlations between the ten rankings. The minimum rank order correlation is about 0.60, which may be characterized as approximately 80 percent overlap.

SOFTWARE AND DOCUMENTATION

Thorough documentation of all of the data sources, adjustments, and calculations that were undertaken to produce the rankings is found in the report titled, "Documentation for the 2001 Rank Ordering of Michigan's CTE Programs." Finally, we have created an Access data base program to calculate the rankings. We have attempted to build in enough flexibility into the program so that it can be used if and when new data sources become available for placements, openings, or wages. Furthermore, the program should be a useful starting point if substantial changes occur such as new CIP codes, or new programs enter the CTE curriculum.

Table 7. Rank Order Correlations

	SOC median wage, related placements	SOC median wage, percent related placements	SOC mean wage, related placements	SOC mean wage, percent related placements	SOC 10th percentile wage, related placements	SOC 10th percentile wage, percent related placements	CPS median wage, related placements	CPS median wage, percent related placements	CPS mean wage, related placements	CPS mean wage, percent related placements
SOC median wage, related placements	1.0000									
SOC median wage, percent related placements	0.7756	1.0000								
SOC mean wage, related placements	0.9945	0.7610	1.0000							
SOC mean wage, percent related placements	0.7746	0.9904	0.7707	1.0000						
SOC 10th percentile wage, related placements	0.9728	0.7601	0.9632	0.7550	1.0000					
SOC 10th percentile wage, percent related placements	0.7149	0.9505	0.6923	0.9363	0.7601	1.0000				
CPS median wage, related placements	0.8932	0.6977	0.8978	0.7005	0.9071	0.6915	1.0000			
CPS median wage, percent related placements	0.5889	0.8834	0.5798	0.8734	0.6076	0.9074	0.6856	1.0000		
CPS mean wage, related placements	0.8868	0.6863	0.8934	0.6895	0.8916	0.6695	0.9949	0.6744	1.0000	
CPS mean wage, percent related placements	0.5758	0.8856	0.5687	0.8767	0.5832	0.8977	0.6657	0.9896	0.6606	1.0000

Appendix

CIP-to-Occupations Crosswalk

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	Jobzone
01.0201	Agricultural Mechanic	85132	Maintenance Repairers, General U	1	547	Specified Mechanics And Repairers, N.	49-9042	Maintenance and Repair Workers, Gen	3
01.0201	Agricultural Mechanic	85321	Farm Equipment Mechanics	1	517	Farm Equipment Mechanics	49-3041	Farm Equipment Mechanics	3
01.0201	Agricultural Mechanic	85328	Small Engine Specialists	1	509	Small Engine Repairers	49-3053	Outdoor Power Equipment and Other S	3
02.9999	Agriscience And Natu	15031	Nursery And Greenhouse Manager	1	476	Managers, Horticultural Specialty Farms	11-9011	Farm, Ranch, and Other Agricultural M	4
02.9999	Agriscience And Natu	15032	Lawn Services Managers	1	485	Supervisors, Related Agricultural Occup	37-1012	First-Line Supervisors/Managers of Lar	3, 4
02.9999	Agriscience And Natu	24501	Science/Mathematics Techns	0.975	000		00-0000		
02.9999	Agriscience And Natu	24502	Biological, Agricultural, And Food T	1	235	Technicians, N.E.C.	19-4011	Agricultural and Food Science Technic	2
02.9999	Agriscience And Natu	24505	Chemical Technicians And Technol	1	224	Chemical Technicians	19-4031	Chemical Technicians	3
02.9999	Agriscience And Natu	24505	Chemical Technicians And Technol	1	224	Chemical Technicians	19-4091	Environmental Science and Protection	3
02.9999	Agriscience And Natu	24511	Petroleum Technicians	1	225	Science Technicians, N.E.C.	19-4041	Geological and Petroleum Technicians	3
02.9999	Agriscience And Natu	24599	All Other Physical And Life Science	1	225	Science Technicians, N.E.C.	19-4091	Environmental Science and Protection	3
02.9999	Agriscience And Natu	24599	All Other Physical And Life Science	1	225	Science Technicians, N.E.C.	19-4093	Forest and Conservation Technicians	
02.9999	Agriscience And Natu	24599	All Other Physical And Life Science	1	225	Science Technicians, N.E.C.	19-4099	Life, Physical, and Social Science Tec	
02.9999	Agriscience And Natu	32951	Veterinary Technicians and Techno	1	208	Health Technologists And Technicians,	29-2056	Veterinary Technologists and Technicia	
02.9999	Agriscience And Natu	32951	Veterinary Technicians and Techno	1	208	Health Technologists And Technicians,	31-9096	Veterinary Assistants and Laboratory A	3
02.9999	Agriscience And Natu	34038	Designers, except interior	1	185	Designers	27-1023	Floral Designers	2
02.9999	Agriscience And Natu	65023	Butchers and Meatcutters	1	686	Butchers And Meat Cutters	51-3021	Butchers and Meat Cutters	3
02.9999	Agriscience And Natu	67008	Pest Controllers and Assistants	1	455	Pest Control Occupations	37-2021	Pest Control Workers	2
02.9999	Agriscience And Natu	71000	Farm Operators & Managers	1	000		00-0000		
02.9999	Agriscience And Natu	71002	Farm Operators	1	473	Farmers, Except Horticultural	11-9012	Farmers and Ranchers	3
02.9999	Agriscience And Natu	71002	Farm Operators	1	474	Horticultural Specialty Farmers	11-9012	Farmers and Ranchers	3
02.9999	Agriscience And Natu	71005	Farm Managers	1	475	Managers, Farms, Except Horticultural	11-9012	Farmers and Ranchers	3
02.9999	Agriscience And Natu	71005	Farm Managers	1	476	Managers, Horticultural Specialty Farms	11-9012	Farmers and Ranchers	3
02.9999	Agriscience And Natu	72000	First-Line Supervisors And Manage	1	000		00-0000		
02.9999	Agriscience And Natu	72002	First-Line Supervisors And Manage	1	477	Supervisors, Farm Workers	37-1012	First-Line Supervisors/Managers of Lar	3, 4
02.9999	Agriscience And Natu	72002	First-Line Supervisors And Manage	1	485	Supervisors, Related Agricultural Occup	37-1012	First-Line Supervisors/Managers of Lar	3, 4
02.9999	Agriscience And Natu	72002	First-Line Supervisors And Manage	1	494	Supervisors, Forestry And Logging Wor	37-1012	First-Line Supervisors/Managers of Lar	3, 4
02.9999	Agriscience And Natu	72002	First-Line Supervisors And Manage	1	477	Supervisors, Farm Workers	45-1011	First-Line Supervisors/Managers of Fai	3, 4
02.9999	Agriscience And Natu	72002	First-Line Supervisors And Manage	1	485	Supervisors, Related Agricultural Occup	45-1011	First-Line Supervisors/Managers of Fai	3, 4
02.9999	Agriscience And Natu	72002	First-Line Supervisors And Manage	1	494	Supervisors, Forestry And Logging Wor	45-1011	First-Line Supervisors/Managers of Fai	3, 4
02.9999	Agriscience And Natu	72002	First-Line Supervisors And Manage	1	477	Supervisors, Farm Workers	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	72002	First-Line Supervisors And Manage	1	485	Supervisors, Related Agricultural Occup	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	72002	First-Line Supervisors And Manage	1	494	Supervisors, Forestry And Logging Wor	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	72008	Supervisors, Farm Workers	1	477	Supervisors, Farm Workers	45-1011	First-Line Supervisors/Managers of Fai	3, 4
02.9999	Agriscience And Natu	73002	Fallers and Buckers	1	496	Timber Cutting And Logging Occupatio	45-4029	Logging Workers, All Other	
02.9999	Agriscience And Natu	73005	Choke Setters	1	496	Timber Cutting And Logging Occupatio	45-4029	Logging Workers, All Other	
02.9999	Agriscience And Natu	73008	Log Handling Equipment Operators	1	856	Industrial Truck And Tractor Equipment	45-4022	Logging Equipment Operators	2
02.9999	Agriscience And Natu	73011	Logging Tractor Operators	1	496	Timber Cutting And Logging Occupatio	45-4022	Logging Equipment Operators	2
02.9999	Agriscience And Natu	73011	Logging Tractor Operators	1	856	Industrial Truck And Tractor Equipment	45-4022	Logging Equipment Operators	2
02.9999	Agriscience And Natu	73098	Timber Cutting Workers, NEC	1	000		00-0000		
02.9999	Agriscience And Natu	73099	All Other Timber Cutting and Relate	1	496	Timber Cutting And Logging Occupatio	45-4029	Logging Workers, All Other	
02.9999	Agriscience And Natu	73099	All Other Timber Cutting and Relate	1	733	Miscellaneous Woodworking Machine C	45-4029	Logging Workers, All Other	
02.9999	Agriscience And Natu	73099	All Other Timber Cutting and Relate	1	889	Laborers, Except Construction	45-4029	Logging Workers, All Other	
02.9999	Agriscience And Natu	74002	Farm Workers exc. Agric. Services	1	479	Farm Workers	00-0000		
02.9999	Agriscience And Natu	75005	Inspectors, Agricultural Production	1	489	Inspectors, Agricultural Products	45-2011	Agricultural Inspectors	
02.9999	Agriscience And Natu	75015	Supervisors, Related Agricultural O	1	485	Supervisors, Related Agricultural Occup	00-0000		
02.9999	Agriscience And Natu	77005	Fishers/Hunters/Trappers	1	000		00-0000		

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
02.9999	Agriscience And Natu	77011	Hunters and Trappers (old OES co	1	499	Hunters And Trappers	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79002	Forest and Conservation Workers	1	495	Forestry Workers, Except Logging	19-4093	Forest and Conservation Technicians	
02.9999	Agriscience And Natu	79005	Nursery Workers	1	000		00-0000		
02.9999	Agriscience And Natu	79008	Log Graders & Scalers	1	496	Timber Cutting And Logging Occupation	45-4023	Log Graders and Scalers	2
02.9999	Agriscience And Natu	79008	Log Graders & Scalers	1	799	Graders And Sorters, Exc. Agricultural	45-4023	Log Graders and Scalers	2
02.9999	Agriscience And Natu	79011	Graders and Sorters, Agricultural P	1	488	Graders And Sorters, Agricultural Produ	45-2041	Graders and Sorters, Agricultural Produ	1
02.9999	Agriscience And Natu	79011	Graders and Sorters, Agricultural P	1	796	Production Inspectors, Checkers, And E	45-2041	Graders and Sorters, Agricultural Produ	1
02.9999	Agriscience And Natu	79012	Animal Breeders and Trainers	1	000		00-0000		
02.9999	Agriscience And Natu	79015	Animal Breeders and Trainers (split	1	473	Farmers, Except Horticultural	45-2021	Animal Breeders	3
02.9999	Agriscience And Natu	79016	Animal Breeders and Trainers (split	1	479	Farm Workers	39-2011	Animal Trainers	3
02.9999	Agriscience And Natu	79017	Animal Caretakers, Except Farm	1	487	Animal Caretakers, Except Farm	31-9096	Veterinary Assistants and Laboratory A	3
02.9999	Agriscience And Natu	79021	Farm Equipment Operators	1	479	Farm Workers	45-2091	Agricultural Equipment Operators	2
02.9999	Agriscience And Natu	79030	Gardeners and Groundskeepers, E	1	000		00-0000		
02.9999	Agriscience And Natu	79033	Pruners	1	479	Farm Workers	37-3013	Tree Trimmers and Pruners	2
02.9999	Agriscience And Natu	79036	Sprayers/Applicators	1	479	Farm Workers	37-3012	Pesticide Handlers, Sprayers, and App	2
02.9999	Agriscience And Natu	79041	Gardeners and Groundskeepers, E	1	484	Nursery Workers	37-3011	Landscaping and Groundskeeping Wor	1
02.9999	Agriscience And Natu	79041	Nursery Workers (replaced in 95)	1	484	Nursery Workers	37-3011	Landscaping and Groundskeeping Wor	1
02.9999	Agriscience And Natu	79041	Lawn Maintenance Workers (replac	1	484	Nursery Workers	37-3011	Landscaping and Groundskeeping Wor	1
02.9999	Agriscience And Natu	79041	Gardeners and Groundskeepers, E	1	486	Groundskeepers And Gardeners, Excep	37-3011	Landscaping and Groundskeeping Wor	1
02.9999	Agriscience And Natu	79041	Lawn Maintenance Workers (replac	1	486	Groundskeepers And Gardeners, Excep	37-3011	Landscaping and Groundskeeping Wor	1
02.9999	Agriscience And Natu	79041	Nursery Workers (replaced in 95)	1	486	Groundskeepers And Gardeners, Excep	37-3011	Landscaping and Groundskeeping Wor	1
02.9999	Agriscience And Natu	79041	Nursery Workers (replaced in 95)	1	484	Nursery Workers	45-2092	Farmworkers and Laborers, Crop, Nurs	1
02.9999	Agriscience And Natu	79041	Gardeners and Groundskeepers, E	1	484	Nursery Workers	45-2092	Farmworkers and Laborers, Crop, Nurs	1
02.9999	Agriscience And Natu	79041	Lawn Maintenance Workers (replac	1	484	Nursery Workers	45-2092	Farmworkers and Laborers, Crop, Nurs	1
02.9999	Agriscience And Natu	79041	Nursery Workers (replaced in 95)	1	486	Groundskeepers And Gardeners, Excep	45-2092	Farmworkers and Laborers, Crop, Nurs	1
02.9999	Agriscience And Natu	79041	Lawn Maintenance Workers (replac	1	486	Groundskeepers And Gardeners, Excep	45-2092	Farmworkers and Laborers, Crop, Nurs	1
02.9999	Agriscience And Natu	79041	Gardeners and Groundskeepers, E	1	486	Groundskeepers And Gardeners, Excep	45-2092	Farmworkers and Laborers, Crop, Nurs	1
02.9999	Agriscience And Natu	79041	Gardeners and Groundskeepers, E	1	484	Nursery Workers	47-4091	Segmental Pavers	
02.9999	Agriscience And Natu	79041	Lawn Maintenance Workers (replac	1	484	Nursery Workers	47-4091	Segmental Pavers	
02.9999	Agriscience And Natu	79041	Nursery Workers (replaced in 95)	1	484	Nursery Workers	47-4091	Segmental Pavers	
02.9999	Agriscience And Natu	79041	Lawn Maintenance Workers (replac	1	486	Groundskeepers And Gardeners, Excep	47-4091	Segmental Pavers	
02.9999	Agriscience And Natu	79041	Nursery Workers (replaced in 95)	1	486	Groundskeepers And Gardeners, Excep	47-4091	Segmental Pavers	
02.9999	Agriscience And Natu	79041	Gardeners and Groundskeepers, E	1	486	Groundskeepers And Gardeners, Excep	47-4091	Segmental Pavers	
02.9999	Agriscience And Natu	79806	Veterinary Assistants	1	208	Health Technologists And Technicians,	29-2056	Veterinary Technologists and Technicia	
02.9999	Agriscience And Natu	79806	Veterinary Assistants	1	208	Health Technologists And Technicians,	31-9096	Veterinary Assistants and Laboratory A	3
02.9999	Agriscience And Natu	79998	Agric, Forest, Fishing, NEC	1	000		00-0000		
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	473	Farmers, Except Horticultural	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	474	Horticultural Specialty Farmers	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	475	Managers, Farms, Except Horticultural	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	476	Managers, Horticultural Specialty Farms	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	479	Farm Workers	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	483	Marine Life Cultivation Workers	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	486	Groundskeepers And Gardeners, Excep	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	489	Inspectors, Agricultural Products	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	498	Fishers	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	499	Hunters And Trappers	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	859	Miscellaneous Material Moving Equipme	37-3019	Grounds Maintenance Workers, All Oth	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	473	Farmers, Except Horticultural	45-1012	Farm Labor Contractors	

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	474	Horticultural Specialty Farmers	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	475	Managers, Farms, Except Horticultural	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	476	Managers, Horticultural Specialty Farms	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	479	Farm Workers	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	483	Marine Life Cultivation Workers	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	486	Groundskeepers And Gardeners, Except	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	489	Inspectors, Agricultural Products	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	498	Fishers	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	499	Hunters And Trappers	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	859	Miscellaneous Material Moving Equipme	45-1012	Farm Labor Contractors	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	473	Farmers, Except Horticultural	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	474	Horticultural Specialty Farmers	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	475	Managers, Farms, Except Horticultural	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	476	Managers, Horticultural Specialty Farms	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	479	Farm Workers	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	483	Marine Life Cultivation Workers	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	486	Groundskeepers And Gardeners, Except	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	489	Inspectors, Agricultural Products	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	498	Fishers	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	499	Hunters And Trappers	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	859	Miscellaneous Material Moving Equipme	45-2099	Agricultural Workers, All Other	
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	473	Farmers, Except Horticultural	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	474	Horticultural Specialty Farmers	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	475	Managers, Farms, Except Horticultural	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	476	Managers, Horticultural Specialty Farms	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	479	Farm Workers	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	483	Marine Life Cultivation Workers	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	486	Groundskeepers And Gardeners, Except	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	489	Inspectors, Agricultural Products	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	498	Fishers	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	499	Hunters And Trappers	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	79999	All Other Agricultural, Forestry, Fis	1	859	Miscellaneous Material Moving Equipme	45-3021	Hunters and Trappers	2
02.9999	Agriscience And Natu	83000	Inspectors and related occupations	0.971	000		00-0000		
02.9999	Agriscience And Natu	83002	Inspectors, Testers & Graders Prec	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83002	Inspectors, Testers & Graders Prec	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83002	Inspectors, Testers & Graders Prec	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83005	Production Inspectors, Testers	1	488	Graders And Sorters, Agricultural Produ	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83005	Production Inspectors, Testers	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83005	Production Inspectors, Testers	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83005	Production Inspectors, Testers	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83005	Production Inspectors, Testers	1	798	Production Samplers And Weighers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83005	Production Inspectors, Testers	1	799	Graders And Sorters, Exc. Agricultural	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83005	Production Inspectors, Testers	1	889	Laborers, Except Construction	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	83099	All Other Inspectors, Testers & Rel	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
02.9999	Agriscience And Natu	85328	Small Engine Specialists	1	509	Small Engine Repairers	49-3053	Outdoor Power Equipment and Other S	3
02.9999	Agriscience And Natu	89802	Slaughterers & Butchers	1	686	Butchers And Meat Cutters	51-3021	Butchers and Meat Cutters	3
02.9999	Agriscience And Natu	89802	Slaughterers & Butchers	1	686	Butchers And Meat Cutters	51-3023	Slaughterers and Meat Packers	2
02.9999	Agriscience And Natu	89803	Butchers and Meatcutters, Prec	1	000		00-0000		

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
02.9999	Agriscience And Natu	89805	Bakers, manufacturing	1	687	Bakers	51-3011	Bakers	3
02.9999	Agriscience And Natu	89805	Bakers, manufacturing	1	689	Inspectors, Testers, And Graders	51-3011	Bakers	3
02.9999	Agriscience And Natu	89808	Food Batchmakers	1	688	Food Batchmakers	51-3092	Food Batchmakers	3
09.0701	Radio And Television	34010	Radio/TV Announcers, Newscstrs	0.89	000		00-0000		
09.0701	Radio And Television	34017	Announcers, Radio And Television	1	198	Announcers	27-3011	Radio and Television Announcers	2
09.0701	Radio and Television	34028	Broadcast Technicians	1	228	Broadcast Equipment Operators	27-4011	Audio and Video Equipment Technician	4
09.0701	Radio and Television	34028	Broadcast Technicians	1	228	Broadcast Equipment Operators	27-4012	Broadcast Technicians	4
09.0701	Radio And Television	34035	Artists and Commercial Artists	1	185	Designers	27-1012	Craft Artists	
09.0701	Radio And Television	34035	Artists and Commercial Artists	1	188	Painters, Sculptors, Craft-Artists, And A	27-1012	Craft Artists	
09.0701	Radio And Television	34035	Artists and Commercial Artists	1	194	Artists, Performers, And Related Worke	27-1012	Craft Artists	
09.0701	Radio And Television	34035	Artists and Commercial Artists	1	185	Designers	27-1014	Multi-Media Artists and Animators	
09.0701	Radio And Television	34035	Artists and Commercial Artists	1	188	Painters, Sculptors, Craft-Artists, And A	27-1014	Multi-Media Artists and Animators	
09.0701	Radio And Television	34035	Artists and Commercial Artists	1	194	Artists, Performers, And Related Worke	27-1014	Multi-Media Artists and Animators	
09.0701	Radio And Television	34035	Artists and Commercial Artists	1	185	Designers	27-1019	Artists and Related Workers, All Other	
09.0701	Radio And Television	34035	Artists and Commercial Artists	1	188	Painters, Sculptors, Craft-Artists, And A	27-1019	Artists and Related Workers, All Other	
09.0701	Radio And Television	34035	Artists and Commercial Artists	1	194	Artists, Performers, And Related Worke	27-1019	Artists and Related Workers, All Other	
09.0701	Radio And Television	34047	Music Directors,Singers & Related	1	186	Musicians And Composers	27-2042	Musicians and Singers	2, 5
09.0701	Radio And Television	34050	Musicians	1	000		00-0000		
09.0701	Radio And Television	34051	Musicians, Instrumental	1	186	Musicians And Composers	27-2042	Musicians and Singers	2, 5
09.0701	Radio And Television	34056	Producers, Directors, Actors, And C	1	187	Actors And Directors	27-2011	Actors	3
09.0701	Radio And Television	34056	Producers, Directors, Actors, And C	1	194	Artists, Performers, And Related Worke	27-2011	Actors	3
09.0701	Radio And Television	34056	Producers, Directors, Actors, And C	1	187	Actors And Directors	27-2099	Entertainers and Performers, Sports ar	
09.0701	Radio And Television	34056	Producers, Directors, Actors, And C	1	194	Artists, Performers, And Related Worke	27-2099	Entertainers and Performers, Sports ar	
09.0701	Radio And Television	39999	Other professional, paraprofessiona	1	034	Business And Promotion Agents	27-4014	Sound Engineering Technicians	3
09.0701	Radio And Television	39999	Other professional, paraprofessiona	1	194	Artists, Performers, And Related Worke	27-4014	Sound Engineering Technicians	3
09.0701	Radio And Television	39999	Other professional, paraprofessiona	1	235	Technicians, N.E.C.	27-4014	Sound Engineering Technicians	3
09.0701	Radio And Television	68005	Hairdressers, hairstylists & cosmet	1	458	Hairdressers And Cosmetologists	39-5091	Makeup Artists, Theatrical and Perform	2
12.0403	Cosmetology	68002	Barber	1	457	Barbers	39-5011	Barbers	3
12.0403	Cosmetology	68005	Hairdressers, Hairstylists, And Cos	1	458	Hairdressers And Cosmetologists	39-5012	Hairdressers, Hairstylists, and Cosmet	3
12.0403	Cosmetology	68005	Hairdressers, Hairstylists, And Cos	1	458	Hairdressers And Cosmetologists	39-5091	Makeup Artists, Theatrical and Perform	2
12.0403	Cosmetology	68005	Hairdressers, Hairstylists, And Cos	1	458	Hairdressers And Cosmetologists	39-5094	Skin Care Specialists	
12.0403	Cosmetology	68011	Shampoers	1	458	Hairdressers And Cosmetologists	39-5093	Shampoers	
13.0101	Education, General	31521	Teacher Aides, Paraprofessional	1	235	Technicians, N.E.C.	25-9041	Teacher Assistants	3
13.0101	Education, General	53904	Teacher Aides/Education Assts	1	000		00-0000		
13.0101	Education, General	53905	Teacher Aides And Educational As	1	387	Teachers' Aides	25-9041	Teacher Assistants	3
15.0607	Plastics	25111	Programmer, Numerical, Tool & Pro	1	215	Mechanical Engineering Technicians	51-4012	Numerical Tool and Process Control Pr	3
15.0607	Plastics	25111	Programmer, Numerical, Tool & Pro	1	233	Tool Programmers, Numerical Control	51-4012	Numerical Tool and Process Control Pr	3
15.0607	Plastics	81000	First-Line Supervisors and Manage	0.315	000		00-0000		
15.0607	Plastics	81008	First Line Supervisors, Production	1	628	Supervisors, Production Occupations	51-1011	First-Line Supervisors/Managers of Pro	3
15.0607	Plastics	81008	First Line Supervisors, Production	1	796	Production Inspectors, Checkers, And E	51-1011	First-Line Supervisors/Managers of Pro	3
15.0607	Plastics	81008	First Line Supervisors, Production	1	864	Supervisors, Handlers, Equipment Clea	51-1011	First-Line Supervisors/Managers of Pro	3
15.0607	Plastics	83000	Inspectors and related occupations	0.971	000		00-0000		
15.0607	Plastics	83002	Inspectors,Testers & Graders Prec	1	684	Miscellaneous Precision Workers, N.E.C	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83002	Inspectors,Testers & Graders Prec	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Censu	CensusTitle	SOCcode	SOCtitle	jobzone
15.0607	Plastics	83002	Inspectors,Testers & Graders Prec	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83002	Inspectors,Testers & Graders Prec	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83005	Production Inspectors,Testers & Gr	1	488	Graders And Sorters, Agricultural Produ	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83005	Production Inspectors,Testers & Gr	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83005	Production Inspectors,Testers & Gr	1	715	Miscellaneous Metal, Plastic, Stone Anc	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83005	Production Inspectors,Testers & Gr	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83005	Production Inspectors,Testers & Gr	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83005	Production Inspectors,Testers & Gr	1	798	Production Samplers And Weighers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83005	Production Inspectors,Testers & Gr	1	799	Graders And Sorters, Exc. Agricultural	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83005	Production Inspectors,Testers & Gr	1	889	Laborers, Except Construction	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	83099	All Other Inspectors,Testers & Gra	1	874	Production Helpers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0607	Plastics	85132	Maintenance Repairers, General U	1	547	Specified Mechanics And Repairers, N.	49-9042	Maintenance and Repair Workers, Gen	3
15.0607	Plastics	91108	Drilling/boring machine tool setters,	1	708	Drilling And Boring Machine Operators	51-4032	Drilling and Boring Machine Tool Sette	2
15.0607	Plastics	91111	Milling & planing machine setters, r	1	705	Milling And Planing Machine Operators	51-4035	Milling and Planing Machine Setters, O	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	704	Lathe And Turning Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	705	Milling And Planing Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	708	Drilling And Boring Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	709	Grinding, Abrading, Buffing, And Polishi	51-4031	Cutting, Punching, and Press Machine	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	715	Miscellaneous Metal, Plastic, Stone Anc	51-4031	Cutting, Punching, and Press Machine	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	704	Lathe And Turning Machine Operators	51-4032	Drilling and Boring Machine Tool Sette	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	705	Milling And Planing Machine Operators	51-4032	Drilling and Boring Machine Tool Sette	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	706	Punching And Stamping Press Machine	51-4032	Drilling and Boring Machine Tool Sette	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	708	Drilling And Boring Machine Operators	51-4032	Drilling and Boring Machine Tool Sette	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	709	Grinding, Abrading, Buffing, And Polishi	51-4032	Drilling and Boring Machine Tool Sette	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	715	Miscellaneous Metal, Plastic, Stone Anc	51-4032	Drilling and Boring Machine Tool Sette	2
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	704	Lathe And Turning Machine Operators	51-4034	Lathe and Turning Machine Tool Setter	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	705	Milling And Planing Machine Operators	51-4034	Lathe and Turning Machine Tool Setter	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	706	Punching And Stamping Press Machine	51-4034	Lathe and Turning Machine Tool Setter	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	708	Drilling And Boring Machine Operators	51-4034	Lathe and Turning Machine Tool Setter	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	709	Grinding, Abrading, Buffing, And Polishi	51-4034	Lathe and Turning Machine Tool Setter	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	715	Miscellaneous Metal, Plastic, Stone Anc	51-4034	Lathe and Turning Machine Tool Setter	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	704	Lathe And Turning Machine Operators	51-4035	Milling and Planing Machine Setters, O	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	705	Milling And Planing Machine Operators	51-4035	Milling and Planing Machine Setters, O	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	706	Punching And Stamping Press Machine	51-4035	Milling and Planing Machine Setters, O	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	708	Drilling And Boring Machine Operators	51-4035	Milling and Planing Machine Setters, O	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	709	Grinding, Abrading, Buffing, And Polishi	51-4035	Milling and Planing Machine Setters, O	3
15.0607	Plastics	91117	Machine tool cutting operators, mef	1	715	Miscellaneous Metal, Plastic, Stone Anc	51-4035	Milling and Planing Machine Setters, O	3
15.0607	Plastics	91302	Punching machine setters, operato	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
15.0607	Plastics	91305	Press & press brake machine sette	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
15.0607	Plastics	91305	Press & press brake machine sette	1	717	Fabricating Machine Operators, N.E.C.	51-4031	Cutting, Punching, and Press Machine	2
15.0607	Plastics	91308	Shear & slitter machine setters, me	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	Jobzone
15.0607	Plastics	91311	Extruding/drawing machine setters	1	719	Molding And Casting Machine Operators	51-4021	Extruding and Drawing Machine Setter	2
15.0607	Plastics	91314	Rolling machine setters, operators,	1	707	Rolling Machine Operators	51-4023	Rolling Machine Setters, Operators, an	2
15.0607	Plastics	91314	Rolling machine setters, operators,	1	715	Miscellaneous Metal, Plastic, Stone And	51-4023	Rolling Machine Setters, Operators, an	2
15.0607	Plastics	91317	Forging machine setters, operators	1	713	Forging Machine Operators	51-4022	Forging Machine Setters, Operators, ai	2
15.0607	Plastics	91502	Numerical Control Machine Tool Op	1	714	Numerical Control Machine Operators	51-4011	Computer-Controlled Machine Tool Op	2
15.0607	Plastics	91502	Numerical Control Machine Tool Op	1	769	Slicing And Cutting Machine Operators	51-4011	Computer-Controlled Machine Tool Op	2
15.0607	Plastics	91502	Numerical Control Machine Tool Op	1	714	Numerical Control Machine Operators	51-4012	Numerical Tool and Process Control Pi	3
15.0607	Plastics	91502	Numerical Control Machine Tool Op	1	769	Slicing And Cutting Machine Operators	51-4012	Numerical Tool and Process Control Pi	3
15.0607	Plastics	91902	Plastic Mold Machine Setters & Set	1	719	Molding And Casting Machine Operator	51-4072	Molding, Coremaking, and Casting Ma	1, 2, 3
15.0607	Plastics	91905	Plastic Mold Machine Ops. & Tende	1	719	Molding And Casting Machine Operator	51-4072	Molding, Coremaking, and Casting Ma	1, 2, 3
15.0607	Plastics	91917	Electrolytic Plating Machine Setters	1	723	Metal Plating Machine Operators	51-4193	Plating and Coating Machine Setters, C	1, 2, 3
15.0607	Plastics	91920	Electrolytic Plating Mach Oprs	1	000		00-0000		
15.0607	Plastics	91921	Electrolytic Plating Machine Opera	1	723	Metal Plating Machine Operators	51-4193	Plating and Coating Machine Setters, C	1, 2, 3
15.0607	Plastics	91921	Electrolytic Plating Machine Opera	1	725	Miscellaneous Metal And Plastic Proces	51-4193	Plating and Coating Machine Setters, C	1, 2, 3
15.0607	Plastics	91923	Nonelectrolytic Plating Mach. Sette	1	723	Metal Plating Machine Operators	51-4193	Plating and Coating Machine Setters, C	1, 2, 3
15.0607	Plastics	91926	Nonelectrolytic Plating Machine Op	1	723	Metal Plating Machine Operators	51-4193	Plating and Coating Machine Setters, C	1, 2, 3
15.0607	Plastics	91928	Heating Eqpt. Setters & Set-up Ope	1	724	Heat Treating Equipment Operators	51-4191	Heat Treating Equipment Setters, Oper	2, 3
15.0607	Plastics	91932	Heat Treating Mach.Ops.,Metal & F	1	724	Heat Treating Equipment Operators	51-4191	Heat Treating Equipment Setters, Oper	2, 3
15.0607	Plastics	91932	Heat Treating Mach.Ops.,Metal & F	1	766	Furnace, Kiln, And Oven Operators, Exc	51-4191	Heat Treating Equipment Setters, Oper	2, 3
15.0607	Plastics	91938	Heaters, Metal & Plastic	1	724	Heat Treating Equipment Operators	51-4191	Heat Treating Equipment Setters, Oper	2, 3
15.0607	Plastics	91938	Heaters, Metal & Plastic	1	878	Machine Feeders And Offbearers	51-4191	Heat Treating Equipment Setters, Oper	2, 3
15.0607	Plastics	91950	Plast/Mold Mach Oprs/Tndrs	1	000		00-0000		
15.0607	Plastics	92101	Metal/Plastic Settrs/Oprs NEC	1	000		00-0000		
15.0607	Plastics	92197	All Other Metal/Plastic Machine Set	1	715	Miscellaneous Metal, Plastic, Stone And	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	92197	All Other Metal/Plastic Machine Set	1	717	Fabricating Machine Operators, N.E.C.	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	92197	All Other Metal/Plastic Machine Set	1	725	Miscellaneous Metal And Plastic Proces	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	92198	All Other Metal/Plastic Machine Op	1	704	Lathe And Turning Machine Operators	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	92198	All Other Metal/Plastic Machine Op	1	715	Miscellaneous Metal, Plastic, Stone And	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	92198	All Other Metal/Plastic Machine Op	1	717	Fabricating Machine Operators, N.E.C.	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	92198	All Other Metal/Plastic Machine Op	1	719	Molding And Casting Machine Operator	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	92198	All Other Metal/Plastic Machine Op	1	725	Miscellaneous Metal And Plastic Proces	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	92198	All Other Metal/Plastic Machine Op	1	755	Extruding And Forming Machine Operat	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	92951	Painting Machine Setters & Set-up	1	723	Metal Plating Machine Operators	51-9121	Coating, Painting, and Spraying Machin	1, 2
15.0607	Plastics	92951	Painting Machine Setters & Set-up	1	754	Packaging And Filling Machine Operato	51-9121	Coating, Painting, and Spraying Machin	1, 2
15.0607	Plastics	92951	Painting Machine Setters & Set-up	1	777	Miscellaneous Machine Operators, N.E.	51-9121	Coating, Painting, and Spraying Machin	1, 2
15.0607	Plastics	92953	Painting Machine Ops.&Tenders	1	733	Miscellaneous Woodworking Machine C	51-9121	Coating, Painting, and Spraying Machin	1, 2
15.0607	Plastics	92953	Painting Machine Ops.&Tenders	1	749	Miscellaneous Textile Machine Operato	51-9121	Coating, Painting, and Spraying Machin	1, 2
15.0607	Plastics	92953	Painting Machine Ops.&Tenders	1	759	Painting And Paint Spraying Machine O	51-9121	Coating, Painting, and Spraying Machin	1, 2
15.0607	Plastics	92960	Coat/paint Ops/Tndrs/Sttrs	1	000		00-0000		
15.0607	Plastics	93944	Molders & Casters, Hand	1	719	Molding And Casting Machine Operator	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	93944	Molders & Casters, Hand	1	755	Extruding And Forming Machine Operat	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	93944	Molders & Casters, Hand	1	785	Assemblers	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	93944	Molders & Casters, Hand	1	787	Hand Molding, Casting, And Forming O	51-4199	Metal Workers and Plastic Workers, Al	
15.0607	Plastics	93944	Molders & Casters, Hand	1	889	Laborers, Except Construction	51-4199	Metal Workers and Plastic Workers, Al	
15.0699	Industrial Production	22508	Industrial engineering technicians &	1	214	Industrial Engineering Technicians	17-3026	Industrial Engineering Technicians	3
15.0699	Industrial Production	22511	Mechanical engineering technicians	1	215	Mechanical Engineering Technicians	17-3027	Mechanical Engineering Technicians	4
15.0699	Industrial Production	22599	All Other Engineering And Related	1	216	Engineering Technicians, N.E.C.	17-3025	Environmental Engineering Technicians	

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
15.0699	Industrial Production	22599	All Other Engineering And Related	1	216	Engineering Technicians, N.E.C.	17-3029	Engineering Technicians, Except Draft	
15.0699	Industrial Production	22599	All Other Engineering And Related	1	216	Engineering Technicians, N.E.C.	19-4041	Geological and Petroleum Technicians	3
15.0699	Industrial Production	22599	All Other Engineering And Related	1	216	Engineering Technicians, N.E.C.	19-4091	Environmental Science and Protection	3
15.0699	Industrial Production	24501	Science/Mathematics Techns	0.366	000		00-0000		
15.0699	Industrial Production	24505	Chemical technicians & technologi	1	224	Chemical Technicians	19-4031	Chemical Technicians	3
15.0699	Industrial Production	24511	Petroleum technicians & technologi	1	225	Science Technicians, N.E.C.	19-4041	Geological and Petroleum Technicians	3
15.0699	Industrial Production	25104	Computer support specialists	1	064	Computer Systems Analysts And Scient	15-1041	Computer Support Specialists	4
15.0699	Industrial Production	25104	Computer support specialists	1	235	Technicians, N.E.C.	15-1041	Computer Support Specialists	4
15.0699	Industrial Production	25196	Computer Scientists, NEC	1	000		00-0000		
15.0699	Industrial Production	35199	Engineering Techns, NEC	1	000		00-0000		
15.0699	Industrial Production	58008	Production, planning & expediting c	1	363	Production Coordinators	43-5061	Production, Planning, and Expediting C	2
15.0699	Industrial Production	58008	Production, planning & expediting c	1	368	Weighers, Measurers, Checkers And Sa	43-5061	Production, Planning, and Expediting C	2
15.0699	Industrial Production	58008	Production, planning & expediting c	1	373	Expeditors	43-5061	Production, Planning, and Expediting C	2
15.0699	Industrial Production	58008	Production, planning & expediting c	1	796	Production Inspectors, Checkers, And E	43-5061	Production, Planning, and Expediting C	2
15.0699	Industrial Production	83000	Inspectors and related occupations	0.643	000		00-0000		
15.0699	Industrial Production	83005	Production Inspectors, Testers, Gra	1	488	Graders And Sorters, Agricultural Produ	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0699	Industrial Production	83005	Production Inspectors, Testers, Gra	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0699	Industrial Production	83005	Production Inspectors, Testers, Gra	1	715	Miscellaneous Metal, Plastic, Stone And	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0699	Industrial Production	83005	Production Inspectors, Testers, Gra	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0699	Industrial Production	83005	Production Inspectors, Testers, Gra	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0699	Industrial Production	83005	Production Inspectors, Testers, Gra	1	798	Production Samplers And Weighers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0699	Industrial Production	83005	Production Inspectors, Testers, Gra	1	799	Graders And Sorters, Exc. Agricultural	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0699	Industrial Production	83005	Production Inspectors, Testers, Gra	1	889	Laborers, Except Construction	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
15.0699	Industrial Production	85109	Industrial Machinery Mechanics	0.319	000		00-0000		
15.0699	Industrial Production	85112	Machinery maintenance mechanics	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
15.0699	Industrial Production	85112	Machinery maintenance mechanics	1	768	Crushing And Grinding Machine Operat	49-9041	Industrial Machinery Mechanics	3
15.0699	Industrial Production	85113	Machinery maintenance mechanics	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
15.0699	Industrial Production	85116	Machinery maintenance mechanics	1	507	Bus, Truck, And Stationary Engine Mec	49-9041	Industrial Machinery Mechanics	3
15.0699	Industrial Production	85116	Machinery maintenance mechanics	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
15.0699	Industrial Production	85116	Machinery maintenance mechanics	1	547	Specified Mechanics And Repairers, N.I	49-9041	Industrial Machinery Mechanics	3
15.0699	Industrial Production	85117	Underground mine machinery mecl	1	516	Heavy Equipment Mechanics	49-9041	Industrial Machinery Mechanics	3
20.0299	Child And Adult Care	62041	Child Care Workers, Private House	1	406	Child Care Workers, Private Household	00-0000		
20.0299	Child And Adult Care	68035	Personal and Home Care Aides	1	465	Welfare Service Aides	39-9021	Personal and Home Care Aides	2
20.0299	Child And Adult Care	68038	Child Care Workers	1	468	Child Care Workers, N.E.C.	39-9011	Child Care Workers	1
20.0301	Clothing And Textiles	34038	Designers, Except Interior Designe	1	185	Designers	27-1022	Fashion Designers	3
20.0301	Clothing And Textiles	83000	Inspectors and related occupations	0.643	000		00-0000		
20.0301	Clothing And Textiles	83005	Production Inspectors, Testers, Gra	1	488	Graders And Sorters, Agricultural Produ	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
20.0301	Clothing And Textiles	83005	Production Inspectors, Testers, Gra	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
20.0301	Clothing And Textiles	83005	Production Inspectors, Testers, Gra	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
20.0301	Clothing And Textiles	83005	Production Inspectors, Testers, Gra	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
20.0301	Clothing And Textiles	83005	Production Inspectors, Testers, Gra	1	798	Production Samplers And Weighers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
20.0301	Clothing And Textiles	83005	Production Inspectors, Testers, Gra	1	799	Graders And Sorters, Exc. Agricultural	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
20.0301	Clothing And Textiles	83005	Production Inspectors, Testers, Gra	1	889	Laborers, Except Construction	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
20.0301	Clothing And Textiles	85956	Menders, garments, linens & relate	1	674	Miscellaneous Precision Apparel And Fa	49-9093	Fabric Menders, except Garment	
20.0301	Clothing And Textiles	85956	Menders, garments, linens & relate	1	674	Miscellaneous Precision Apparel And Fa	51-6051	Sewers, Hand	1
20.0301	Clothing And Textiles	85956	Menders, Garments, Linens, And R	1	674	Miscellaneous Precision Apparel And Fa	51-6062	Textile Cutting Machine Setters, Opera	3

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
20.0301	Clothing And Textiles	89502	Fabric And Apparel Patternmakers	1	646	Lay-Out Workers	51-6092	Fabric and Apparel Patternmakers	2
20.0301	Clothing And Textiles	89502	Fabric And Apparel Patternmakers	1	674	Miscellaneous Precision Apparel And Fa	51-6092	Fabric and Apparel Patternmakers	2
20.0301	Clothing And Textiles	89505	Custom Tailors And Sewers	1	666	Dressmakers	51-6052	Tailors, Dressmakers, and Custom Sev	3, 4
20.0301	Clothing And Textiles	89505	Custom Tailors And Sewers	1	667	Tailors	51-6052	Tailors, Dressmakers, and Custom Sev	3, 4
20.0301	Clothing And Textiles	89508	Upholsterers	1	668	Upholsterers	51-6093	Upholsterers	3
20.0301	Clothing And Textiles	89514	Spotters, Dry Cleaning	1	748	Laundering And Dry Cleaning Machine	51-6011	Laundry and Dry-Cleaning Workers	1, 3
20.0301	Clothing And Textiles	89517	Pressers, Delicate Fabrics	1	748	Laundering And Dry Cleaning Machine	51-6021	Pressers, Textile, Garment, and Relate	1, 2
20.0301	Clothing And Textiles	89521	Precision dyers	1	748	Laundering And Dry Cleaning Machine	51-6011	Laundry and Dry-Cleaning Workers	1, 3
20.0301	Clothing And Textiles	89598	Precision Textile Wkrs, NEC	1	000		00-0000		
20.0301	Clothing And Textiles	89599	All Other Precision Textile, Appare	1	674	Miscellaneous Precision Apparel And Fa	51-6099	Textile, Apparel, and Furnishings Work	
20.0301	Clothing And Textiles	89599	All Other Precision Textile, Appare	1	889	Laborers, Except Construction	51-6099	Textile, Apparel, and Furnishings Work	
20.0301	Clothing And Textiles	92717	Sewing machine operators, garmer	1	744	Textile Sewing Machine Operators	51-6031	Sewing Machine Operator	1
20.0301	Clothing And Textiles	92721	Sewing machine operators, non-ga	1	674	Miscellaneous Precision Apparel And Fa	51-6031	Sewing Machine Operator	1
20.0301	Clothing And Textiles	92721	Sewing machine operators, non-ga	1	744	Textile Sewing Machine Operators	51-6031	Sewing Machine Operator	1
20.0301	Clothing And Textiles	92721	Sewing machine operators, non-ga	1	777	Miscellaneous Machine Operators, N.E.	51-6031	Sewing Machine Operator	1
20.0301	Clothing And Textiles	92726	Laundry And Dry-Cleaning Machine	1	748	Laundering And Dry Cleaning Machine	51-6011	Laundry and Dry-Cleaning Workers	1, 3
20.0301	Clothing And Textiles	92728	Pressing Machine Operators And T	1	747	Pressing Machine Operators	51-6021	Pressers, Textile, Garment, and Relate	1, 2
20.0301	Clothing And Textiles	92728	Pressing Machine Operators And T	1	749	Miscellaneous Textile Machine Operato	51-6021	Pressers, Textile, Garment, and Relate	1, 2
20.0301	Clothing And Textiles	92728	Pressing Machine Operators And T	1	889	Laborers, Except Construction	51-6021	Pressers, Textile, Garment, and Relate	1, 2
20.0301	Clothing And Textiles	93921	Pressers, hand	1	795	Miscellaneous Hand Working Occupatic	51-6021	Pressers, Textile, Garment, and Relate	1, 2
20.0301	Clothing And Textiles	93923	Sewers, hand	1	666	Dressmakers	51-6051	Sewers, Hand	1
20.0301	Clothing And Textiles	93923	Sewers, hand	1	674	Miscellaneous Precision Apparel And Fa	51-6051	Sewers, Hand	1
20.0499	Hospitality And Food	15026	Food Service And Lodging Manage	1	017	Managers, Food Serving And Lodging E	11-9051	Food Service Managers	4
20.0499	Hospitality And Food	15026	Food Service And Lodging Manage	1	017	Managers, Food Serving And Lodging E	11-9081	Lodging Managers	3
20.0499	Hospitality And Food	43021	Travel Agents	1	274	Sales Workers, Other Commodities	41-3041	Travel Agents	2
20.0499	Hospitality And Food	53802	Travel Clerks	1	318	Transportation Ticket And Reservation /	43-4181	Reservation and Transportation Ticket	2
20.0499	Hospitality And Food	53805	Reservation and Transportation Tid	1	318	Transportation Ticket And Reservation /	43-4181	Reservation and Transportation Ticket	2
20.0499	Hospitality And Food	53808	Hotel Desk Clerks	1	317	Hotel Clerks	43-4081	Hotel, Motel, and Resort Desk Clerks	2
20.0499	Hospitality And Food	53810	Reserv,Ticket Agts, Travel Clks	1	000		00-0000		
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	415	Supervisors, Guards	35-1012	First-Line Supervisors/Managers of Fo	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	433	Supervisors, Food Preparation And Ser	35-1012	First-Line Supervisors/Managers of Fo	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	448	Supervisors, Cleaning And Building Ser	35-1012	First-Line Supervisors/Managers of Fo	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	456	Supervisors, Personal Service Occupati	35-1012	First-Line Supervisors/Managers of Fo	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	415	Supervisors, Guards	39-1011	Gaming Supervisors	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	433	Supervisors, Food Preparation And Ser	39-1011	Gaming Supervisors	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	448	Supervisors, Cleaning And Building Ser	39-1011	Gaming Supervisors	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	456	Supervisors, Personal Service Occupati	39-1011	Gaming Supervisors	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	415	Supervisors, Guards	39-1012	Slot Key Persons	
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	433	Supervisors, Food Preparation And Ser	39-1012	Slot Key Persons	
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	448	Supervisors, Cleaning And Building Ser	39-1012	Slot Key Persons	
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	456	Supervisors, Personal Service Occupati	39-1012	Slot Key Persons	
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	415	Supervisors, Guards	39-1021	First-Line Supervisors/Managers of Pe	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	433	Supervisors, Food Preparation And Ser	39-1021	First-Line Supervisors/Managers of Pe	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	448	Supervisors, Cleaning And Building Ser	39-1021	First-Line Supervisors/Managers of Pe	3
20.0499	Hospitality And Food	61099	All Other Supervisors And Manage	1	456	Supervisors, Personal Service Occupati	39-1021	First-Line Supervisors/Managers of Pe	3
20.0499	Hospitality And Food	65002	Host & Hostess	1	433	Supervisors, Food Preparation And Ser	35-9031	Hosts and Hostesses, Restaurant, Lou	3
20.0499	Hospitality And Food	65021	Bakers,Bread & Pastry	1	436	Cooks	51-3011	Bakers	3

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	Jobzone
20.0499	Hospitality And Food	65026	Cooks, Restaurant	1	436	Cooks	35-2014	Cooks, Restaurant	3
20.0499	Hospitality And Food	65026	Cooks, Restaurant	1	436	Cooks	35-2019	Cooks, All Other	
20.0499	Hospitality And Food	65028	Cooks, Institution Or Cafeteria	1	436	Cooks	35-2012	Cooks, Institution and Cafeteria	2
20.0499	Hospitality And Food	65032	Cooks, Fast Food	1	436	Cooks	35-2011	Cooks, Fast Food	2
20.0499	Hospitality And Food	65099	All Other Food Service Workers	1	439	Kitchen Workers, Food Preparation	35-9099	Food Preparation and Serving Related	
20.0499	Hospitality And Food	65099	All Other Food Service Workers	1	444	Miscellaneous Food Preparation Occup	35-9099	Food Preparation and Serving Related	
20.0499	Hospitality And Food	68026	Flight Attendants	1	463	Public Transportation Attendants	39-6031	Flight Attendants	2
20.0499	Hospitality And Food	69998	Service Workers, NEC	1	000		00-0000		
20.0499	Hospitality And Food	69999	All Other Service Workers	1	456	Supervisors, Personal Service Occupati	39-3019	Gaming Service Workers, All Other	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	463	Public Transportation Attendants	39-3019	Gaming Service Workers, All Other	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	469	Personal Service Occupations, N.E.C.	39-3019	Gaming Service Workers, All Other	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	456	Supervisors, Personal Service Occupati	39-6012	Concierges	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	463	Public Transportation Attendants	39-6012	Concierges	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	469	Personal Service Occupations, N.E.C.	39-6012	Concierges	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	456	Supervisors, Personal Service Occupati	39-9031	Fitness Trainers and Aerobics Instruct	3
20.0499	Hospitality And Food	69999	All Other Service Workers	1	463	Public Transportation Attendants	39-9031	Fitness Trainers and Aerobics Instruct	3
20.0499	Hospitality And Food	69999	All Other Service Workers	1	469	Personal Service Occupations, N.E.C.	39-9031	Fitness Trainers and Aerobics Instruct	3
20.0499	Hospitality And Food	69999	All Other Service Workers	1	456	Supervisors, Personal Service Occupati	39-9099	Personal Care and Service Workers, A	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	463	Public Transportation Attendants	39-9099	Personal Care and Service Workers, A	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	469	Personal Service Occupations, N.E.C.	39-9099	Personal Care and Service Workers, A	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	456	Supervisors, Personal Service Occupati	41-2012	Gaming Change Persons and Booth C	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	463	Public Transportation Attendants	41-2012	Gaming Change Persons and Booth C	
20.0499	Hospitality And Food	69999	All Other Service Workers	1	469	Personal Service Occupations, N.E.C.	41-2012	Gaming Change Persons and Booth C	
20.0499	Hospitality And Food	89808	Food Batchmakers	1	688	Food Batchmakers	51-3092	Food Batchmakers	3
20.0501	Commercial Painting/	34044	Merchandise Displayers And Windc	1	185	Designers	27-1026	Merchandise Displayers and Window T	3
20.0501	Commercial Painting/	87108	Drywall installers	1	573	Drywall Installers	47-2081	Drywall and Ceiling Tile Installers	2, 4
20.0501	Commercial Painting/	87111	Tapers	1	573	Drywall Installers	47-2082	Tapers	2
20.0501	Commercial Painting/	87120	Drywall installers and Finishers	1	000		00-0000		
20.0501	Commercial Painting/	87402	Painters & paperhangers, construct	1	579	Painters, Construction And Maintenance	47-2141	Painters, Construction and Maintenanc	4
20.0501	Commercial Painting/	87402	Painters & paperhangers, construct	1	583	Paperhangers	47-2141	Painters, Construction and Maintenanc	4
20.0501	Commercial Painting/	87402	Painters & paperhangers, construct	1	579	Painters, Construction And Maintenance	47-2142	Paperhangers	2
20.0501	Commercial Painting/	87402	Painters & paperhangers, construct	1	583	Paperhangers	47-2142	Paperhangers	2
20.0501	Commercial Painting/	89508	Upholsterers	1	668	Upholsterers	51-6093	Upholsterers	3
20.0601	Building & Home Mai	61008	Housekeeping Supervisors	1	448	Supervisors, Cleaning And Building Ser	37-1011	First-Line Supervisors/Managers of Ho	3, 4
20.0601	Building & Home Mai	67001	Janitors & Cleaners, Inc Maid	1	000		00-0000		
20.0601	Building & Home Mai	67002	Maids And Housekeeping Cleaners	1	449	Maids And Housemen	37-2012	Maids and Housekeeping Cleaners	1
20.0601	Building & Home Mai	67005	Janitors And Cleaners, Except Maid	1	453	Janitors And Cleaners	37-2011	Janitors and Cleaners, Except Maids a	1
20.0601	Building & Home Mai	67098	Cleaning/Bldg Serv Wkrs, NEC	1	000		00-0000		
20.0601	Building & Home Mai	67099	All Other Cleaning And Building Se	1	449	Maids And Housemen	37-2019	Building Cleaning Workers, All Other	
20.0601	Building & Home Mai	67099	All Other Cleaning And Building Se	1	469	Personal Service Occupations, N.E.C.	37-2019	Building Cleaning Workers, All Other	
20.0601	Building & Home Mai	68035	Personal And Home Care Aides	1	446	HEALTH AIDES, EXCEPT NURSING	39-9021	Personal and Home Care Aides	2
20.0601	Building & Home Mai	85132	Maintenance Repairers, General U	1	547	Specified Mechanics And Repairers, N.	49-9042	Maintenance and Repair Workers, Gen	3
43.0107	Law Enforcement	63009	Police Detectives/Investigators	1	000		00-0000		
43.0107	Law Enforcement	63011	Police Detectives	1	418	Police And Detectives, Public Service	33-3021	Detectives and Criminal Investigators	3, 4
43.0107	Law Enforcement	63014	Police Patrol Officers	1	418	Police And Detectives, Public Service	33-3051	Police and Sheriff's Patrol Officers	2, 3

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	Jobzone
43.0107	Law Enforcement	63014	Police Patrol Officers	1	427	Protective Service Occupations, N.E.C.	33-3051	Police and Sheriff's Patrol Officers	2, 3
43.0107	Law Enforcement	63017	Correction Officers And Jailers	1	424	Correctional Institution Officers	33-3012	Correctional Officers and Jailers	2
43.0107	Law Enforcement	63028	Criminal Investigators, Federal	1	418	Police And Detectives, Public Service	33-3021	Detectives and Criminal Investigators	3, 4
43.0107	Law Enforcement	63032	Sheriffs And Deputy Sheriffs	1	423	Sheriffs, Bailiffs, And Other Law Enforce	33-3051	Police and Sheriff's Patrol Officers	2, 3
43.0107	Law Enforcement	63035	Detectives And Investigators, Exce	1	415	Supervisors, Guards	33-9021	Private Detectives and Investigators	2
43.0107	Law Enforcement	63035	Detectives And Investigators, Exce	1	426	Guards And Police, Exc. Public Service	33-9021	Private Detectives and Investigators	2
43.0107	Law Enforcement	63035	Detectives And Investigators, Exce	1	415	Supervisors, Guards	33-9031	Gaming Surveillance Officers and Garr	
43.0107	Law Enforcement	63035	Detectives And Investigators, Exce	1	426	Guards And Police, Exc. Public Service	33-9031	Gaming Surveillance Officers and Garr	
43.0107	Law Enforcement	63038	Railroad & Transit Police	1	426	Guards And Police, Exc. Public Service	33-3052	Transit and Railroad Police	2
43.0107	Law Enforcement	63041	Fish & Game Wardens	1	423	Sheriffs, Bailiffs, And Other Law Enforce	33-3031	Fish and Game Wardens	3
43.9999	Public Safety/Protecti	32508	Emergency Medical Technician	1	208	Health Technologists And Technicians,	29-2041	Emergency Medical Technicians and P	2
43.9999	Public Safety/Protecti	58002	Dispatchers, Police, Fire, Ambulan	1	359	Dispatchers	43-5031	Police, Fire, and Ambulance Dispatch	2
43.9999	Public Safety/Protecti	63001	Fire Inspection Occupations	1	000		00-0000		
43.9999	Public Safety/Protecti	63002	Fire Inspectors	1	416	Fire Inspection And Fire Prevention Occ	33-2021	Fire Inspectors and Investigators	2, 4
43.9999	Public Safety/Protecti	63005	Forest Fire Inspectors And Prevent	1	079	Forestry And Conservation Scientists	33-2022	Forest Fire Inspectors and Prevention	2
43.9999	Public Safety/Protecti	63005	Forest Fire Inspectors And Prevent	1	416	Fire Inspection And Fire Prevention Occ	33-2022	Forest Fire Inspectors and Prevention	2
43.9999	Public Safety/Protecti	63008	Fire Fighters	1	417	Firefighting Occupations	33-2011	Fire Fighters	2
43.9999	Public Safety/Protecti	63009	Police Detectives/Investigators	1	000		00-0000		
43.9999	Public Safety/Protecti	63011	Police Detectives	1	418	Police And Detectives, Public Service	33-3021	Detectives and Criminal Investigators	3, 4
43.9999	Public Safety/Protecti	63014	Police Patrol Officers	1	418	Police And Detectives, Public Service	33-3051	Police and Sheriff's Patrol Officers	2, 3
43.9999	Public Safety/Protecti	63014	Police Patrol Officers	1	427	Protective Service Occupations, N.E.C.	33-3051	Police and Sheriff's Patrol Officers	2, 3
43.9999	Public Safety/Protecti	63017	Correction Officers And Jailers	1	424	Correctional Institution Officers	33-3012	Correctional Officers and Jailers	2
43.9999	Public Safety/Protecti	63028	Criminal Investigators, Federal	1	418	Police And Detectives, Public Service	33-3021	Detectives and Criminal Investigators	3, 4
43.9999	Public Safety/Protecti	63032	Sheriffs And Deputy Sheriffs	1	423	Sheriffs, Bailiffs, And Other Law Enforce	33-3051	Police and Sheriff's Patrol Officers	2, 3
43.9999	Public Safety/Protecti	63035	Detectives And Investigators, Exce	1	415	Supervisors, Guards	33-9021	Private Detectives and Investigators	2
43.9999	Public Safety/Protecti	63035	Detectives And Investigators, Exce	1	426	Guards And Police, Exc. Public Service	33-9021	Private Detectives and Investigators	2
43.9999	Public Safety/Protecti	63038	Railroad & Transit Police	1	426	Guards And Police, Exc. Public Service	33-3052	Transit and Railroad Police	2
43.9999	Public Safety/Protecti	63041	Fish & Game Wardens	1	423	Sheriffs, Bailiffs, And Other Law Enforce	33-3031	Fish and Game Wardens	3
43.9999	Public Safety/Protecti	63097	Protective Service Workers, NEC	1	000		00-0000		
43.9999	Public Safety/Protecti	63099	All Other Protective Service Worke	1	427	Protective Service Occupations, N.E.C.	21-1092	Probation Officers and Correctional Tre	3
43.9999	Public Safety/Protecti	63099	All Other Protective Service Worke	1	427	Protective Service Occupations, N.E.C.	33-9011	Animal Control Workers	2
43.9999	Public Safety/Protecti	63099	All Other Protective Service Worke	1	427	Protective Service Occupations, N.E.C.	33-9092	Lifeguards, Ski Patrol, and Other Recre	2
43.9999	Public Safety/Protecti	63099	All Other Protective Service Worke	1	427	Protective Service Occupations, N.E.C.	33-9099	Protective Service Workers, All Other	
46.0301	Electric And Power T	85702	Telephone And Cable Tv Line Insta	1	523	Electronic Repairers, Communications A	49-9052	Telecommunications Line Installers and	3
46.0301	Electric And Power T	85702	Telephone And Cable Tv Line Insta	1	527	Telephone Line Installers And Repairers	49-9052	Telecommunications Line Installers and	3
46.0301	Electric And Power T	85714	Electric Motor, Transformer, And R	1	533	Miscellaneous Electrical And Electronic	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
46.0301	Electric And Power T	85714	Electric Motor, Transformer, And R	1	577	Electrical Power Installers And Repairer	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
46.0301	Electric And Power T	85714	Electric Motor, Transformer, And R	1	889	Laborers, Except Construction	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
46.0301	Electric And Power T	85720	Electric & Electronic Rprs, NEC	1	000		00-0000		
46.0301	Electric And Power T	85726	Station Installers, Telephone	1	529	Telephone Installers And Repairers	49-2022	Telecommunications Equipment Install	2, 3, 4
46.0301	Electric And Power T	85728	Electrical Installers And Repairers,	1	533	Miscellaneous Electrical And Electronic	49-2093	Electrical and Electronics Installers and	3
46.0301	Electric And Power T	85728	Electrical Installers And Repairers,	1	533	Miscellaneous Electrical And Electronic	49-2096	Electronic Equipment Installers and Re	3
46.0301	Electric And Power T	87202	Electrician	1	523	Electronic Repairers, Communications A	47-2111	Electricians	3
46.0301	Electric And Power T	87202	Electrician	1	575	Electricians	47-2111	Electricians	3
46.0301	Electric And Power T	87202	Electrician	1	576	Electrician Apprentices	47-2111	Electricians	3
46.0301	Electric And Power T	87202	Electrician	1	523	Electronic Repairers, Communications A	49-2098	Security and Fire Alarm Systems Insta	

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
46.0301	Electric And Power T	87202	Electrician	1	575	Electricians	49-2098	Security and Fire Alarm Systems Instal	
46.0301	Electric And Power T	87202	Electrician	1	576	Electrician Apprentices	49-2098	Security and Fire Alarm Systems Instal	
46.9900	Construction Trades	21908	Construction And Building Inspecto	1	035	Construction Inspectors	47-4011	Construction and Building Inspectors	3
46.9900	Construction Trades	81000	First-Line Supervisors and Manage	0.182	000		00-0000		
46.9900	Construction Trades	81005	First Line Supervisors, Constructio	1	503	Supervisors, Mechanics And Repairers	47-1011	First-Line Supervisors/Managers of Co	3, 4
46.9900	Construction Trades	81005	First Line Supervisors, Constructio	1	553	Supervisors; Brickmasons, Stonemaso	47-1011	First-Line Supervisors/Managers of Co	3, 4
46.9900	Construction Trades	81005	First Line Supervisors, Constructio	1	554	Supervisors, Carpenters And Related W	47-1011	First-Line Supervisors/Managers of Co	3, 4
46.9900	Construction Trades	81005	First Line Supervisors, Constructio	1	555	Supervisors, Electricians And Power Tra	47-1011	First-Line Supervisors/Managers of Co	3, 4
46.9900	Construction Trades	81005	First Line Supervisors, Constructio	1	556	Supervisors; Painters, Paperhangers Ar	47-1011	First-Line Supervisors/Managers of Co	3, 4
46.9900	Construction Trades	81005	First Line Supervisors, Constructio	1	557	Supervisors; Plumbers, Pipefitters And	47-1011	First-Line Supervisors/Managers of Co	3, 4
46.9900	Construction Trades	81005	First Line Supervisors, Constructio	1	558	Supervisors, N.E.C.	47-1011	First-Line Supervisors/Managers of Co	3, 4
46.9900	Construction Trades	81005	First Line Supervisors, Constructio	1	613	Supervisors, Extractive Occupations	47-1011	First-Line Supervisors/Managers of Co	3, 4
46.9900	Construction Trades	85132	Maintenance Repairers, General U	1	547	Specified Mechanics And Repairers, N.I	49-9042	Maintenance and Repair Workers, Gen	3
46.9900	Construction Trades	85702	Telephone And Cable Tv Line Insta	1	523	Electronic Repairers, Communications /	49-9052	Telecommunications Line Installers and	3
46.9900	Construction Trades	85702	Telephone And Cable Tv Line Insta	1	527	Telephone Line Installers And Repairers	49-9052	Telecommunications Line Installers and	3
46.9900	Construction Trades	85938	Installers And Repairers, Manufact	1	547	Specified Mechanics And Repairers, N.I	49-3092	Recreational Vehicle Service Technicia	2
46.9900	Construction Trades	85938	Installers And Repairers, Manufact	1	547	Specified Mechanics And Repairers, N.I	49-9095	Manufactured Building and Mobile Hom	2
46.9900	Construction Trades	87102	Carpenters	1	567	Carpenters	47-2031	Carpenters	2, 3, 4
46.9900	Construction Trades	87102	Carpenters	1	569	Carpenter Apprentices	47-2031	Carpenters	2, 3, 4
46.9900	Construction Trades	87102	Carpenters	1	567	Carpenters	47-2042	Floor Layers, Except Carpet, Wood, an	3
46.9900	Construction Trades	87102	Carpenters	1	569	Carpenter Apprentices	47-2042	Floor Layers, Except Carpet, Wood, an	3
46.9900	Construction Trades	87102	Carpenters	1	567	Carpenters	47-2081	Drywall and Ceiling Tile Installers	2, 4
46.9900	Construction Trades	87102	Carpenters	1	569	Carpenter Apprentices	47-2081	Drywall and Ceiling Tile Installers	2, 4
46.9900	Construction Trades	87105	Ceiling Tile Installers and Acoustica	1	567	Carpenters	47-2081	Drywall and Ceiling Tile Installers	2, 4
46.9900	Construction Trades	87108	Drywall Installers	1	573	Drywall Installers	47-2081	Drywall and Ceiling Tile Installers	2, 4
46.9900	Construction Trades	87110	Carpenters	1	000		00-0000		
46.9900	Construction Trades	87111	Tapers	1	573	Drywall Installers	47-2082	Tapers	2
46.9900	Construction Trades	87114	Lathers	1	573	Drywall Installers	47-2081	Drywall and Ceiling Tile Installers	2, 4
46.9900	Construction Trades	87120	Drywall installers and Finishers	1	000		00-0000		
46.9900	Construction Trades	87121	Brattice Builders	1	599	Construction Trades, N.E.C.	47-2031	Carpenters	2, 3, 4
46.9900	Construction Trades	87202	Electricians	1	575	Electricians	47-2111	Electricians	3
46.9900	Construction Trades	87202	Electricians	1	576	Electrician Apprentices	47-2111	Electricians	3
46.9900	Construction Trades	87202	Electricians	1	575	Electricians	49-2098	Security and Fire Alarm Systems Instal	
46.9900	Construction Trades	87202	Electricians	1	576	Electrician Apprentices	49-2098	Security and Fire Alarm Systems Instal	
46.9900	Construction Trades	87302	Brick Masons	1	563	Brickmasons And Stonemasons	47-2021	Brickmasons and Blockmasons	3
46.9900	Construction Trades	87302	Brick Masons	1	564	Brickmason And Stonemason Apprentic	47-2021	Brickmasons and Blockmasons	3
46.9900	Construction Trades	87302	Brick Masons	1	599	Construction Trades, N.E.C.	47-2021	Brickmasons and Blockmasons	3
46.9900	Construction Trades	87302	Brick Masons	1	563	Brickmasons And Stonemasons	47-4091	Segmental Pavers	
46.9900	Construction Trades	87302	Brick Masons	1	564	Brickmason And Stonemason Apprentic	47-4091	Segmental Pavers	
46.9900	Construction Trades	87302	Brick Masons	1	599	Construction Trades, N.E.C.	47-4091	Segmental Pavers	
46.9900	Construction Trades	87308	Hard Tile Setters	1	565	Tile Setters, Hard And Soft	47-2044	Tile and Marble Setters	2
46.9900	Construction Trades	87310	Bricklayers & Stone Masons	0.867	000		00-0000		
46.9900	Construction Trades	87311	Concrete And Terrazzo Finishers	1	588	Concrete And Terrazzo Finishers	47-2044	Tile and Marble Setters	2
46.9900	Construction Trades	87311	Concrete And Terrazzo Finishers	1	588	Concrete And Terrazzo Finishers	47-2051	Cement Masons and Concrete Finishe	3
46.9900	Construction Trades	87311	Concrete And Terrazzo Finishers	1	588	Concrete And Terrazzo Finishers	47-2053	Terrazzo Workers and Finishers	3
46.9900	Construction Trades	87311	Concrete And Terrazzo Finishers	1	588	Concrete And Terrazzo Finishers	47-4091	Segmental Pavers	
46.9900	Construction Trades	87314	Reinforcing Metal Workers	1	597	Structural Metal Workers	47-2171	Reinforcing Iron and Rebar Workers	3

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	Jobzone
46.9900	Construction Trades	87320	Structural/Reinforc Metal Wkrs	1	000		00-0000		
46.9900	Construction Trades	87402	Painters And Paperhangers, Const	1	579	Painters, Construction And Maintenance	47-2142	Paperhangers	2
46.9900	Construction Trades	87402	Painters And Paperhangers, Const	1	583	Paperhangers	47-2142	Paperhangers	2
46.9900	Construction Trades	87502	Plumbers, Pipefitters, And Steamfit	1	585	Plumbers, Pipefitters, And Steamfitters	47-2152	Plumbers, Pipefitters, and Steamfitters	2, 3, 4
46.9900	Construction Trades	87502	Plumbers, Pipefitters, And Steamfit	1	587	Plumber, Pipefitter, And Steamfitter App	47-2152	Plumbers, Pipefitters, and Steamfitters	2, 3, 4
46.9900	Construction Trades	87505	Pipelaying Fitters	1	599	Construction Trades, N.E.C.	47-2152	Plumbers, Pipefitters, and Steamfitters	2, 3, 4
46.9900	Construction Trades	87508	Pipelayers	1	565	Tile Setters, Hard And Soft	47-2151	Pipelayers	2
46.9900	Construction Trades	87508	Pipelayers	1	599	Construction Trades, N.E.C.	47-2151	Pipelayers	2
46.9900	Construction Trades	87510	Pipelayers & Fitters	1	000		00-0000		
46.9900	Construction Trades	87511	Septic Tank Servicers And Sewer F	1	599	Construction Trades, N.E.C.	47-4071	Septic Tank Servicers and Sewer Pipe	2
46.9900	Construction Trades	87605	Floor Layers, Except Carpet, Wood	1	565	Tile Setters, Hard And Soft	47-2042	Floor Layers, Except Carpet, Wood, an	3
46.9900	Construction Trades	87608	Floor Sanding Machine Operators	1	599	Construction Trades, N.E.C.	47-2043	Floor Sanders and Finishers	2
46.9900	Construction Trades	87702	Air Hammer Operators	1	599	Construction Trades, N.E.C.	47-2061	Construction Laborers	2
46.9900	Construction Trades	87705	Pile Driving Operators	1	599	Construction Trades, N.E.C.	47-2072	Pile-Driver Operators	2
46.9900	Construction Trades	87708	Paving, Surfacing, and Tamping Ec	1	594	Paving, Surfacing, And Tamping Equipn	47-2071	Paving, Surfacing, and Tamping Equip	2
46.9900	Construction Trades	87708	Paving, Surfacing, and Tamping Ec	1	855	Grader, Dozer, And Scraper Operators	47-2071	Paving, Surfacing, and Tamping Equip	2
46.9900	Construction Trades	87802	Insulation Workers	1	593	Insulation Workers	47-2131	Insulation Workers, Floor, Ceiling, and	3
46.9900	Construction Trades	87802	Insulation Workers	1	593	Insulation Workers	47-2132	Insulation Workers, Mechanical	3
46.9900	Construction Trades	87805	Sheet Metal Duct Installers	1	599	Construction Trades, N.E.C.	47-2211	Sheet Metal Workers	3
46.9900	Construction Trades	87808	Roofers	1	595	Roofers	47-2181	Roofers	3
46.9900	Construction Trades	87811	Glaziers	1	589	Glaziers	47-2121	Glaziers	3
46.9900	Construction Trades	87814	Structural Metal Workers	1	597	Structural Metal Workers	47-2221	Structural Iron and Steel Workers	3
46.9900	Construction Trades	87817	Fence Erectors	1	599	Construction Trades, N.E.C.	47-4031	Fence Erectors	2
46.9900	Construction Trades	87823	Sheet Metal Wkrs, Duct Instlrs	1	000		00-0000		
46.9900	Construction Trades	87898	Construction Trades Workers	1	000		00-0000		
46.9900	Construction Trades	87899	All Other Construction Trades Work	1	567	Carpenters	47-4099	Construction and Related Workers, All	
46.9900	Construction Trades	87899	All Other Construction Trades Work	1	585	Plumbers, Pipefitters, And Steamfitters	47-4099	Construction and Related Workers, All	
46.9900	Construction Trades	87899	All Other Construction Trades Work	1	599	Construction Trades, N.E.C.	47-4099	Construction and Related Workers, All	
46.9900	Construction Trades	87899	All Other Construction Trades Work	1	684	Miscellaneous Precision Workers, N.E.C.	47-4099	Construction and Related Workers, All	
46.9900	Construction Trades	89132	Sheet Metal Workers	1	653	Sheet Metal Workers	47-2211	Sheet Metal Workers	3
46.9900	Construction Trades	89132	Sheet Metal Workers	1	654	Sheet Metal Worker Apprentices	47-2211	Sheet Metal Workers	3
46.9900	Construction Trades	89132	Sheet Metal Workers	1	715	Miscellaneous Metal, Plastic, Stone Anc	47-2211	Sheet Metal Workers	3
46.9900	Construction Trades	92926	Boiler Operators And Tenders, Low	1	696	Stationary Engineers	51-8021	Stationary Engineers and Boiler Opera	2, 3
46.9900	Construction Trades	93911	Glaziers, Manufacturing	1	785	Assemblers	47-2121	Glaziers	3
46.9900	Construction Trades	93911	Glaziers, Manufacturing	1	785	Assemblers	51-2099	Assemblers and Fabricators, All Other	
46.9900	Construction Trades	95032	Stationary Engineers	1	695	Power Plant Operators	51-8021	Stationary Engineers and Boiler Opera	2, 3
46.9900	Construction Trades	95032	Stationary Engineers	1	696	Stationary Engineers	51-8021	Stationary Engineers and Boiler Opera	2, 3
46.9900	Construction Trades	95032	Stationary Engineers	1	777	Miscellaneous Machine Operators, N.E.	51-8021	Stationary Engineers and Boiler Opera	2, 3
46.9900	Construction Trades	97923	Excavation and Loading Machine C	1	853	Excavating And Loading Machine Opera	53-7032	Excavating and Loading Machine and	2
46.9900	Construction Trades	97938	Grader, Dozer, and Scraper Opera	1	855	Grader, Dozer, And Scraper Operators	47-2073	Operating Engineers and Other Constr	2, 3
46.9900	Construction Trades	97944	Crane and Tower Operator	1	849	Crane And Tower Operators	53-7021	Crane and Tower Operators	2
46.9900	Construction Trades	97956	Operating Engineer	1	844	Operating Engineers	47-2073	Operating Engineers and Other Constr	2, 3
46.9900	Construction Trades	98310	Construction Trades Helpers	1	000		00-0000		
46.9900	Construction Trades	98311	Helpers, Brick and Stonemasons a	1	866	Helpers, Construction Trades	47-3011	Helpers--Brickmasons, Blockmasons, \$	1
46.9900	Construction Trades	98312	Helpers, Carpenters and related wo	1	866	Helpers, Construction Trades	47-3012	Helpers--Carpenters	1
46.9900	Construction Trades	98313	Helpers, Electricians & Related	1	866	Helpers, Construction Trades	47-3013	Helpers--Electricians	2
46.9900	Construction Trades	98314	Helpers, Painters, Paperangers, Pl	1	866	Helpers, Construction Trades	47-3014	Helpers--Painters, Paperhangers, Plas	1
46.9900	Construction Trades	98315	Helpers, Plumbers & Related	1	866	Helpers, Construction Trades	47-3015	Helpers--Pipelayers, Plumbers, Pipefitt	2

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
46.9900	Construction Trades	98316	Helpers, Roofers	1	869	Construction Laborers	47-3016	Helpers--Roofers	
46.9900	Construction Trades	98319	Helpers, All Other Construction Tra	1	599	Construction Trades, N.E.C.	47-3019	Helpers, Construction Trades, All Othe	
46.9900	Construction Trades	98319	Helpers, All Other Construction Tra	1	866	Helpers, Construction Trades	47-3019	Helpers, Construction Trades, All Othe	
46.9999	Construction/Building	85132	Maintenance Repairers, General U	1	547	Specified Mechanics And Repairers, N.I	49-9042	Maintenance and Repair Workers, Gen	3
46.9999	Construction/Building	87108	Drywall Installers	1	573	Drywall Installers	47-2081	Drywall and Ceiling Tile Installers	2, 4
46.9999	Construction/Building	87111	Tapers	1	573	Drywall Installers	47-2082	Tapers	2
46.9999	Construction/Building	87114	Lathers	1	573	Drywall Installers	47-2081	Drywall and Ceiling Tile Installers	2, 4
46.9999	Construction/Building	87120	Drywall installers and Finishers	1	000		00-0000		
46.9999	Construction/Building	87320	Structural/Reinforc Metal Wkrs	0.731	000		00-0000		
46.9999	Construction/Building	87605	Floor Layers, Except Carpet, Wood	1	565	Tile Setters, Hard And Soft	47-2042	Floor Layers, Except Carpet, Wood, an	3
46.9999	Construction/Building	87608	Floor Sanding Machine Operators	1	599	Construction Trades, N.E.C.	47-2043	Floor Sanders and Finishers	2
46.9999	Construction/Building	87802	Insulation Workers	1	593	Insulation Workers	47-2131	Insulation Workers, Floor, Ceiling, and	3
46.9999	Construction/Building	87802	Insulation Workers	1	593	Insulation Workers	47-2132	Insulation Workers, Mechanical	3
46.9999	Construction/Building	87808	Roofers	1	595	Roofers	47-2181	Roofers	3
46.9999	Construction/Building	87811	Glaziers	1	589	Glaziers	47-2121	Glaziers	3
46.9999	Construction/Building	87814	Structural Metal Workers	1	597	Structural Metal Workers	47-2221	Structural Iron and Steel Workers	3
46.9999	Construction/Building	87898	Construction Trades Workers	1	000		00-0000		
46.9999	Construction/Building	87899	All Other Construction Trades Work	1	567	Carpenters	47-4099	Construction and Related Workers, All	
46.9999	Construction/Building	87899	All Other Construction Trades Work	1	585	Plumbers, Pipefitters, And Steamfitters	47-4099	Construction and Related Workers, All	
46.9999	Construction/Building	87899	All Other Construction Trades Work	1	599	Construction Trades, N.E.C.	47-4099	Construction and Related Workers, All	
46.9999	Construction/Building	87899	All Other Construction Trades Work	1	684	Miscellaneous Precision Workers, N.E.C.	47-4099	Construction and Related Workers, All	
46.9999	Construction/Building	93911	Glaziers, Manufacturing	1	785	Assemblers	47-2121	Glaziers	3
46.9999	Construction/Building	93911	Glaziers, Manufacturing	1	785	Assemblers	51-2099	Assemblers and Fabricators, All Other	
47.0101	Electrical And Electro	85502	Central Office & PBX Installers and	1	523	Electronic Repairers, Communications	49-2022	Telecommunications Equipment Install	2, 3, 4
47.0101	Electrical And Electro	85505	Frame Wirers, Central Office	1	523	Electronic Repairers, Communications	49-2022	Telecommunications Equipment Install	2, 3, 4
47.0101	Electrical And Electro	85508	Telegraph & Teletype Installers and	1	523	Electronic Repairers, Communications	49-2022	Telecommunications Equipment Install	2, 3, 4
47.0101	Electrical And Electro	85514	Radio Mechanics	1	523	Electronic Repairers, Communications	49-2021	Radio Mechanics	3
47.0101	Electrical And Electro	85597	Communic Eqp Mech/Inst/Rpr NEC	1	000		00-0000		
47.0101	Electrical And Electro	85599	All Other Communication Eqpt. Me	1	523	Electronic Repairers, Communications	49-2022	Telecommunications Equipment Install	2, 3, 4
47.0101	Electrical And Electro	85705	Data Processing Equipment repaire	1	523	Electronic Repairers, Communications	49-2011	Computer, Automated Teller, and Offic	3, 4
47.0101	Electrical And Electro	85708	Electronic Home Entertainment Equ	1	523	Electronic Repairers, Communications	49-2097	Electronic Home Entertainment Equipr	3
47.0101	Electrical And Electro	85710	Home Appl, Power Tool Rprs	1	000		00-0000		
47.0101	Electrical And Electro	85711	Electric Home Appliance And Powe	1	526	Household Appliance And Power Tool F	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
47.0101	Electrical And Electro	85711	Electric Home Appliance And Powe	1	526	Household Appliance And Power Tool F	49-9031	Home Appliance Repairers	3, 4
47.0101	Electrical And Electro	85714	Electric Motor, Transformer, And R	1	533	Miscellaneous Electrical And Electronic	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
47.0101	Electrical And Electro	85714	Electric Motor, Transformer, And R	1	577	Electrical Power Installers And Repairer	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
47.0101	Electrical And Electro	85717	Electronics Repairers, Commercial	1	523	Electronic Repairers, Communications	49-2094	Electrical and Electronics Repairers, C	3
47.0101	Electrical And Electro	85720	Electric & Electronic Rprs, NEC	1	000		00-0000		
47.0101	Electrical And Electro	85726	Station installers & repairers, teleph	1	529	Telephone Installers And Repairers	49-2022	Telecommunications Equipment Install	2, 3, 4
47.0101	Electrical And Electro	85728	Electrical Installers & Repairers, Tr	1	533	Miscellaneous Electrical And Electronic	49-2093	Electrical and Electronics Installers and	3
47.0101	Electrical And Electro	85728	Electrical Installers & Repairers, Tr	1	533	Miscellaneous Electrical And Electronic	49-2096	Electronic Equipment Installers and Re	3
47.0101	Electrical And Electro	85799	All Other Electrical And Electronic	1	533	Miscellaneous Electrical And Electronic	49-2098	Security and Fire Alarm Systems Instal	
47.0101	Electrical And Electro	85799	All Other Electrical And Electronic	1	533	Miscellaneous Electrical And Electronic	49-9091	Coin, Vending, and Amusement Machi	2
47.0101	Electrical And Electro	85799	All Other Electrical And Electronic	1	533	Miscellaneous Electrical And Electronic	49-9099	Installation, Maintenance, and Repair V	
47.0101	Electrical And Electro	85905	Precision Instrument Repairers	1	535	Camera, Watch, And Musical Instrumer	49-9069	Precision Instrument and Equipment R	
47.0101	Electrical And Electro	85926	Office Machine & Cash Register Se	1	525	Data Processing Equipment Repairers	49-2011	Computer, Automated Teller, and Offic	3, 4

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	Jobzone
47.0101	Electrical And Electro	85926	Office Machine & Cash Register Se	1	538	Office Machine Repairers	49-2011	Computer, Automated Teller, and Office	3, 4
47.0101	Electrical And Electro	85947	Coin And Vending Machine Repair	1	547	Specified Mechanics And Repairers, N.I	49-9091	Coin, Vending, and Amusement Machin	2
47.0101	Electrical And Electro	85995	Mechanics, Installers, Rprs, NEC	1	000		00-0000		
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	519	Machinery Maintenance Occupations	49-2011	Computer, Automated Teller, and Office	3, 4
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	547	Specified Mechanics And Repairers, N.I	49-2011	Computer, Automated Teller, and Office	3, 4
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	675	Hand Molders And Shapers, Except Jew	49-2011	Computer, Automated Teller, and Office	3, 4
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	684	Miscellaneous Precision Workers, N.E.C	49-2011	Computer, Automated Teller, and Office	3, 4
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	796	Production Inspectors, Checkers, And E	49-2011	Computer, Automated Teller, and Office	3, 4
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	865	Helpers, Mechanics And Repairers	49-2011	Computer, Automated Teller, and Office	3, 4
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	519	Machinery Maintenance Occupations	49-9099	Installation, Maintenance, and Repair V	
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	547	Specified Mechanics And Repairers, N.I	49-9099	Installation, Maintenance, and Repair V	
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	675	Hand Molders And Shapers, Except Jew	49-9099	Installation, Maintenance, and Repair V	
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	684	Miscellaneous Precision Workers, N.E.C	49-9099	Installation, Maintenance, and Repair V	
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	796	Production Inspectors, Checkers, And E	49-9099	Installation, Maintenance, and Repair V	
47.0101	Electrical And Electro	85999	All Other Mechanics, Installers, Re	1	865	Helpers, Mechanics And Repairers	49-9099	Installation, Maintenance, and Repair V	
47.0101	Electrical And Electro	93114	Electrical and Electronic Equipmen	1	523	Electronic Repairers, Communications A	51-2022	Electrical and Electronic Equipment As	3
47.0101	Electrical And Electro	93114	Electrical and Electronic Equipmen	1	525	Data Processing Equipment Repairers	51-2022	Electrical and Electronic Equipment As	3
47.0101	Electrical And Electro	93114	Electrical and Electronic Equipmen	1	683	Electrical And Electronic Equipment Ass	51-2022	Electrical and Electronic Equipment As	3
47.0101	Electrical And Electro	93114	Electrical and Electronic Equipmen	1	684	Miscellaneous Precision Workers, N.E.C	51-2022	Electrical and Electronic Equipment As	3
47.0101	Electrical And Electro	93114	Electrical and Electronic Equipmen	1	523	Electronic Repairers, Communications A	51-4012	Numerical Tool and Process Control Pi	3
47.0101	Electrical And Electro	93114	Electrical and Electronic Equipmen	1	525	Data Processing Equipment Repairers	51-4012	Numerical Tool and Process Control Pi	3
47.0101	Electrical And Electro	93114	Electrical and Electronic Equipmen	1	683	Electrical And Electronic Equipment Ass	51-4012	Numerical Tool and Process Control Pi	3
47.0101	Electrical And Electro	93114	Electrical and Electronic Equipmen	1	684	Miscellaneous Precision Workers, N.E.C	51-4012	Numerical Tool and Process Control Pi	3
47.0101	Electrical And Electro	93905	Electrical and Electronic Assembler	1	785	ASSEMBLERS	51-2022	Electrical and Electronic Equipment As	3
47.0101	Electrical And Electro	93905	Electrical and Electronic Assembler	1	785	ASSEMBLERS	51-2031	Engine and Other Machine Assemblers	3
47.0106	Major Appliance Repa	85710	Home Appl, Power Tool Rprs	1	000		00-0000		
47.0106	Major Appliance Repa	85711	Electric Home Appliance And Powe	1	526	Household Appliance And Power Tool F	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
47.0106	Major Appliance Repa	85711	Electric Home Appliance And Powe	1	526	Household Appliance And Power Tool F	49-9031	Home Appliance Repairers	3, 4
47.0106	Major Appliance Repa	85944	Gas Appliance Repairers	1	547	Specified Mechanics And Repairers, N.I	49-9031	Home Appliance Repairers	3, 4
47.0199	Electromechanical Te	22505	Electrical/electronic engineering tec	1	213	Electrical And Electronic Technicians	17-3023	Electrical and Electronic Engineering T	4
47.0199	Electromechanical Te	22505	Electrical/electronic engineering tec	1	213	Electrical And Electronic Technicians	17-3024	Electro-Mechanical Technicians	4
47.0199	Electromechanical Te	22511	Mechanical engineering technicians	1	215	Mechanical Engineering Technicians	17-3024	Electro-Mechanical Technicians	4
47.0199	Electromechanical Te	22511	Mechanical engineering technicians	1	215	Mechanical Engineering Technicians	17-3027	Mechanical Engineering Technicians	4
47.0199	Electromechanical Te	85710	Home Appl, Power Tool Rprs	1	000		00-0000		
47.0199	Electromechanical Te	85711	Electric Home Appliance And Powe	1	526	Household Appliance And Power Tool F	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
47.0199	Electromechanical Te	85711	Electric Home Appliance And Powe	1	526	Household Appliance And Power Tool F	49-9031	Home Appliance Repairers	3, 4
47.0199	Electromechanical Te	85714	Electric Motor, Transformer, And R	1	533	Miscellaneous Electrical And Electronic	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
47.0199	Electromechanical Te	85714	Electric Motor, Transformer, And R	1	577	Electrical Power Installers And Repairer	49-2092	Electric Motor, Power Tool, and Relate	2, 3, 4
47.0199	Electromechanical Te	85720	Electric & Electronic Rprs, NEC	1	000		00-0000		
47.0199	Electromechanical Te	85947	Coin And Vending Machine Service	1	547	Specified Mechanics And Repairers, N.I	49-9091	Coin, Vending, and Amusement Machin	2
47.0199	Electromechanical Te	93111	Electromechanical Equipment Asse	1	636	Precision Assemblers, Metal	51-2023	Electromechanical Equipment Assemb	3
47.0199	Electromechanical Te	93111	Electromechanical Equipment Asse	1	683	Electrical And Electronic Equipment Ass	51-2023	Electromechanical Equipment Assemb	3
47.0199	Electromechanical Te	93111	Electromechanical Equipment Asse	1	684	Miscellaneous Precision Workers, N.E.C	51-2023	Electromechanical Equipment Assemb	3
47.0199	Electromechanical Te	93114	Electrical and Electronic Assembler	1	523	Electronic Repairers, Communications A	51-2022	Electrical and Electronic Equipment As	3
47.0199	Electromechanical Te	93114	Electrical and Electronic Assembler	1	525	Data Processing Equipment Repairers	51-2022	Electrical and Electronic Equipment As	3
47.0199	Electromechanical Te	93114	Electrical and Electronic Assembler	1	683	Electrical And Electronic Equipment Ass	51-2022	Electrical and Electronic Equipment As	3

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Censu	CensusTitle	SOCcode	SOCtitle	Jobzone
47.0199	Electromechanical Te	93114	Electrical and Electronic Assembl	1	684	Miscellaneous Precision Workers, N.E.C.	51-2022	Electrical and Electronic Equipment As	3
47.0199	Electromechanical Te	93114	Electrical and Electronic Assembl	1	523	Electronic Repairers, Communications A	51-4012	Numerical Tool and Process Control P	3
47.0199	Electromechanical Te	93114	Electrical and Electronic Assembl	1	525	Data Processing Equipment Repairers	51-4012	Numerical Tool and Process Control P	3
47.0199	Electromechanical Te	93114	Electrical and Electronic Assembl	1	683	Electrical And Electronic Equipment Ass	51-4012	Numerical Tool and Process Control P	3
47.0199	Electromechanical Te	93114	Electrical and Electronic Assembl	1	684	Miscellaneous Precision Workers, N.E.C.	51-4012	Numerical Tool and Process Control P	3
47.0201	Heating, Air Condition	85902	Heating, Air Conditioning, And Refr	1	534	Heating, Air Conditioning, And Refrigera	49-9021	Heating, Air Conditioning, and Refriger	4
47.0201	Heating, Air Condition	87805	Sheet Metal Duct Installers	1	599	Construction Trades, N.E.C.	47-2211	Sheet Metal Workers	3
47.0201	Heating, Air Condition	87823	Sheet Metal Wkrs, Duct Instrs	0.211	000		00-0000		
47.0399	Industrial Equipment	85109	Industrial Machinery Mechanics	1	000		00-0000		
47.0399	Industrial Equipment	85112	Machinery Maintenance Mechanics	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
47.0399	Industrial Equipment	85113	Machinery Maintenance Mechanics	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
47.0399	Industrial Equipment	85116	Machinery Maintenance Mechanics	1	507	Bus, Truck, And Stationary Engine Mec	49-3051	Motorboat Mechanics	3
47.0399	Industrial Equipment	85116	Machinery Maintenance Mechanics	1	518	Industrial Machinery Repairers	49-3051	Motorboat Mechanics	3
47.0399	Industrial Equipment	85116	Machinery Maintenance Mechanics	1	547	Specified Mechanics And Repairers, N.	49-3051	Motorboat Mechanics	3
47.0399	Industrial Equipment	85116	Machinery Maintenance Mechanics	1	507	Bus, Truck, And Stationary Engine Mec	49-9041	Industrial Machinery Mechanics	3
47.0399	Industrial Equipment	85116	Machinery Maintenance Mechanics	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
47.0399	Industrial Equipment	85116	Machinery Maintenance Mechanics	1	547	Specified Mechanics And Repairers, N.	49-9041	Industrial Machinery Mechanics	3
47.0399	Industrial Equipment	85116	Machinery Maintenance Mechanics	1	507	Bus, Truck, And Stationary Engine Mec	49-9092	Commercial Divers	2
47.0399	Industrial Equipment	85116	Machinery Maintenance Mechanics	1	518	Industrial Machinery Repairers	49-9092	Commercial Divers	2
47.0399	Industrial Equipment	85116	Machinery Maintenance Mechanics	1	547	Specified Mechanics And Repairers, N.	49-9092	Commercial Divers	2
47.0399	Industrial Equipment	85117	Underground Mine Machinery Mecl	1	516	Heavy Equipment Mechanics	49-9041	Industrial Machinery Mechanics	3
47.0399	Industrial Equipment	85118	Machinery Maintenance Mechanics	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
47.0399	Industrial Equipment	85119	All Other Machinery Maintenance M	1	518	Industrial Machinery Repairers	49-3051	Motorboat Mechanics	3
47.0399	Industrial Equipment	85119	All Other Machinery Maintenance M	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
47.0399	Industrial Equipment	85132	Maintenance Repairers, General U	1	547	Specified Mechanics And Repairers, N.	49-9042	Maintenance and Repair Workers, Gen	3
47.0399	Industrial Equipment	85311	Bus And Truck Mechanics And Die	1	507	Bus, Truck, And Stationary Engine Mec	49-3031	Bus and Truck Mechanics and Diesel E	3
47.0399	Industrial Equipment	85317	Rail Car Repairers	1	516	Heavy Equipment Mechanics	49-3043	Rail Car Repairers	3
47.0399	Industrial Equipment	85928	Mechanical Control And Valve Insta	1	539	Mechanical Controls And Valve Repair	49-9011	Mechanical Door Repairers	3
47.0399	Industrial Equipment	85928	Mechanical Control And Valve Insta	1	539	Mechanical Controls And Valve Repair	49-9012	Control and Valve Installers and Repair	2, 3
47.0399	Industrial Equipment	87921	Roustabouts	1	617	Mining Occupations, N.E.C.	47-5071	Roustabouts, Oil and Gas	2
47.0399	Industrial Equipment	92702	Textile Machine Setters And Set-U	1	738	Winding And Twisting Machine Operato	51-6062	Textile Cutting Machine Setters, Opera	3
47.0399	Industrial Equipment	92702	Textile Machine Setters And Set-U	1	739	Knitting, Looping, Taping, And Weaving	51-6062	Textile Cutting Machine Setters, Opera	3
47.0399	Industrial Equipment	92702	Textile Machine Setters And Set-U	1	749	Miscellaneous Textile Machine Operato	51-6062	Textile Cutting Machine Setters, Opera	3
47.0399	Industrial Equipment	92702	Textile Machine Setters And Set-U	1	738	Winding And Twisting Machine Operato	51-6063	Textile Knitting and Weaving Machine	3
47.0399	Industrial Equipment	92702	Textile Machine Setters And Set-U	1	739	Knitting, Looping, Taping, And Weaving	51-6063	Textile Knitting and Weaving Machine	3
47.0399	Industrial Equipment	92702	Textile Machine Setters And Set-U	1	749	Miscellaneous Textile Machine Operato	51-6063	Textile Knitting and Weaving Machine	3
47.0399	Industrial Equipment	92702	Textile Machine Setters And Set-U	1	738	Winding And Twisting Machine Operato	51-6064	Textile Winding, Twisting, and Drawing	3
47.0399	Industrial Equipment	92702	Textile Machine Setters And Set-U	1	739	Knitting, Looping, Taping, And Weaving	51-6064	Textile Winding, Twisting, and Drawing	3
47.0399	Industrial Equipment	92702	Textile Machine Setters And Set-U	1	749	Miscellaneous Textile Machine Operato	51-6064	Textile Winding, Twisting, and Drawing	3
47.0399	Industrial Equipment	92997	All Other Machine Setters And Set-	1	709	Grinding, Abrading, Buffing, And Polishi	51-9199	Production Workers, All Other	
47.0399	Industrial Equipment	92997	All Other Machine Setters And Set-	1	754	Packaging And Filling Machine Operato	51-9199	Production Workers, All Other	
47.0399	Industrial Equipment	92997	All Other Machine Setters And Set-	1	755	Extruding And Forming Machine Operat	51-9199	Production Workers, All Other	
47.0399	Industrial Equipment	92997	All Other Machine Setters And Set-	1	757	Separating, Filtering, And Clarifying Ma	51-9199	Production Workers, All Other	
47.0399	Industrial Equipment	92997	All Other Machine Setters And Set-	1	763	Roasting And Baking Machine Operator	51-9199	Production Workers, All Other	
47.0399	Industrial Equipment	92997	All Other Machine Setters And Set-	1	765	Folding Machine Operators	51-9199	Production Workers, All Other	
47.0399	Industrial Equipment	92997	All Other Machine Setters And Set-	1	768	Crushing And Grinding Machine Operat	51-9199	Production Workers, All Other	

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
47.0399	Industrial Equipment	92997	All Other Machine Setters And Set-	1	769	Slicing And Cutting Machine Operators	51-9199	Production Workers, All Other	
47.0399	Industrial Equipment	92997	All Other Machine Setters And Set-	1	777	Miscellaneous Machine Operators, N.E.	51-9199	Production Workers, All Other	
47.0399	Industrial Equipment	92999	Machine Opr/Tndr/Settrs, NEC	0.199	000		00-0000		
47.0399	Industrial Equipment	97317	Railroad Brake, Signal, And Switch	1	825	Railroad Brake, Signal, And Switch Ope	53-4021	Railroad Brake, Signal, and Switch Ope	1, 2
47.0401	Hydraulics & Pneuma	83000	Inspectors and related occupations	0.218	000		00-0000		
47.0401	Hydraulics & Pneuma	83002	Precision Inspectors, Testers, And	1	523	Electronic Repairers, Communications A	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
47.0401	Hydraulics & Pneuma	83002	Precision Inspectors, Testers, And	1	684	Miscellaneous Precision Workers, N.E.C	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
47.0401	Hydraulics & Pneuma	83002	Precision Inspectors, Testers, And	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
47.0401	Hydraulics & Pneuma	83002	Precision Inspectors, Testers, And	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
47.0401	Hydraulics & Pneuma	83002	Precision Inspectors, Testers, And	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
47.0401	Hydraulics & Pneuma	85323	Aircraft mechanics	1	515	Aircraft Mechanics, Exc. Engine	49-3011	Aircraft Mechanics and Service Techni	3, 4
47.0401	Hydraulics & Pneuma	85323	Aircraft mechanics	1	547	Specified Mechanics And Repairers, N.I	49-3011	Aircraft Mechanics and Service Techni	3, 4
47.0401	Hydraulics & Pneuma	85799	All Other Electrical And Electronic	1	533	Miscellaneous Electrical And Electronic	49-2098	Security and Fire Alarm Systems Instal	
47.0401	Hydraulics & Pneuma	85799	All Other Electrical And Electronic	1	533	Miscellaneous Electrical And Electronic	49-9091	Coin, Vending, and Amusement Machin	2
47.0401	Hydraulics & Pneuma	85799	All Other Electrical And Electronic	1	533	Miscellaneous Electrical And Electronic	49-9099	Installation, Maintenance, and Repair V	
47.0401	Hydraulics & Pneuma	85905	Precision Instrument Repairers	1	000		49-9069	Precision Instrument and Equipment R	
47.0401	Hydraulics & Pneuma	85911	Electric Meter Installers And Repair	1	539	Mechanical Controls And Valve Repair	49-9012	Control and Valve Installers and Repair	2, 3
47.0401	Hydraulics & Pneuma	85928	Mechanical Control And Valve Insta	1	539	Mechanical Controls And Valve Repair	49-9011	Mechanical Door Repairers	3
47.0401	Hydraulics & Pneuma	85928	Mechanical Control And Valve Insta	1	539	Mechanical Controls And Valve Repair	49-9012	Control and Valve Installers and Repair	2, 3
47.0408	Watch Repair	85917	Watchmakers	1	535	Camera, Watch, And Musical Instrumen	49-9064	Watch Repairers	3
47.0408	Watch Repair	89123	Jewelers And Silversmiths	1	647	Precious Stones And Metals Workers(J	51-9071	Jewelers and Precious Stone and Meta	2, 3, 4
47.0408	Watch Repair	89126	Precision Hand Workers, Jewelry A	1	647	Precious Stones And Metals Workers(J	51-9071	Jewelers and Precious Stone and Meta	2, 3, 4
47.0408	Watch Repair	89128	Precision Etchers And Engravers, M	1	649	Engravers, Metal	51-9194	Etchers and Engravers	1, 3
47.0408	Watch Repair	89908	Precision Patternmakers, Model Ma	1	675	Hand Molders And Shapers, Except Jev	51-9199	Production Workers, All Other	
47.0408	Watch Repair	89908	Precision Patternmakers, Model Ma	1	676	Patternmakers, Lay-Out Workers, And C	51-9199	Production Workers, All Other	
47.0408	Watch Repair	89908	Precision Patternmakers, Model Ma	1	769	Slicing And Cutting Machine Operators	51-9199	Production Workers, All Other	
47.0408	Watch Repair	89926	Gem And Diamond Workers	1	647	Precious Stones And Metals Workers(J	51-9071	Jewelers and Precious Stone and Meta	2, 3, 4
47.0408	Watch Repair	89998	Precision Workers, NEC	1	000		00-0000		
47.0408	Watch Repair	89999	All Other Precision Workers	1	684	Miscellaneous Precision Workers, N.E.C	51-9199	Production Workers, All Other	
47.0408	Watch Repair	89999	All Other Precision Workers	1	693	Adjusters And Calibrators	51-9199	Production Workers, All Other	
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	704	Lathe And Turning Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	705	Milling And Planing Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	708	Drilling And Boring Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	709	Grinding, Abrading, Buffing, And Polishi	51-4031	Cutting, Punching, and Press Machine	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	715	Miscellaneous Metal, Plastic, Stone And	51-4031	Cutting, Punching, and Press Machine	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	704	Lathe And Turning Machine Operators	51-4032	Drilling and Boring Machine Tool Settel	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	705	Milling And Planing Machine Operators	51-4032	Drilling and Boring Machine Tool Settel	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	706	Punching And Stamping Press Machine	51-4032	Drilling and Boring Machine Tool Settel	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	708	Drilling And Boring Machine Operators	51-4032	Drilling and Boring Machine Tool Settel	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	709	Grinding, Abrading, Buffing, And Polishi	51-4032	Drilling and Boring Machine Tool Settel	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	715	Miscellaneous Metal, Plastic, Stone And	51-4032	Drilling and Boring Machine Tool Settel	2
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	704	Lathe And Turning Machine Operators	51-4033	Grinding, Lapping, Polishing, and Buffir	2, 3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	705	Milling And Planing Machine Operators	51-4033	Grinding, Lapping, Polishing, and Buffir	2, 3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	706	Punching And Stamping Press Machine	51-4033	Grinding, Lapping, Polishing, and Buffir	2, 3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	708	Drilling And Boring Machine Operators	51-4033	Grinding, Lapping, Polishing, and Buffir	2, 3

CIPcode	CIPtitle	OEScode	OEStitle	OESshr	Census	CensusTitle	SOCcode	SOCtitle	jobzone
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	709	Grinding, Abrading, Buffing, And Polishi	51-4033	Grinding, Lapping, Polishing, and Buffi	2, 3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	715	Miscellaneous Metal, Plastic, Stone And	51-4033	Grinding, Lapping, Polishing, and Buffi	2, 3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	704	Lathe And Turning Machine Operators	51-4034	Lathe and Turning Machine Tool Setter	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	705	Milling And Planing Machine Operators	51-4034	Lathe and Turning Machine Tool Setter	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	706	Punching And Stamping Press Machine	51-4034	Lathe and Turning Machine Tool Setter	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	708	Drilling And Boring Machine Operators	51-4034	Lathe and Turning Machine Tool Setter	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	709	Grinding, Abrading, Buffing, And Polishi	51-4034	Lathe and Turning Machine Tool Setter	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	715	Miscellaneous Metal, Plastic, Stone And	51-4034	Lathe and Turning Machine Tool Setter	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	704	Lathe And Turning Machine Operators	51-4035	Milling and Planing Machine Setters, O	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	705	Milling And Planing Machine Operators	51-4035	Milling and Planing Machine Setters, O	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	706	Punching And Stamping Press Machine	51-4035	Milling and Planing Machine Setters, O	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	708	Drilling And Boring Machine Operators	51-4035	Milling and Planing Machine Setters, O	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	709	Grinding, Abrading, Buffing, And Polishi	51-4035	Milling and Planing Machine Setters, O	3
47.0408	Watch Repair	91117	Machine Tool Cutting Operators Ar	1	715	Miscellaneous Metal, Plastic, Stone And	51-4035	Milling and Planing Machine Setters, O	3
47.0408	Watch Repair	93117	Watch, Clock, And Chronometer As	1	647	Precious Stones And Metals Workers(J	51-2093	Timing Device Assemblers, Adjusters,	2
47.0408	Watch Repair	93117	Watch, Clock, And Chronometer As	1	684	Miscellaneous Precision Workers, N.E.C	51-2093	Timing Device Assemblers, Adjusters,	2
47.0408	Watch Repair	93117	Watch, Clock, And Chronometer As	1	689	Inspectors, Testers, And Graders	51-2093	Timing Device Assemblers, Adjusters,	2
47.0408	Watch Repair	93117	Watch, Clock, And Chronometer As	1	693	Adjusters And Calibrators	51-2093	Timing Device Assemblers, Adjusters,	2
47.0603	Collision Repair Tech	85305	Automotive Body And Related Rep	1	514	Automobile Body And Related Repairer	49-3021	Automotive Body and Related Repairer	3
47.0603	Collision Repair Tech	85305	Automotive Body And Related Rep	1	514	Automobile Body And Related Repairer	49-3022	Automotive Glass Installers and Repair	2
47.0603	Collision Repair Tech	92947	Painters, Transportation Equipmen	1	514	Automobile Body And Related Repairer	51-9122	Painters, Transportation Equipment	2
47.0603	Collision Repair Tech	92947	Painters, Transportation Equipmen	1	579	Painters, Construction And Maintenance	51-9122	Painters, Transportation Equipment	2
47.0603	Collision Repair Tech	92947	Painters, Transportation Equipmen	1	759	Painting And Paint Spraying Machine O	51-9122	Painters, Transportation Equipment	2
47.0604	Automobile Technicia	85302	Automotive Mechanics	1	505	Automobile Mechanics	49-3023	Automotive Service Technicians and M	2, 3
47.0604	Automobile Technicia	85302	Automotive Mechanics	1	506	Automobile Mechanic Apprentices	49-3023	Automotive Service Technicians and M	2, 3
47.0604	Automobile Technicia	85302	Automotive Mechanics	1	533	Miscellaneous Electrical And Electronic	49-3023	Automotive Service Technicians and M	2, 3
47.0604	Automobile Technicia	85728	Electrical Installers And Repairers,	1	533	Miscellaneous Electrical And Electronic	49-2093	Electrical and Electronics Installers and	3
47.0604	Automobile Technicia	85728	Electrical Installers And Repairers,	1	533	Miscellaneous Electrical And Electronic	49-2096	Electronic Equipment Installers and Re	3
47.0605	Medium/Heavy Truck	85311	Bus And Truck Mechanics And Die	1	507	Bus, Truck, And Stationary Engine Mec	49-3031	Bus and Truck Mechanics and Diesel E	3
47.0606	Small Engine Repair	85308	Motorcycle Repairers	1	509	Small Engine Repairers	49-3052	Motorcycle Mechanics	2
47.0606	Small Engine Repair	85328	Small Engine Specialists	1	509	Small Engine Repairers	49-3051	Motorboat Mechanics	3
47.0606	Small Engine Repair	85328	Small Engine Specialists	1	509	Small Engine Repairers	49-3053	Outdoor Power Equipment and Other S	3
47.0608	Aircraft Mechanics	85323	Aircraft Mechanics	1	515	Aircraft Mechanics, Exc. Engine	49-3011	Aircraft Mechanics and Service Techni	3, 4
47.0608	Aircraft Mechanics	85323	Aircraft Mechanics	1	547	Specified Mechanics And Repairers, N.	49-3011	Aircraft Mechanics and Service Techni	3, 4
47.0608	Aircraft Mechanics	85326	Aircraft Engine Specialists	1	515	Aircraft Mechanics, Exc. Engine	49-3011	Aircraft Mechanics and Service Techni	3, 4
47.0608	Aircraft Mechanics	93102	Aircraft Assemblers, Precision	1	636	Precision Assemblers, Metal	51-2011	Aircraft Structure, Surfaces, Rigging, a	3
47.0608	Aircraft Mechanics	93102	Aircraft Assemblers, Precision	1	645	Patternmakers And Model Makers, Meta	51-2011	Aircraft Structure, Surfaces, Rigging, a	3
47.0608	Aircraft Mechanics	93102	Aircraft Assemblers, Precision	1	684	Miscellaneous Precision Workers, N.E.C	51-2011	Aircraft Structure, Surfaces, Rigging, a	3
47.0683	Collision Repair Tech	85305	Automotive Body And Related Rep	1	514	Automobile Body And Related Repairer	49-3021	Automotive Body and Related Repairer	3
47.0683	Collision Repair Tech	85305	Automotive Body And Related Rep	1	514	Automobile Body And Related Repairer	49-3022	Automotive Glass Installers and Repair	2
47.0683	Collision Repair Tech	92947	Painters, Transportation Equipmen	1	514	Automobile Body And Related Repairer	51-9122	Painters, Transportation Equipment	2
47.0683	Collision Repair Tech	92947	Painters, Transportation Equipmen	1	579	Painters, Construction And Maintenance	51-9122	Painters, Transportation Equipment	2

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
47.0683	Collision Repair Tech	92947	Painters, Transportation Equipmen	1	759	Painting And Paint Spraying Machine O	51-9122	Painters, Transportation Equipment	2
47.0684	Automobile Technicia	85302	Automotive Mechanics	1	505	Automobile Mechanics	49-3023	Automotive Service Technicians and M	2, 3
47.0684	Automobile Technicia	85302	Automotive Mechanics	1	506	Automobile Mechanic Apprentices	49-3023	Automotive Service Technicians and M	2, 3
47.0684	Automobile Technicia	85302	Automotive Mechanics	1	533	Miscellaneous Electrical And Electronic	49-3023	Automotive Service Technicians and M	2, 3
47.0684	Automobile Technicia	85728	Electrical Installers And Repairers,	1	533	Miscellaneous Electrical And Electronic	49-2093	Electrical and Electronics Installers and	3
47.0684	Automobile Technicia	85728	Electrical Installers And Repairers,	1	533	Miscellaneous Electrical And Electronic	49-2096	Electronic Equipment Installers and Re	3
47.0685	Medium/Heavy Truck	85311	Bus And Truck Mechanics And Die	1	507	Bus, Truck, And Stationary Engine Mec	49-3031	Bus and Truck Mechanics and Diesel E	3
47.0699	Mechanics Cluster	85109	Industrial Machinery Mechanics	0.07	000		00-0000		
47.0699	Mechanics Cluster	85116	Machinery maintenance mechanics	1	507	Bus, Truck, And Stationary Engine Mec	49-3051	Motorboat Mechanics	3
47.0699	Mechanics Cluster	85116	Machinery maintenance mechanics	1	518	Industrial Machinery Repairers	49-3051	Motorboat Mechanics	3
47.0699	Mechanics Cluster	85116	Machinery maintenance mechanics	1	547	Specified Mechanics And Repairers, N.I	49-3051	Motorboat Mechanics	3
47.0699	Mechanics Cluster	85116	Machinery maintenance mechanics	1	507	Bus, Truck, And Stationary Engine Mec	49-9041	Industrial Machinery Mechanics	3
47.0699	Mechanics Cluster	85116	Machinery maintenance mechanics	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
47.0699	Mechanics Cluster	85116	Machinery maintenance mechanics	1	547	Specified Mechanics And Repairers, N.I	49-9041	Industrial Machinery Mechanics	3
47.0699	Mechanics Cluster	85302	Automotive Mechanics	1	505	Automobile Mechanics	49-3023	Automotive Service Technicians and M	2, 3
47.0699	Mechanics Cluster	85302	Automotive Mechanics	1	506	Automobile Mechanic Apprentices	49-3023	Automotive Service Technicians and M	2, 3
47.0699	Mechanics Cluster	85302	Automotive Mechanics	1	533	Miscellaneous Electrical And Electronic	49-3023	Automotive Service Technicians and M	2, 3
47.0699	Mechanics Cluster	85305	Automotive Body And Related Rep	1	514	Automobile Body And Related Repairers	49-3021	Automotive Body and Related Repairer	3
47.0699	Mechanics Cluster	85305	Automotive Body And Related Rep	1	514	Automobile Body And Related Repairers	49-3022	Automotive Glass Installers and Repair	2
47.0699	Mechanics Cluster	85308	Motorcycle Repairers	1	509	Small Engine Repairers	49-3052	Motorcycle Mechanics	2
47.0699	Mechanics Cluster	85311	Bus And Truck Mechanics And Die	1	505	Automobile Mechanics	49-3031	Bus and Truck Mechanics and Diesel E	3
47.0699	Mechanics Cluster	85311	Bus And Truck Mechanics And Die	1	507	Bus, Truck, And Stationary Engine Mec	49-3031	Bus and Truck Mechanics and Diesel E	3
47.0699	Mechanics Cluster	85323	Aircraft Mechanics	1	515	Aircraft Mechanics, Exc. Engine	49-3011	Aircraft Mechanics and Service Techni	3, 4
47.0699	Mechanics Cluster	85323	Aircraft Mechanics	1	547	Specified Mechanics And Repairers, N.I	49-3011	Aircraft Mechanics and Service Techni	3, 4
47.0699	Mechanics Cluster	85326	Aircraft Engine Specialists	1	515	Aircraft Mechanics, Exc. Engine	49-3011	Aircraft Mechanics and Service Techni	3, 4
47.0699	Mechanics Cluster	85328	Small Engine Specialists	1	509	Small Engine Repairers	49-3051	Motorboat Mechanics	3
47.0699	Mechanics Cluster	85328	Small Engine Specialists	1	509	Small Engine Repairers	49-3053	Outdoor Power Equipment and Other S	3
47.0699	Mechanics Cluster	85717	Electronics Repairers, Commercial	1	523	Electronic Repairers, Communications A	49-2094	Electrical and Electronics Repairers, C	3
47.0699	Mechanics Cluster	85728	Electrical Installers And Repairers,	1	533	Miscellaneous Electrical And Electronic	49-2093	Electrical and Electronics Installers and	3
47.0699	Mechanics Cluster	85728	Electrical Installers And Repairers,	1	533	Miscellaneous Electrical And Electronic	49-2096	Electronic Equipment Installers and Re	3
47.0699	Mechanics Cluster	92947	Painters, Transportation Equipmen	1	514	Automobile Body And Related Repairers	51-9122	Painters, Transportation Equipment	2
47.0699	Mechanics Cluster	92947	Painters, Transportation Equipmen	1	579	Painters, Construction And Maintenance	51-9122	Painters, Transportation Equipment	2
47.0699	Mechanics Cluster	92947	Painters, Transportation Equipmen	1	759	Painting And Paint Spraying Machine O	51-9122	Painters, Transportation Equipment	2
47.0699	Mechanics Cluster	93102	Aircraft Assemblers, Precision	1	636	Precision Assemblers, Metal	51-2011	Aircraft Structure, Surfaces, Rigging, a	3
47.0699	Mechanics Cluster	93102	Aircraft Assemblers, Precision	1	645	Patternmakers And Model Makers, Met	51-2011	Aircraft Structure, Surfaces, Rigging, a	3
47.0699	Mechanics Cluster	93102	Aircraft Assemblers, Precision	1	684	Miscellaneous Precision Workers, N.E.C	51-2011	Aircraft Structure, Surfaces, Rigging, a	3
47.9999	Transportation Servic	81000	First-Line Supervisors and Manage	0.075	000		00-0000		
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	803	Supervisors, Motor Vehicle Operators	53-1011	Aircraft Cargo Handling Supervisors	
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	823	Railroad Conductors And Yardmasters	53-1011	Aircraft Cargo Handling Supervisors	
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	828	Ship Captains And Mates, Except Fishir	53-1011	Aircraft Cargo Handling Supervisors	
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	843	Supervisors, Material Moving Equipmen	53-1011	Aircraft Cargo Handling Supervisors	
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	864	Supervisors, Handlers, Equipment Clea	53-1011	Aircraft Cargo Handling Supervisors	
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	803	Supervisors, Motor Vehicle Operators	53-1031	First-Line Supervisors/Managers of Tra	3
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	823	Railroad Conductors And Yardmasters	53-1031	First-Line Supervisors/Managers of Tra	3

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	828	Ship Captains And Mates, Except Fishir	53-1031	First-Line Supervisors/Managers of Tra	3
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	843	Supervisors, Material Moving Equipmen	53-1031	First-Line Supervisors/Managers of Tra	3
47.9999	Transportation Servic	81011	First line supervisors, transport/mo	1	864	Supervisors, Handlers, Equipment Clea	53-1031	First-Line Supervisors/Managers of Tra	3
47.9999	Transportation Servic	83000	Inspectors and related occupations	0.028	000		00-0000		
47.9999	Transportation Servic	83008	Transportation inspectors	1	689	Inspectors, Testers, And Graders	53-6051	Transportation Inspectors	2, 4, 5
47.9999	Transportation Servic	85132	Maintenance Repairers, General U	1	547	Specified Mechanics And Repairers, N.I	49-9042	Maintenance and Repair Workers, Gen	3
47.9999	Transportation Servic	97001	Truck Drivers, Light/Heavy	1	000		00-0000		
47.9999	Transportation Servic	97101	Truck Drivers, Light/Heavy	1	000		00-0000		
47.9999	Transportation Servic	97102	Truck drivers, heavy or tractor traile	1	804	Truck Drivers	53-3032	Truck Drivers, Heavy and Tractor-Trail	1, 2
47.9999	Transportation Servic	97102	Truck drivers, heavy or tractor traile	1	804	Truck Drivers	53-3033	Truck Drivers, Light Or Delivery Servic	1
47.9999	Transportation Servic	97105	Truck drivers-light, include delivery	1	804	Truck Drivers	53-3033	Truck Drivers, Light or Delivery Servic	1
47.9999	Transportation Servic	97108	Bus drivers, except school	1	808	Bus Drivers	53-3021	Bus Drivers, Transit and Intercity	1
47.9999	Transportation Servic	97111	Bus drivers, school	1	808	Bus Drivers	53-3022	Bus Drivers, School	2
47.9999	Transportation Servic	97199	Other motor vehicle operators	1	814	Motor Transportation Occupations, N.E.	53-3099	Motor Vehicle Operators, All Other	
47.9999	Transportation Servic	97308	Rail yard engineers, dinkey operato	1	824	Locomotive Operating Occupations	53-4013	Rail Yard Engineers, Dinkey Operators	2
47.9999	Transportation Servic	97308	Rail yard engineers, dinkey operato	1	826	Rail Vehicle Operators, N.E.C.	53-4013	Rail Yard Engineers, Dinkey Operators	2
47.9999	Transportation Servic	97311	Locomotive firers	1	824	Locomotive Operating Occupations	53-4012	Locomotive Firers	3
47.9999	Transportation Servic	97314	Subway & streetcar operators	1	824	Locomotive Operating Occupations	53-4041	Subway and Streetcar Operators	2
47.9999	Transportation Servic	97317	Railroad brake, signal & switch ope	1	825	Railroad Brake, Signal, And Switch Ope	53-4021	Railroad Brake, Signal, and Switch Ope	1, 2
47.9999	Transportation Servic	97399	Other rail vehicle operators & contr	1	826	Rail Vehicle Operators, N.E.C.	53-4099	Rail Transportation Workers, All Other	
47.9999	Transportation Servic	97502	Captains, water vessel	1	497	Captains And Other Officers, Fishing Ve	53-5021	Captains, Mates, and Pilots of Water V	3, 4, 5
47.9999	Transportation Servic	97502	Captains, water vessel	1	828	Ship Captains And Mates, Except Fishir	53-5021	Captains, Mates, and Pilots of Water V	3, 4, 5
47.9999	Transportation Servic	97504	Marine Oilers, Able Seamen	1	000		00-0000		
47.9999	Transportation Servic	97505	Mates, ship/boat/barge	1	497	Captains And Other Officers, Fishing Ve	53-5021	Captains, Mates, and Pilots of Water V	3, 4, 5
47.9999	Transportation Servic	97505	Mates, ship/boat/barge	1	828	Ship Captains And Mates, Except Fishir	53-5021	Captains, Mates, and Pilots of Water V	3, 4, 5
47.9999	Transportation Servic	97508	Pilots, ship	1	828	Ship Captains And Mates, Except Fishir	53-5021	Captains, Mates, and Pilots of Water V	3, 4, 5
47.9999	Transportation Servic	97510	Captains & Pilots, Ship	1	000		00-0000		
47.9999	Transportation Servic	97511	Motorboat operators	1	828	Ship Captains And Mates, Except Fishir	53-5022	Motorboat Operators	2
47.9999	Transportation Servic	97514	Able seamen	1	829	Sailors And Deckhands	53-5011	Sailors and Marine Oilers	2
47.9999	Transportation Servic	97517	Ordinary seamen & marine oilers	1	829	Sailors And Deckhands	53-5011	Sailors and Marine Oilers	2
47.9999	Transportation Servic	97802	Bridge, lock & lighthouse tenders	1	834	Bridge, Lock, And Lighthouse Tenders	53-6011	Bridge and Lock Tenders	2
47.9999	Transportation Servic	97899	All other transportation & related w	1	883	Freight, Stock, And Material Handlers, N	53-6051	Transportation Inspectors	2, 4, 5
47.9999	Transportation Servic	97899	All other transportation & related w	1	889	Laborers, Except Construction	53-6051	Transportation Inspectors	2, 4, 5
47.9999	Transportation Servic	97899	All other transportation & related w	1	883	Freight, Stock, And Material Handlers, N	53-6099	Transportation Workers, All Other	
47.9999	Transportation Servic	97899	All other transportation & related w	1	889	Laborers, Except Construction	53-6099	Transportation Workers, All Other	
48.0101	Drafting	22310	Survey/Map Scientsts, Techs	0.605	000		00-0000		
48.0101	Drafting	22508	Industrial Engineering Technicians	1	214	Industrial Engineering Technicians	17-3026	Industrial Engineering Technicians	3
48.0101	Drafting	22508	Industrial Engineering Technicians	1	225	Science Technicians, N.E.C.	17-3026	Industrial Engineering Technicians	3
48.0101	Drafting	22512	Drafters	1	000		00-0000		
48.0101	Drafting	22514	Drafters	1	217	Drafting Occupations	17-3011	Architectural and Civil Drafters	3, 4
48.0101	Drafting	22514	Drafters	1	217	Drafting Occupations	17-3012	Electrical and Electronics Drafters	3, 4
48.0101	Drafting	22514	Drafters	1	217	Drafting Occupations	17-3013	Mechanical Drafters	4
48.0101	Drafting	22514	Drafters	1	217	Drafting Occupations	17-3019	Drafters, All Other	
48.0101	Drafting	22517	Estimators & Drafters, Utilities	1	217	Drafting Occupations	17-3019	Drafters, All Other	
48.0101	Drafting	22521	Surveying & Mapping Technicians	1	218	Surveying And Mapping Technicians	17-3031	Surveying and Mapping Technicians	3, 4
48.0101	Drafting	35199	Engineering Techns, NEC	1	000		00-0000		

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
48.0199	Drafting And Design	22508	Industrial Engineering Technicians	1	214	Industrial Engineering Technicians	17-3026	Industrial Engineering Technicians	3
48.0199	Drafting And Design	22508	Industrial Engineering Technicians	1	225	Science Technicians, N.E.C.	17-3026	Industrial Engineering Technicians	3
48.0199	Drafting And Design	22512	Drafters	1	000		00-0000		
48.0199	Drafting And Design	22514	Drafters	1	217	Drafting Occupations	17-3011	Architectural and Civil Drafters	3, 4
48.0199	Drafting And Design	22514	Drafters	1	217	Drafting Occupations	17-3012	Electrical and Electronics Drafters	3, 4
48.0199	Drafting And Design	22514	Drafters	1	217	Drafting Occupations	17-3019	Drafters, All Other	
48.0199	Drafting And Design	22517	Estimators & Drafters, Utilities	1	217	Drafting Occupations	17-3019	Drafters, All Other	
48.0199	Drafting And Design	22599	All Other Engineering Technicians	1	216	Engineering Technicians, N.E.C.	17-3025	Environmental Engineering Technicians	
48.0199	Drafting And Design	22599	All Other Engineering Technicians	1	225	Science Technicians, N.E.C.	17-3025	Environmental Engineering Technicians	
48.0199	Drafting And Design	22599	All Other Engineering Technicians	1	216	Engineering Technicians, N.E.C.	17-3029	Engineering Technicians, Except Draft	
48.0199	Drafting And Design	22599	All Other Engineering Technicians	1	225	Science Technicians, N.E.C.	17-3029	Engineering Technicians, Except Draft	
48.0199	Drafting And Design	22599	All Other Engineering Technicians	1	216	Engineering Technicians, N.E.C.	19-4091	Environmental Science and Protection	3
48.0199	Drafting And Design	22599	All Other Engineering Technicians	1	225	Science Technicians, N.E.C.	19-4091	Environmental Science and Protection	3
48.0199	Drafting And Design	34038	Designers Except Interior	1	185	Designers	27-1021	Commercial and Industrial Designers	4
48.0199	Drafting And Design	34038	Designers Except Interior	1	185	Designers	27-1022	Fashion Designers	3
48.0199	Drafting And Design	34038	Designers Except Interior	1	185	Designers	27-1023	Floral Designers	2
48.0199	Drafting And Design	34038	Designers Except Interior	1	185	Designers	27-1029	Designers, All Other	
48.0199	Drafting And Design	35199	Engineering Techns, NEC	1	000		00-0000		
48.0199	Drafting And Design	35199	Engineering Techns, NEC	1	000		00-0000		
48.0201	Graphics And Printing	34023	Photographers	1	189	Photographers	27-4021	Photographers	3
48.0201	Graphics And Printing	34038	Designers Except Interior	1	185	Designers	27-1021	Commercial and Industrial Designers	4
48.0201	Graphics And Printing	34038	Designers Except Interior	1	185	Designers	27-1024	Graphic Designers	4
48.0201	Graphics And Printing	34041	Interior designers	1	185	Designers	27-1025	Interior Designers	4
48.0201	Graphics And Printing	53911	Proofreaders And Copy Markers	1	384	Proofreaders	43-9081	Proofreaders and Copy Markers	2
48.0201	Graphics And Printing	89702	Compositors & Typesetters	1	736	Typesetters And Compositors	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89706	Paste-Up Workers	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89706	Paste-Up Workers	1	774	Photographic Process Machine Operatc	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89712	Photoengravers	1	649	Engravers, Metal	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89712	Photoengravers	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89713	Camera Operators	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89715	Scanner Operators	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89716	Printing Wkrs, Prec, NEC	1	000		00-0000		
48.0201	Graphics And Printing	89717	Strippers	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89717	Strippers	1	774	Photographic Process Machine Operatc	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89718	Platemakers	1	684	Miscellaneous Precision Workers, N.E.C.	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89718	Platemakers	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89719	All Other Lithography And Photoen	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89799	All Other Precision Printing Worker	1	737	Miscellaneous Printing Machine Operatc	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	89914	Photographic Process Workers, Pr	1	774	Photographic Process Machine Operatc	51-9131	Photographic Process Workers	2, 3, 4
48.0201	Graphics And Printing	92510	Printing Press Machine Setters	1	734	Printing Machine Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0201	Graphics And Printing	92512	Offset Lithographic Press Operator	1	734	Printing Press Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0201	Graphics And Printing	92515	Letterpress Operators	1	734	Printing Press Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0201	Graphics And Printing	92519	All Other Printing Press Setters and	1	734	Printing Press Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0201	Graphics And Printing	92522	Specialty Materials Printing Machin	1	735	Photoengravers And Lithographers	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0201	Graphics And Printing	92524	Screen Printing Machine Setters ar	1	737	Miscellaneous Printing Machine Operatc	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0201	Graphics And Printing	92525	Bindery Machine Setters & Set-up	1	737	Miscellaneous Printing Machine Operatc	51-5011	Bindery Workers	1, 2
48.0201	Graphics And Printing	92529	All Other Printing Related Machine	1	737	Miscellaneous Printing Machine Operatc	51-5023	Printing Machine Operators	1, 2, 3, 4, 5

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	Jobzone
48.0201	Graphics And Printing	92540	Bindery Machine Op/Set	1	000		00-0000		
48.0201	Graphics And Printing	92541	Typesetting and Composing Machi	1	736	Typesetters And Compositors	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	92542	Printing Press Mach Set/Ops/Tndr	1	000		00-0000		
48.0201	Graphics And Printing	92543	Printing Press Machine Operators	1	734	Printing Press Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0201	Graphics And Printing	92545	Photoengraving and Lithographic M	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	92545	Photoengraving and Lithographic M	1	774	Photographic Process Machine Operatc	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	92546	Bindery Machine Operators	1	737	Miscellaneous Printing Machine Operatc	51-5011	Bindery Workers	1, 2
48.0201	Graphics And Printing	92546	Bindery Machine Operators	1	777	Miscellaneous Machine Operators, N.E.	51-5011	Bindery Workers	1, 2
48.0201	Graphics And Printing	92549	All Other Printing, Binding & Relate	1	734	Printing Press Operators	51-5011	Bindery Workers	1, 2
48.0201	Graphics And Printing	92549	All Other Printing, Binding & Relate	1	735	Photoengravers And Lithographers	51-5011	Bindery Workers	1, 2
48.0201	Graphics And Printing	92549	All Other Printing, Binding & Relate	1	737	Miscellaneous Printing Machine Operatc	51-5011	Bindery Workers	1, 2
48.0201	Graphics And Printing	92549	All Other Printing, Binding & Relate	1	734	Printing Press Operators	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	92549	All Other Printing, Binding & Relate	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	92549	All Other Printing, Binding & Relate	1	737	Miscellaneous Printing Machine Operatc	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0201	Graphics And Printing	92599	Printing, Binding, Rel, NEC	1	000		00-0000		
48.0201	Graphics And Printing	92908	Photographic Process Machine Op	1	774	Photographic Process Machine Operatc	51-9132	Photographic Processing Machine Ope	2
48.0299	Visual Imaging Techn	34023	Photographers	1	189	Photographers	27-4021	Photographers	3
48.0299	Visual Imaging Techn	34035	Artists and Commercial Artists	1	185	Designers	27-1014	Multi-Media Artists and Animators	
48.0299	Visual Imaging Techn	34035	Artists and Commercial Artists	1	188	Painters, Sculptors, Craft-Artists, And A	27-1014	Multi-Media Artists and Animators	
48.0299	Visual Imaging Techn	34035	Artists and Commercial Artists	1	194	Artists, Performers, And Related Worke	27-1014	Multi-Media Artists and Animators	
48.0299	Visual Imaging Techn	34035	Artists and Commercial Artists	1	774	Photographic Process Machine Operatc	27-1014	Multi-Media Artists and Animators	
48.0299	Visual Imaging Techn	89702	Compositors & Typesetters	1	736	Typesetters And Compositors	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89706	Paste-Up Workers	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89706	Paste-Up Workers	1	774	Photographic Process Machine Operatc	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89712	Photoengravers	1	649	Engravers, Metal	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89712	Photoengravers	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89713	Camera Operators	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89715	Scanner Operators	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89716	Printing Wkrs, Prec, NEC	1	000		00-0000		
48.0299	Visual Imaging Techn	89717	Strippers, Printing	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89717	Strippers, Printing	1	774	Photographic Process Machine Operatc	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89718	Platemakers	1	684	Miscellaneous Precision Workers, N.E.C	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89718	Platemakers	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89719	All Other Litho. & Photoengraving C	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89799	All Other Precision Printing Worker	1	737	Miscellaneous Printing Machine Operatc	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	89914	Precision Photographic Process Wl	1	774	Photographic Process Machine Operatc	51-9131	Photographic Process Workers	2, 3, 4
48.0299	Visual Imaging Techn	92510	Printing Press Machine Setters	1	734	Printing Machine Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0299	Visual Imaging Techn	92512	Offset Lithographic Press Operator	1	734	Printing Press Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0299	Visual Imaging Techn	92515	Letterpress Operators	1	734	Printing Press Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0299	Visual Imaging Techn	92519	All Other Printing Press Setters and	1	734	Printing Press Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0299	Visual Imaging Techn	92522	Specialty Material Printing Machine	1	735	Photoengravers And Lithographers	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0299	Visual Imaging Techn	92524	Screen Printing Machine Setters Ar	1	737	Miscellaneous Printing Machine Operatc	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0299	Visual Imaging Techn	92525	Bindery Machine Setters And Set-U	1	737	Miscellaneous Printing Machine Operatc	51-5011	Bindery Workers	1, 2
48.0299	Visual Imaging Techn	92529	All Other Printing, Related Setters	1	737	Miscellaneous Printing Machine Operatc	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0299	Visual Imaging Techn	92540	Bindery Machine Op/Set	1	000		00-0000		
48.0299	Visual Imaging Techn	92541	Typesetting and Composing Machi	1	736	Typesetters And Compositors	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Techn	92542	Printing Press Mach Set/Ops/Tndr	1	000		00-0000		

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOtitle	jobzone
48.0299	Visual Imaging Technicians	92543	Printing Press Machine Operators	1	734	Printing Press Operators	51-5023	Printing Machine Operators	1, 2, 3, 4, 5
48.0299	Visual Imaging Technicians	92545	Photoengraving and Lithographic Machine Operators	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Technicians	92545	Photoengraving and Lithographic Machine Operators	1	774	Photographic Process Machine Operators	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Technicians	92546	Bindery Machine Operators	1	737	Miscellaneous Printing Machine Operators	51-5011	Bindery Workers	1, 2
48.0299	Visual Imaging Technicians	92546	Bindery Machine Operators	1	777	Miscellaneous Machine Operators, N.E.C.	51-5011	Bindery Workers	1, 2
48.0299	Visual Imaging Technicians	92549	All Other Printing, Binding, And Related Occupations	1	734	Printing Press Operators	51-5011	Bindery Workers	1, 2
48.0299	Visual Imaging Technicians	92549	All Other Printing, Binding, And Related Occupations	1	735	Photoengravers And Lithographers	51-5011	Bindery Workers	1, 2
48.0299	Visual Imaging Technicians	92549	All Other Printing, Binding, And Related Occupations	1	737	Miscellaneous Printing Machine Operators	51-5011	Bindery Workers	1, 2
48.0299	Visual Imaging Technicians	92549	All Other Printing, Binding, And Related Occupations	1	734	Printing Press Operators	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Technicians	92549	All Other Printing, Binding, And Related Occupations	1	735	Photoengravers And Lithographers	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Technicians	92549	All Other Printing, Binding, And Related Occupations	1	737	Miscellaneous Printing Machine Operators	51-5022	Prepress Technicians and Workers	2, 3, 4, 5
48.0299	Visual Imaging Technicians	92599	Printing, Binding, Rel, NEC	1	000		00-0000		
48.0299	Visual Imaging Technicians	92908	Photographic Process Machine Operators	1	774	Photographic Process Machine Operators	51-9132	Photographic Processing Machine Operators	2
48.0503	Machine Tool Operators	83000	Inspectors and related occupations	0.861	000		00-0000		
48.0503	Machine Tool Operators	83002	Precision Inspectors, Testers, And Graders	1	684	Miscellaneous Precision Workers, N.E.C.	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83002	Precision Inspectors, Testers, And Graders	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83002	Precision Inspectors, Testers, And Graders	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83002	Precision Inspectors, Testers, And Graders	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83005	Production Inspectors, Testers, Graders And Sorters, Agricultural Products	1	488	Graders And Sorters, Agricultural Products	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83005	Production Inspectors, Testers, Graders And Sorters, Agricultural Products	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83005	Production Inspectors, Testers, Graders And Sorters, Agricultural Products	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83005	Production Inspectors, Testers, Graders And Sorters, Agricultural Products	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83005	Production Inspectors, Testers, Graders And Sorters, Agricultural Products	1	798	Production Samplers And Weighers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83005	Production Inspectors, Testers, Graders And Sorters, Agricultural Products	1	799	Graders And Sorters, Exc. Agricultural	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	83005	Production Inspectors, Testers, Graders And Sorters, Agricultural Products	1	889	Laborers, Except Construction	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0503	Machine Tool Operators	89105	Precision Instrument Makers	1	637	Machinists	51-2023	Electromechanical Equipment Assemblers	3
48.0503	Machine Tool Operators	89105	Precision Instrument Makers	1	639	Machinist Apprentices	51-2023	Electromechanical Equipment Assemblers	3
48.0503	Machine Tool Operators	89105	Precision Instrument Makers	1	637	Machinists	51-2093	Timing Device Assemblers, Adjusters	2
48.0503	Machine Tool Operators	89105	Precision Instrument Makers	1	639	Machinist Apprentices	51-2093	Timing Device Assemblers, Adjusters	2
48.0503	Machine Tool Operators	89111	Tool Grinders, Filers, Sharpeners, And Buffers	1	644	Precision Grinders, Fitters, And Tool Sh	51-4194	Tool Grinders, Filers, and Sharpeners	3
48.0503	Machine Tool Operators	89117	Precision Lay-Out Workers, Metal and Plastic	1	646	Lay-Out Workers	51-4192	Lay-Out Workers, Metal and Plastic	3
48.0503	Machine Tool Operators	89128	Etchers & Engravers, Hand or Machine	1	649	Engravers, Metal	51-9194	Etchers and Engravers	1, 3
48.0503	Machine Tool Operators	89195	Precision Metal Wkrs	1	000		00-0000		
48.0503	Machine Tool Operators	89199	All Other Precision Metal Workers	1	655	Miscellaneous Precision Metal Workers	51-4199	Metal Workers and Plastic Workers, All Other	
48.0503	Machine Tool Operators	89199	All Other Precision Metal Workers	1	717	Fabricating Machine Operators, N.E.C.	51-4199	Metal Workers and Plastic Workers, All Other	
48.0503	Machine Tool Operators	89199	All Other Precision Metal Workers	1	655	Miscellaneous Precision Metal Workers	51-9199	Production Workers, All Other	
48.0503	Machine Tool Operators	89199	All Other Precision Metal Workers	1	717	Fabricating Machine Operators, N.E.C.	51-9199	Production Workers, All Other	
48.0503	Machine Tool Operators	91102	Sawing Machine Tool Setters & Set-up Operators	1	715	Miscellaneous Metal, Plastic, Stone And	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operators	91105	Lathe and Turning Tool Setters and Set-up Operators	1	703	Lathe And Turning Machine Set-Up Oper	51-4034	Lathe and Turning Machine Tool Setters	3
48.0503	Machine Tool Operators	91108	Drilling & Boring Machine Setters & Set-up Operators	1	708	Drilling And Boring Machine Operators	51-4032	Drilling and Boring Machine Tool Setters	2
48.0503	Machine Tool Operators	91111	Milling Machine Setters & Set-up Operators	1	705	Milling And Planing Machine Operators	51-4035	Milling and Planing Machine Setters, Operators	3
48.0503	Machine Tool Operators	91114	Grinding Machine Setters and Set-up Operators	1	708	Drilling And Boring Machine Operators	51-4033	Grinding, Lapping, Polishing, and Buffing	2, 3
48.0503	Machine Tool Operators	91114	Grinding Machine Setters and Set-up Operators	1	709	Grinding, Abrading, Buffing, And Polishi	51-4033	Grinding, Lapping, Polishing, and Buffing	2, 3
48.0503	Machine Tool Operators	91117	Machine Tool Cutting Operators And Set-up Operators	1	704	Lathe And Turning Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operators	91117	Machine Tool Cutting Operators And Set-up Operators	1	705	Milling And Planing Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operators	91117	Machine Tool Cutting Operators And Set-up Operators	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operators	91117	Machine Tool Cutting Operators And Set-up Operators	1	708	Drilling And Boring Machine Operators	51-4031	Cutting, Punching, and Press Machine	2

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Census	CensusTitle	SOCcode	SOtitle	jobzone
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	717	Fabricating Machine Operators, N.E.C.	51-4022	Forging Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	719	Molding And Casting Machine Operator	51-4022	Forging Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	769	Slicing And Cutting Machine Operators	51-4022	Forging Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	783	Welders And Cutters	51-4022	Forging Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	704	Lathe And Turning Machine Operators	51-4023	Rolling Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	706	Punching And Stamping Press Machine	51-4023	Rolling Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	707	Rolling Machine Operators	51-4023	Rolling Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	713	Forging Machine Operators	51-4023	Rolling Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	715	Miscellaneous Metal, Plastic, Stone And	51-4023	Rolling Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	717	Fabricating Machine Operators, N.E.C.	51-4023	Rolling Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	719	Molding And Casting Machine Operator	51-4023	Rolling Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	769	Slicing And Cutting Machine Operators	51-4023	Rolling Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	783	Welders And Cutters	51-4023	Rolling Machine Setters, Operators, an	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	704	Lathe And Turning Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	707	Rolling Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	713	Forging Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	715	Miscellaneous Metal, Plastic, Stone And	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	717	Fabricating Machine Operators, N.E.C.	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	719	Molding And Casting Machine Operator	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	769	Slicing And Cutting Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operati	91321	Forming Machine Operators And T	1	783	Welders And Cutters	51-4031	Cutting, Punching, and Press Machine	2
48.0503	Machine Tool Operati	91502	Numerical Control Machine Tool Op	1	714	Numerical Control Machine Operators	51-4011	Computer-Controlled Machine Tool Op	2
48.0503	Machine Tool Operati	91502	Numerical Control Machine Tool Op	1	769	Slicing And Cutting Machine Operators	51-4011	Computer-Controlled Machine Tool Op	2
48.0503	Machine Tool Operati	91502	Numerical Control Machine Tool Op	1	714	Numerical Control Machine Operators	51-4012	Numerical Tool and Process Control Pr	3
48.0503	Machine Tool Operati	91502	Numerical Control Machine Tool Op	1	769	Slicing And Cutting Machine Operators	51-4012	Numerical Tool and Process Control Pr	3
48.0503	Machine Tool Operati	91505	Combination Machine Tool Setters	1	715	Miscellaneous Metal, Plastic, Stone And	51-4081	Multiple Machine Tool Setters, Operatc	2, 3
48.0503	Machine Tool Operati	91508	Combination Machine Tool Operatc	1	715	Miscellaneous Metal, Plastic, Stone And	51-4081	Multiple Machine Tool Setters, Operatc	2, 3
48.0503	Machine Tool Operati	91510	Combn Mach Tool Setrs/Oprs	1	000		00-0000		
48.0503	Machine Tool Operati	91932	Heat Treating, Annealing, And Tem	1	724	Heat Treating Equipment Operators	51-4191	Heat Treating Equipment Setters, Oper	2, 3
48.0503	Machine Tool Operati	91932	Heat Treating, Annealing, And Tem	1	766	Furnace, Kiln, And Oven Operators, Exc	51-4191	Heat Treating Equipment Setters, Oper	2, 3
48.0503	Machine Tool Operati	92101	Metal/Plastic Settrs/Oprs NEC	1	000		00-0000		
48.0503	Machine Tool Operati	92197	All Other Metal And Plastic (Cutting	1	715	Miscellaneous Metal, Plastic, Stone And	51-4199	Metal Workers and Plastic Workers, Al	
48.0503	Machine Tool Operati	92197	All Other Metal And Plastic (Cutting	1	717	Fabricating Machine Operators, N.E.C.	51-4199	Metal Workers and Plastic Workers, Al	
48.0503	Machine Tool Operati	92197	All Other Metal And Plastic (Cutting	1	725	Miscellaneous Metal And Plastic Proces	51-4199	Metal Workers and Plastic Workers, Al	
48.0503	Machine Tool Operati	92198	All Other Metal And Plastic (Cutting	1	704	Lathe And Turning Machine Operators	51-4199	Metal Workers and Plastic Workers, Al	
48.0503	Machine Tool Operati	92198	All Other Metal And Plastic (Cutting	1	715	Miscellaneous Metal, Plastic, Stone And	51-4199	Metal Workers and Plastic Workers, Al	
48.0503	Machine Tool Operati	92198	All Other Metal And Plastic (Cutting	1	717	Fabricating Machine Operators, N.E.C.	51-4199	Metal Workers and Plastic Workers, Al	
48.0503	Machine Tool Operati	92198	All Other Metal And Plastic (Cutting	1	719	Molding And Casting Machine Operator	51-4199	Metal Workers and Plastic Workers, Al	
48.0503	Machine Tool Operati	92198	All Other Metal And Plastic (Cutting	1	725	Miscellaneous Metal And Plastic Proces	51-4199	Metal Workers and Plastic Workers, Al	
48.0503	Machine Tool Operati	92198	All Other Metal And Plastic (Cutting	1	755	Extruding And Forming Machine Operat	51-4199	Metal Workers and Plastic Workers, Al	
48.0506	Sheet Metal	83000	Inspectors and related occupations	0.971	000		00-0000		
48.0506	Sheet Metal	83002	Precision Inspectors, Testers, And	1	684	Miscellaneous Precision Workers, N.E.C.	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	83002	Precision Inspectors, Testers, And	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	83002	Precision Inspectors, Testers, And	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	83002	Precision Inspectors, Testers, And	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	83005	Production Inspectors, Testers, Gr	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	Jobzone
48.0506	Sheet Metal	83005	Production Inspectors, Testers, Gra	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	83005	Production Inspectors, Testers, Gra	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	83005	Production Inspectors, Testers, Gra	1	798	Production Samplers And Weighers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	83005	Production Inspectors, Testers, Gra	1	799	Graders And Sorters, Exc. Agricultural	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	83005	Production Inspectors, Testers, Gra	1	889	Laborers, Except Construction	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	83099	All Other Inspectors, Testers, And I	1	874	Production Helpers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.0506	Sheet Metal	87805	Sheet metal duct installers	1	599	Construction Trades, N.E.C.	47-2211	Sheet Metal Workers	3
48.0506	Sheet Metal	87823	Sheet Metal Wkrs, Duct Instlrs	1	000		00-0000		
48.0506	Sheet Metal	89117	Precision Lay-Out Workers, Metal	1	646	Lay-Out Workers	51-4192	Lay-Out Workers, Metal and Plastic	3
48.0506	Sheet Metal	89132	Sheet Metal Workers	1	653	Sheet Metal Workers	47-2211	Sheet Metal Workers	3
48.0506	Sheet Metal	89132	Sheet Metal Workers	1	654	Sheet Metal Worker Apprentices	47-2211	Sheet Metal Workers	3
48.0506	Sheet Metal	89132	Sheet Metal Workers	1	715	Miscellaneous Metal, Plastic, Stone And	47-2211	Sheet Metal Workers	3
48.0506	Sheet Metal	89195	Precision Metal Wkrs	1	000		00-0000		
48.0506	Sheet Metal	89199	All Other Precision Metal Workers	1	655	Miscellaneous Precision Metal Workers	51-4199	Metal Workers and Plastic Workers, Al	
48.0506	Sheet Metal	89199	All Other Precision Metal Workers	1	717	Fabricating Machine Operators, N.E.C.	51-4199	Metal Workers and Plastic Workers, Al	
48.0506	Sheet Metal	89199	All Other Precision Metal Workers	1	655	Miscellaneous Precision Metal Workers	51-9199	Production Workers, All Other	
48.0506	Sheet Metal	89199	All Other Precision Metal Workers	1	717	Fabricating Machine Operators, N.E.C.	51-9199	Production Workers, All Other	
48.0506	Sheet Metal	91302	Punching Machine Setters And Set	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91305	Press And Press-Brake Machine S	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91305	Press And Press-Brake Machine S	1	717	Fabricating Machine Operators, N.E.C.	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91308	Shear And Slitter Machine Setters	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91314	Rolling Machine Setters And Set-U	1	707	Rolling Machine Operators	51-4023	Rolling Machine Setters, Operators, an	2
48.0506	Sheet Metal	91314	Rolling Machine Setters And Set-U	1	715	Miscellaneous Metal, Plastic, Stone And	51-4023	Rolling Machine Setters, Operators, an	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	704	Lathe And Turning Machine Operators	51-4021	Extruding and Drawing Machine Setter	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	706	Punching And Stamping Press Machine	51-4021	Extruding and Drawing Machine Setter	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	707	Rolling Machine Operators	51-4021	Extruding and Drawing Machine Setter	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	713	Forging Machine Operators	51-4021	Extruding and Drawing Machine Setter	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	715	Miscellaneous Metal, Plastic, Stone And	51-4021	Extruding and Drawing Machine Setter	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	717	Fabricating Machine Operators, N.E.C.	51-4021	Extruding and Drawing Machine Setter	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	719	Molding And Casting Machine Operator	51-4021	Extruding and Drawing Machine Setter	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	769	Slicing And Cutting Machine Operators	51-4021	Extruding and Drawing Machine Setter	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	783	Welders And Cutters	51-4021	Extruding and Drawing Machine Setter	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	704	Lathe And Turning Machine Operators	51-4022	Forging Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	706	Punching And Stamping Press Machine	51-4022	Forging Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	707	Rolling Machine Operators	51-4022	Forging Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	713	Forging Machine Operators	51-4022	Forging Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	715	Miscellaneous Metal, Plastic, Stone And	51-4022	Forging Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	717	Fabricating Machine Operators, N.E.C.	51-4022	Forging Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	719	Molding And Casting Machine Operator	51-4022	Forging Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	769	Slicing And Cutting Machine Operators	51-4022	Forging Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	783	Welders And Cutters	51-4022	Forging Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	704	Lathe And Turning Machine Operators	51-4023	Rolling Machine Setters, Operators, ar	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	706	Punching And Stamping Press Machine	51-4023	Rolling Machine Setters, Operators, an	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	707	Rolling Machine Operators	51-4023	Rolling Machine Setters, Operators, an	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	713	Forging Machine Operators	51-4023	Rolling Machine Setters, Operators, an	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	715	Miscellaneous Metal, Plastic, Stone And	51-4023	Rolling Machine Setters, Operators, an	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	717	Fabricating Machine Operators, N.E.C.	51-4023	Rolling Machine Setters, Operators, an	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	719	Molding And Casting Machine Operator	51-4023	Rolling Machine Setters, Operators, an	2

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	769	Slicing And Cutting Machine Operators	51-4023	Rolling Machine Setters, Operators, an	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	783	Welders And Cutters	51-4023	Rolling Machine Setters, Operators, an	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	704	Lathe And Turning Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	706	Punching And Stamping Press Machine	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	707	Rolling Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	713	Forging Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	715	Miscellaneous Metal, Plastic, Stone And	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	717	Fabricating Machine Operators, N.E.C.	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	719	Molding And Casting Machine Operator	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	769	Slicing And Cutting Machine Operators	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	91321	Forming Machine Operators And T	1	783	Welders And Cutters	51-4031	Cutting, Punching, and Press Machine	2
48.0506	Sheet Metal	92101	Metal/Plastic Settrs/Oprs NEC	0.631	000		00-0000		
48.0506	Sheet Metal	92198	All Other Metal And Plastic (Cutting	1	704	Lathe And Turning Machine Operators	51-4199	Metal Workers and Plastic Workers, Al	
48.0506	Sheet Metal	92198	All Other Metal And Plastic (Cutting	1	715	Miscellaneous Metal, Plastic, Stone And	51-4199	Metal Workers and Plastic Workers, Al	
48.0506	Sheet Metal	92198	All Other Metal And Plastic (Cutting	1	717	Fabricating Machine Operators, N.E.C.	51-4199	Metal Workers and Plastic Workers, Al	
48.0506	Sheet Metal	92198	All Other Metal And Plastic (Cutting	1	719	Molding And Casting Machine Operator	51-4199	Metal Workers and Plastic Workers, Al	
48.0506	Sheet Metal	92198	All Other Metal And Plastic (Cutting	1	725	Miscellaneous Metal And Plastic Proces	51-4199	Metal Workers and Plastic Workers, Al	
48.0506	Sheet Metal	92198	All Other Metal And Plastic (Cutting	1	755	Extruding And Forming Machine Operat	51-4199	Metal Workers and Plastic Workers, Al	
48.0506	Sheet Metal	93196	Precision Assemblers, All Other	1	000		00-0000		
48.0506	Sheet Metal	93197	All Other Precision Assemblers	1	636	Precision Assemblers, Metal	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93197	All Other Precision Assemblers	1	655	Miscellaneous Precision Metal Workers	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93197	All Other Precision Assemblers	1	675	Hand Molders And Shapers, Except Jew	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93197	All Other Precision Assemblers	1	684	Miscellaneous Precision Workers, N.E.C	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93197	All Other Precision Assemblers	1	715	Miscellaneous Metal, Plastic, Stone And	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93197	All Other Precision Assemblers	1	785	Assemblers	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93944	Molders And Casters, Hand	1	719	Molding And Casting Machine Operator	51-9195	Molders, Shapers, and Casters, Except	2, 3, 4
48.0506	Sheet Metal	93944	Molders And Casters, Hand	1	755	Extruding And Forming Machine Operat	51-9195	Molders, Shapers, and Casters, Except	2, 3, 4
48.0506	Sheet Metal	93944	Molders And Casters, Hand	1	785	Assemblers	51-9195	Molders, Shapers, and Casters, Except	2, 3, 4
48.0506	Sheet Metal	93944	Molders And Casters, Hand	1	787	Hand Molding, Casting, And Forming O	51-9195	Molders, Shapers, and Casters, Except	2, 3, 4
48.0506	Sheet Metal	93944	Molders And Casters, Hand	1	889	Laborers, Except Construction	51-9195	Molders, Shapers, and Casters, Except	2, 3, 4
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	599	Construction Trades, N.E.C.	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	715	Miscellaneous Metal, Plastic, Stone And	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	758	Compressing And Compacting Machine	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	769	Slicing And Cutting Machine Operators	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	783	Welders And Cutters	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	785	Assemblers	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	786	Hand Cutting And Trimming Occupation	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	787	Hand Molding, Casting, And Forming O	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	795	Miscellaneous Hand Working Occupatic	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	796	Production Inspectors, Checkers, And E	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	888	Hand Packers And Packagers	51-2091	Fiberglass Laminators and Fabricators	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	599	Construction Trades, N.E.C.	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	715	Miscellaneous Metal, Plastic, Stone And	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	758	Compressing And Compacting Machine	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	769	Slicing And Cutting Machine Operators	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	783	Welders And Cutters	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	785	Assemblers	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Excep	1	786	Hand Cutting And Trimming Occupation	51-2092	Team Assemblers	

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	787	Hand Molding, Casting, And Forming O	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	795	Miscellaneous Hand Working Occupatic	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	796	Production Inspectors, Checkers, And E	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	888	Hand Packers And Packagers	51-2092	Team Assemblers	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	599	Construction Trades, N.E.C.	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	715	Miscellaneous Metal, Plastic, Stone And	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	758	Compressing And Compacting Machine	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	769	Slicing And Cutting Machine Operators	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	783	Welders And Cutters	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	785	Assemblers	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	786	Hand Cutting And Trimming Occupation	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	787	Hand Molding, Casting, And Forming O	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	795	Miscellaneous Hand Working Occupatic	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	796	Production Inspectors, Checkers, And E	51-2099	Assemblers and Fabricators, All Other	
48.0506	Sheet Metal	93956	Assemblers And Fabricators, Exce	1	888	Hand Packers And Packagers	51-2099	Assemblers and Fabricators, All Other	
48.0508	Welding, Brazing & S	91702	Welding Machine Setters And Set-l	1	783	Welders And Cutters	51-4122	Welding, Soldering, and Brazing Machi	1, 2, 3
48.0508	Welding, Brazing & S	91705	Welding Machine Operators & Tenc	1	783	Welders And Cutters	51-4122	Welding, Soldering, and Brazing Machi	1, 2, 3
48.0508	Welding, Brazing & S	91708	Soldering And Brazing Machine Se	1	784	Solderers And Brazers	51-4122	Welding, Soldering, and Brazing Machi	1, 2, 3
48.0508	Welding, Brazing & S	91710	Solder & Brazine Mach Ops	1	000		00-0000		
48.0508	Welding, Brazing & S	91711	Soldering And Brazing Machine Op	1	784	Solderers And Brazers	51-4122	Welding, Soldering, and Brazing Machi	1, 2, 3
48.0508	Welding, Brazing & S	91750	Welding Machine Setrs/Oprs/Tndrs	1	000		00-0000		
48.0508	Welding, Brazing & S	93914	Welders And Cutters	1	783	Welders And Cutters	51-4121	Welders, Cutters, Solderers, and Braze	1, 2, 4
48.0508	Welding, Brazing & S	93917	Solderers And Brazers	1	783	Welders And Cutters	51-4121	Welders, Cutters, Solderers, and Braze	1, 2, 4
48.0508	Welding, Brazing & S	93917	Solderers And Brazers	1	784	Solderers And Brazers	51-4121	Welders, Cutters, Solderers, and Braze	1, 2, 4
48.0701	Woodworking & Furni	89305	Pattern Markers, Wood	1	659	Miscellaneous Precision Woodworkers	51-7099	Woodworkers, All Other	
48.0701	Woodworking & Furni	89308	Wood Machinists	1	657	Cabinet Makers And Bench Carpenters	51-7011	Cabinetmakers and Bench Carpenters	3
48.0701	Woodworking & Furni	89308	Wood Machinists	1	657	Cabinet Makers And Bench Carpenters	51-7042	Woodworking Machine Setters, Operat	1, 2
48.0701	Woodworking & Furni	89308	Wood Machinists	1	657	Cabinet Makers And Bench Carpenters	51-7099	Woodworkers, All Other	
48.0701	Woodworking & Furni	89311	Cabinetmakers and Bench Carpent	1	657	Cabinet Makers And Bench Carpenters	51-7011	Cabinetmakers and Bench Carpenters	3
48.0701	Woodworking & Furni	89314	Furniture Finishers	1	547	Specified Mechanics And Repairers, N.	51-7021	Furniture Finishers	2
48.0701	Woodworking & Furni	89314	Furniture Finishers	1	658	Furniture And Wood Finishers	51-7021	Furniture Finishers	2
48.0701	Woodworking & Furni	89395	Precision Woodworkers	1	000		00-0000		
48.0701	Woodworking & Furni	89399	All Other Precision Woodworkers	1	659	Miscellaneous Precision Woodworkers	51-7099	Woodworkers, All Other	
48.0701	Woodworking & Furni	89399	All Other Precision Woodworkers	1	675	Hand Molders And Shapers, Except Jev	51-7099	Woodworkers, All Other	
48.0701	Woodworking & Furni	92302	Sawing Machine Setters & Set-up (1	727	Sawing Machine Operators	51-7041	Sawing Machine Setters, Operators, ar	2
48.0701	Woodworking & Furni	92305	Head Sawyers	1	727	Sawing Machine Operators	51-7041	Sawing Machine Setters, Operators, ar	2
48.0701	Woodworking & Furni	92308	Sawing Machine Operators & Tenc	1	727	Sawing Machine Operators	51-7041	Sawing Machine Setters, Operators, ar	2
48.0701	Woodworking & Furni	92310	Woodworking Machine Op/Set	1	000		00-0000		
48.0701	Woodworking & Furni	92311	Woodworking Machine Setters And	1	726	Wood Lathe, Routing, And Planing Mac	51-7042	Woodworking Machine Setters, Operat	1, 2
48.0701	Woodworking & Furni	92311	Woodworking Machine Setters And	1	728	Shaping And Joining Machine Operators	51-7042	Woodworking Machine Setters, Operat	1, 2
48.0701	Woodworking & Furni	92311	Woodworking Machine Setters And	1	733	Miscellaneous Woodworking Machine C	51-7042	Woodworking Machine Setters, Operat	1, 2
48.0701	Woodworking & Furni	92314	Woodworking Machine Ops./Tende	1	726	Wood Lathe, Routing, And Planing Mac	51-7042	Woodworking Machine Setters, Operat	1, 2
48.0701	Woodworking & Furni	92314	Woodworking Machine Ops./Tende	1	728	Shaping And Joining Machine Operators	51-7042	Woodworking Machine Setters, Operat	1, 2
48.0701	Woodworking & Furni	92314	Woodworking Machine Ops./Tende	1	729	Nailing And Tacking Machine Operators	51-7042	Woodworking Machine Setters, Operat	1, 2
48.0701	Woodworking & Furni	92314	Woodworking Machine Ops./Tende	1	733	Miscellaneous Woodworking Machine C	51-7042	Woodworking Machine Setters, Operat	1, 2

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
48.9999	Manufacturing Techn	25111	Programmer, Numerical, Tool & Pro	1	233	Tool Programmers, Numerical Control	51-4012	Numerical Tool and Process Control Pr	3
48.9999	Manufacturing Techn	81000	First-Line Supervisors and Manage	0.315	000		00-0000		
48.9999	Manufacturing Techn	81008	First Line Supervisors, Production	1	628	Supervisors, Production Occupations	51-1011	First-Line Supervisors/Managers of Pro	3
48.9999	Manufacturing Techn	81008	First Line Supervisors, Production	1	796	Production Inspectors, Checkers, And E	51-1011	First-Line Supervisors/Managers of Pro	3
48.9999	Manufacturing Techn	81008	First Line Supervisors, Production	1	864	Supervisors, Handlers, Equipment Clea	51-1011	First-Line Supervisors/Managers of Pro	3
48.9999	Manufacturing Techn	83000	Inspectors and related occupations	0.971	000		00-0000		
48.9999	Manufacturing Techn	83002	Inspectors,Testers & Graders Prec	1	523	Electronic Repairers, Communications /	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83002	Inspectors,Testers & Graders Prec	1	684	Miscellaneous Precision Workers, N.E.C	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83002	Inspectors,Testers & Graders Prec	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83002	Inspectors,Testers & Graders Prec	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83002	Inspectors,Testers & Graders Prec	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83005	Production Inspectors,Testers & Gr	1	488	Graders And Sorters, Agricultural Produ	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83005	Production Inspectors,Testers & Gr	1	689	Inspectors, Testers, And Graders	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83005	Production Inspectors,Testers & Gr	1	715	Miscellaneous Metal, Plastic, Stone Anc	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83005	Production Inspectors,Testers & Gr	1	796	Production Inspectors, Checkers, And E	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83005	Production Inspectors,Testers & Gr	1	797	Production Testers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83005	Production Inspectors,Testers & Gr	1	798	Production Samplers And Weighers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83005	Production Inspectors,Testers & Gr	1	799	Graders And Sorters, Exc. Agricultural	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83005	Production Inspectors,Testers & Gr	1	889	Laborers, Except Construction	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	83099	All Other Inspectors,Testers & Grad	1	874	Production Helpers	51-9061	Inspectors, Testers, Sorters, Samplers	1, 3, 4
48.9999	Manufacturing Techn	85132	Maintenance Repairers, General U	1	547	Specified Mechanics And Repairers, N.I	49-9042	Maintenance and Repair Workers, Gen	3
48.9999	Manufacturing Techn	87202	Electricians	1	523	Electronic Repairers, Communications /	47-2111	Electricians	3
48.9999	Manufacturing Techn	87202	Electricians	1	575	Electricians	47-2111	Electricians	3
48.9999	Manufacturing Techn	87202	Electricians	1	576	Electrician Apprentices	47-2111	Electricians	3
48.9999	Manufacturing Techn	87202	Electricians	1	523	Electronic Repairers, Communications /	49-2098	Security and Fire Alarm Systems Instal	
48.9999	Manufacturing Techn	87202	Electricians	1	575	Electricians	49-2098	Security and Fire Alarm Systems Instal	
48.9999	Manufacturing Techn	87202	Electricians	1	576	Electrician Apprentices	49-2098	Security and Fire Alarm Systems Instal	
48.9999	Manufacturing Techn	87823	Sheet Metal Wkrs, Duct Instlrs	0.789	000		00-0000		
48.9999	Manufacturing Techn	89132	Sheet Metal Workers	1	653	Sheet Metal Workers	47-2211	Sheet Metal Workers	3
48.9999	Manufacturing Techn	89132	Sheet Metal Workers	1	654	Sheet Metal Worker Apprentices	47-2211	Sheet Metal Workers	3
48.9999	Manufacturing Techn	89132	Sheet Metal Workers	1	715	Miscellaneous Metal, Plastic, Stone Anc	47-2211	Sheet Metal Workers	3
48.9999	Manufacturing Techn	91502	Numerical Control Machine Tool Op	1	714	Numerical Control Machine Operators	51-4011	Computer-Controlled Machine Tool Op	2
48.9999	Manufacturing Techn	91502	Numerical Control Machine Tool Op	1	769	Slicing And Cutting Machine Operators	51-4011	Computer-Controlled Machine Tool Op	2
48.9999	Manufacturing Techn	91502	Numerical Control Machine Tool Op	1	714	Numerical Control Machine Operators	51-4012	Numerical Tool and Process Control Pr	3
48.9999	Manufacturing Techn	91502	Numerical Control Machine Tool Op	1	769	Slicing And Cutting Machine Operators	51-4012	Numerical Tool and Process Control Pr	3
48.9999	Manufacturing Techn	91902	Plastic Mold Machine Setters & Set	1	719	Molding And Casting Machine Operator	51-4072	Molding, Coremaking, and Casting Mac	1, 2, 3
48.9999	Manufacturing Techn	91905	Plastic Mold Machine Ops. & Tend	1	719	Molding And Casting Machine Operator	51-4072	Molding, Coremaking, and Casting Mac	1, 2, 3
48.9999	Manufacturing Techn	91908	Metal Molding Machine Setters & S	1	719	Molding And Casting Machine Operator	51-4072	Molding, Coremaking, and Casting Mac	1, 2, 3
48.9999	Manufacturing Techn	91910	Met Mold Mach Ops/Tndrs/Sttrs	1	000		00-0000		
48.9999	Manufacturing Techn	91911	Metal Molding Machine Operators	1	719	Molding And Casting Machine Operator	51-4072	Molding, Coremaking, and Casting Mac	1, 2, 3
48.9999	Manufacturing Techn	91914	Foundry Mold Assembly & Shakeo	1	719	Molding And Casting Machine Operator	51-4071	Foundry Mold and Coremakers	2
48.9999	Manufacturing Techn	91914	Foundry Mold Assembly & Shakeo	1	719	Molding And Casting Machine Operator	51-4072	Molding, Coremaking, and Casting Mac	1, 2, 3
48.9999	Manufacturing Techn	91917	Electrolytic Plating Machine Setter	1	723	Metal Plating Machine Operators	51-4193	Plating and Coating Machine Setters, C	1, 2, 3
48.9999	Manufacturing Techn	91920	Electrolytic Plating Mach Oprs	1	000		00-0000		
48.9999	Manufacturing Techn	91921	Electrolytic Plating Machine Opera	1	723	Metal Plating Machine Operators	51-4193	Plating and Coating Machine Setters, C	1, 2, 3
48.9999	Manufacturing Techn	91921	Electrolytic Plating Machine Opera	1	725	Miscellaneous Metal And Plastic Proces	51-4193	Plating and Coating Machine Setters, C	1, 2, 3
48.9999	Manufacturing Techn	91923	Nonelectrolytic Plating Mach. Sette	1	723	Metal Plating Machine Operators	51-4193	Plating and Coating Machine Setters, C	1, 2, 3
48.9999	Manufacturing Techn	91926	Nonelectrolytic Plating Machine Op	1	723	Metal Plating Machine Operators	51-4193	Plating and Coating Machine Setters, C	1, 2, 3

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
48.9999	Manufacturing Techn	91928	Heating Eqpt. Setters & Set-up Ops	1	724	Heat Treating Equipment Operators	51-4191	Heat Treating Equipment Setters, Oper	2, 3
48.9999	Manufacturing Techn	91932	Heat Treating Mach.Ops.,Metal & F	1	724	Heat Treating Equipment Operators	51-4191	Heat Treating Equipment Setters, Oper	2, 3
48.9999	Manufacturing Techn	91932	Heat Treating Mach.Ops.,Metal & F	1	766	Furnace, Kiln, And Oven Operators, Exc	51-4191	Heat Treating Equipment Setters, Oper	2, 3
48.9999	Manufacturing Techn	91935	Furnace Operators & Tenders	1	715	Miscellaneous Metal, Plastic, Stone And	51-4051	Metal-Refining Furnace Operators and	2
48.9999	Manufacturing Techn	91935	Furnace Operators & Tenders	1	719	Molding And Casting Machine Operator	51-4051	Metal-Refining Furnace Operators and	2
48.9999	Manufacturing Techn	91935	Furnace Operators & Tenders	1	724	Heat Treating Equipment Operators	51-4051	Metal-Refining Furnace Operators and	2
48.9999	Manufacturing Techn	91935	Furnace Operators & Tenders	1	766	Furnace, Kiln, And Oven Operators, Exc	51-4051	Metal-Refining Furnace Operators and	2
48.9999	Manufacturing Techn	91938	Heaters, Metal & Plastic	1	724	Heat Treating Equipment Operators	51-4191	Heat Treating Equipment Setters, Oper	2, 3
48.9999	Manufacturing Techn	91938	Heaters, Metal & Plastic	1	878	Machine Feeders And Offbearers	51-4191	Heat Treating Equipment Setters, Oper	2, 3
48.9999	Manufacturing Techn	91950	Plast/Mold Mach Oprs/Tndrs	1	000		00-0000		
48.9999	Manufacturing Techn	92101	Metal/Plastic Settrs/Oprs NEC	1	000		00-0000		
48.9999	Manufacturing Techn	92197	All Other Metal/Plastic Machine Set	1	715	Miscellaneous Metal, Plastic, Stone And	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	92197	All Other Metal/Plastic Machine Set	1	717	Fabricating Machine Operators, N.E.C.	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	92197	All Other Metal/Plastic Machine Set	1	725	Miscellaneous Metal And Plastic Proces	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	92198	All Other Metal/Plastic Machine Op	1	704	Lathe And Turning Machine Operators	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	92198	All Other Metal/Plastic Machine Op	1	715	Miscellaneous Metal, Plastic, Stone And	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	92198	All Other Metal/Plastic Machine Op	1	717	Fabricating Machine Operators, N.E.C.	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	92198	All Other Metal/Plastic Machine Op	1	719	Molding And Casting Machine Operator	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	92198	All Other Metal/Plastic Machine Op	1	725	Miscellaneous Metal And Plastic Proces	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	92198	All Other Metal/Plastic Machine Op	1	755	Extruding And Forming Machine Operat	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	92914	Paper Goods Machine Setters & O	1	765	Folding Machine Operators	51-9196	Paper Goods Machine Setters, Operat	2
48.9999	Manufacturing Techn	92914	Paper Goods Machine Setters & O	1	777	Miscellaneous Machine Operators, N.E.	51-9196	Paper Goods Machine Setters, Operat	2
48.9999	Manufacturing Techn	92951	Painting Machine Setters & Set-up	1	723	Metal Plating Machine Operators	51-9121	Coating, Painting, and Spraying Machi	1, 2
48.9999	Manufacturing Techn	92951	Painting Machine Setters & Set-up	1	754	Packaging And Filling Machine Operato	51-9121	Coating, Painting, and Spraying Machi	1, 2
48.9999	Manufacturing Techn	92951	Painting Machine Setters & Set-up	1	777	Miscellaneous Machine Operators, N.E.	51-9121	Coating, Painting, and Spraying Machi	1, 2
48.9999	Manufacturing Techn	92953	Painting Machine Ops.&Tenders	1	733	Miscellaneous Woodworking Machine C	51-9121	Coating, Painting, and Spraying Machi	1, 2
48.9999	Manufacturing Techn	92953	Painting Machine Ops.&Tenders	1	749	Miscellaneous Textile Machine Operato	51-9121	Coating, Painting, and Spraying Machi	1, 2
48.9999	Manufacturing Techn	92953	Painting Machine Ops.&Tenders	1	759	Painting And Paint Spraying Machine O	51-9121	Coating, Painting, and Spraying Machi	1, 2
48.9999	Manufacturing Techn	92960	Coat/paint Ops/Tndrs/Sttrs	1	000		00-0000		
48.9999	Manufacturing Techn	92968	Extruding & Forming Machine Sette	1	755	Extruding And Forming Machine Operat	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92968	Extruding & Forming Machine Sette	1	758	Compressing And Compacting Machine	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92970	Extrud/Form Mach Sets/Oprs	1	000		00-0000		
48.9999	Manufacturing Techn	92971	Extruding & Forming Machine Ops.	1	706	Punching And Stamping Press Machine	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92971	Extruding & Forming Machine Ops.	1	719	Molding And Casting Machine Operator	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92971	Extruding & Forming Machine Ops.	1	728	Shaping And Joining Machine Operator	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92971	Extruding & Forming Machine Ops.	1	733	Miscellaneous Woodworking Machine C	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92971	Extruding & Forming Machine Ops.	1	749	Miscellaneous Textile Machine Operato	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92971	Extruding & Forming Machine Ops.	1	753	Cementing And Gluing Machine Operat	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92971	Extruding & Forming Machine Ops.	1	755	Extruding And Forming Machine Operat	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92971	Extruding & Forming Machine Ops.	1	758	Compressing And Compacting Machine	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	92971	Extruding & Forming Machine Ops.	1	777	Miscellaneous Machine Operators, N.E.	51-9041	Extruding, Forming, Pressing, and Con	1, 2
48.9999	Manufacturing Techn	93105	Machine Builders and Other Preci	1	636	Precision Assemblers, Metal	49-2011	Computer, Automated Teller, and Offic	3, 4
48.9999	Manufacturing Techn	93105	Machine Builders and Other Preci	1	683	Electrical And Electronic Equipment Ass	49-2011	Computer, Automated Teller, and Offic	3, 4
48.9999	Manufacturing Techn	93105	Machine Builders and Other Preci	1	636	Precision Assemblers, Metal	51-2031	Engine and Other Machine Assemblers	3
48.9999	Manufacturing Techn	93105	Machine Builders and Other Preci	1	683	Electrical And Electronic Equipment Ass	51-2031	Engine and Other Machine Assemblers	3
48.9999	Manufacturing Techn	93117	Watch & Clock Assemblers, Preci	1	647	Precious Stones And Metals Workers(J	51-2093	Timing Device Assemblers, Adjusters,	2
48.9999	Manufacturing Techn	93117	Watch & Clock Assemblers, Preci	1	684	Miscellaneous Precision Workers, N.E.C	51-2093	Timing Device Assemblers, Adjusters,	2
48.9999	Manufacturing Techn	93117	Watch & Clock Assemblers, Preci	1	689	Inspectors, Testers, And Graders	51-2093	Timing Device Assemblers, Adjusters,	2

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	Jobzone
48.9999	Manufacturing Techn	93117	Watch & Clock Assemblers, Preci	1	693	Adjusters And Calibrators	51-2093	Timing Device Assemblers, Adjusters,	2
48.9999	Manufacturing Techn	93196	Precision Assemblers, All Other	1	000		00-0000		
48.9999	Manufacturing Techn	93197	All Other Precision Assemblers, Me	1	636	Precision Assemblers, Metal	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93197	All Other Precision Assemblers, Me	1	655	Miscellaneous Precision Metal Workers	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93197	All Other Precision Assemblers, Me	1	675	Hand Molders And Shapers, Except Jew	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93197	All Other Precision Assemblers, Me	1	684	Miscellaneous Precision Workers, N.E.C	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93197	All Other Precision Assemblers, Me	1	715	Miscellaneous Metal, Plastic, Stone And	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93197	All Other Precision Assemblers, Me	1	785	Assemblers	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93902	Machine Assemblers	1	785	Assemblers	51-2031	Engine and Other Machine Assemblers	3
48.9999	Manufacturing Techn	93905	Electrical & Electronic Assemblers	1	785	Assemblers	51-2022	Electrical and Electronic Equipment As	3
48.9999	Manufacturing Techn	93905	Electrical & Electronic Assemblers	1	785	Assemblers	51-2031	Engine and Other Machine Assemblers	3
48.9999	Manufacturing Techn	93911	Glaziers, Manufacturing	1	785	Assemblers	47-2121	Glaziers	3
48.9999	Manufacturing Techn	93911	Glaziers, Manufacturing	1	785	Assemblers	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	719	Molding And Casting Machine Operator	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	755	Extruding And Forming Machine Operat	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	785	Assemblers	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	787	Hand Molding, Casting, And Forming O	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	889	Laborers, Except Construction	51-4199	Metal Workers and Plastic Workers, Al	
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	719	Molding And Casting Machine Operator	51-9195	Molders, Shapers, and Casters, Excep	2, 3, 4
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	755	Extruding And Forming Machine Operat	51-9195	Molders, Shapers, and Casters, Excep	2, 3, 4
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	785	Assemblers	51-9195	Molders, Shapers, and Casters, Excep	2, 3, 4
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	787	Hand Molding, Casting, And Forming O	51-9195	Molders, Shapers, and Casters, Excep	2, 3, 4
48.9999	Manufacturing Techn	93944	Molders & Casters, Hand	1	889	Laborers, Except Construction	51-9195	Molders, Shapers, and Casters, Excep	2, 3, 4
48.9999	Manufacturing Techn	93951	Engraving & Printing, Hand	1	785	Assemblers	51-9194	Etchers and Engravers	1, 3
48.9999	Manufacturing Techn	93951	Engraving & Printing, Hand	1	793	Hand Engraving And Printing Occupatio	51-9194	Etchers and Engravers	1, 3
48.9999	Manufacturing Techn	93951	Engraving & Printing, Hand	1	889	Laborers, Except Construction	51-9194	Etchers and Engravers	1, 3
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	599	Construction Trades, N.E.C.	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	715	Miscellaneous Metal, Plastic, Stone And	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	758	Compressing And Compacting Machine	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	769	Slicing And Cutting Machine Operators	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	783	Welders And Cutters	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	785	Assemblers	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	786	Hand Cutting And Trimming Occupation	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	787	Hand Molding, Casting, And Forming O	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	795	Miscellaneous Hand Working Occupatio	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	796	Production Inspectors, Checkers, And E	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	888	Hand Packers And Packagers	51-2091	Fiberglass Laminators and Fabricators	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	599	Construction Trades, N.E.C.	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	715	Miscellaneous Metal, Plastic, Stone And	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	758	Compressing And Compacting Machine	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	769	Slicing And Cutting Machine Operators	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	783	Welders And Cutters	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	785	Assemblers	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	786	Hand Cutting And Trimming Occupation	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	787	Hand Molding, Casting, And Forming O	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	795	Miscellaneous Hand Working Occupatio	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	796	Production Inspectors, Checkers, And E	51-2092	Team Assemblers	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	888	Hand Packers And Packagers	51-2092	Team Assemblers	

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Censu	CensusTitle	SOCcode	SOCtitle	jobzone
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	599	Construction Trades, N.E.C.	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	715	Miscellaneous Metal, Plastic, Stone And	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	758	Compressing And Compacting Machine	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	769	Slicing And Cutting Machine Operators	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	783	Welders And Cutters	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	785	Assemblers	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	786	Hand Cutting And Trimming Occupation	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	787	Hand Molding, Casting, And Forming O	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	795	Miscellaneous Hand Working Occupatic	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	796	Production Inspectors, Checkers, And E	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93956	Assemblers And Fabricators, Exce	1	888	Hand Packers And Packagers	51-2099	Assemblers and Fabricators, All Other	
48.9999	Manufacturing Techn	93996	Hand Workers, NEC	1	000		00-0000		
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	547	Specified Mechanics And Repairers, N.I	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	715	Miscellaneous Metal, Plastic, Stone And	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	733	Miscellaneous Woodworking Machine C	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	756	Mixing And Blending Machine Operators	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	769	Slicing And Cutting Machine Operators	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	785	Assemblers	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	786	Hand Cutting And Trimming Occupation	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	787	Hand Molding, Casting, And Forming O	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	795	Miscellaneous Hand Working Occupatic	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	874	Production Helpers	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	889	Laborers, Except Construction	51-5011	Bindery Workers	1, 2
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	547	Specified Mechanics And Repairers, N.I	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	715	Miscellaneous Metal, Plastic, Stone And	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	733	Miscellaneous Woodworking Machine C	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	756	Mixing And Blending Machine Operators	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	769	Slicing And Cutting Machine Operators	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	785	Assemblers	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	786	Hand Cutting And Trimming Occupation	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	787	Hand Molding, Casting, And Forming O	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	795	Miscellaneous Hand Working Occupatic	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	874	Production Helpers	51-9199	Production Workers, All Other	
48.9999	Manufacturing Techn	93999	All Other Hand Workers	1	889	Laborers, Except Construction	51-9199	Production Workers, All Other	
49.0101	Air Transportation	39002	Airplane dispatchers & air traffic co	1	227	Air Traffic Controllers	53-2022	Airfield Operations Specialists	
49.0101	Air Transportation	68026	Flight Attendants	1	463	Public Transportation Attendants	39-6031	Flight Attendants	2
49.0101	Air Transportation	81000	First-Line Supervisors and Manage	0.076	000		00-0000		
49.0101	Air Transportation	81017	First line supervisors, helpers/labor	1	864	Supervisors, Handlers, Equipment Clea	53-1011	Aircraft Cargo Handling Supervisors	
49.0306	Marine Mechanics	85109	Industrial Machinery Mechanics	0.07	000		00-0000		
49.0306	Marine Mechanics	85116	Machinery Maintenance Mechanics	1	518	Industrial Machinery Repairers	49-3051	Motorboat Mechanics	3
49.0306	Marine Mechanics	85116	Machinery Maintenance Mechanics	1	547	Specified Mechanics And Repairers, N.I	49-3051	Motorboat Mechanics	3
49.0306	Marine Mechanics	85116	Machinery Maintenance Mechanics	1	518	Industrial Machinery Repairers	49-9041	Industrial Machinery Mechanics	3
49.0306	Marine Mechanics	85116	Machinery Maintenance Mechanics	1	547	Specified Mechanics And Repairers, N.I	49-9041	Industrial Machinery Mechanics	3
49.0306	Marine Mechanics	85116	Machinery Maintenance Mechanics	1	518	Industrial Machinery Repairers	49-9092	Commercial Divers	2
49.0306	Marine Mechanics	85116	Machinery Maintenance Mechanics	1	547	Specified Mechanics And Repairers, N.I	49-9092	Commercial Divers	2
49.0306	Marine Mechanics	89121	Shipfitters	1	646	Lay-Out Workers	51-4192	Lay-Out Workers, Metal and Plastic	3

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
49.0306	Marine Mechanics	97504	Marine Oilers, Able Seamen	1	000		00-0000		
49.0306	Marine Mechanics	97517	Ordinary Seamen And Marine Oilers	1	829	Sailors And Deckhands	53-5011	Sailors and Marine Oilers	2
50.0599	Dramatic/Theater Arts	34035	Artists and Commercial Artists	1	185	Designers	27-1012	Craft Artists	
50.0599	Dramatic/Theater Arts	34035	Artists and Commercial Artists	1	188	Painters, Sculptors, Craft-Artists, And A	27-1012	Craft Artists	
50.0599	Dramatic/Theater Arts	34035	Artists and Commercial Artists	1	194	Artists, Performers, And Related Worke	27-1012	Craft Artists	
50.0599	Dramatic/Theater Arts	34035	Artists and Commercial Artists	1	774	Photographic Process Machine Operatc	27-1012	Craft Artists	
50.0599	Dramatic/Theater Arts	34035	Artists and Commercial Artists	1	185	Designers	27-1019	Artists and Related Workers, All Other	
50.0599	Dramatic/Theater Arts	34035	Artists and Commercial Artists	1	188	Painters, Sculptors, Craft-Artists, And A	27-1019	Artists and Related Workers, All Other	
50.0599	Dramatic/Theater Arts	34035	Artists and Commercial Artists	1	194	Artists, Performers, And Related Worke	27-1019	Artists and Related Workers, All Other	
50.0599	Dramatic/Theater Arts	34035	Artists and Commercial Artists	1	774	Photographic Process Machine Operatc	27-1019	Artists and Related Workers, All Other	
50.0599	Dramatic/Theater Arts	34047	Music Directors,Singers & Related	1	186	Musicians And Composers	27-2042	Musicians and Singers	2, 5
50.0599	Dramatic/Theater Arts	34050	Musicians	1	000		00-0000		
50.0599	Dramatic/Theater Arts	34051	Musicians, Instrumental	1	186	Musicians And Composers	27-2042	Musicians and Singers	2, 5
50.0599	Dramatic/Theater Arts	34056	Producers, Directors, Actors, And C	1	187	Actors And Directors	27-2011	Actors	3
50.0599	Dramatic/Theater Arts	34056	Producers, Directors, Actors, And C	1	194	Artists, Performers, And Related Worke	27-2011	Actors	3
50.0599	Dramatic/Theater Arts	34056	Producers, Directors, Actors, And C	1	187	Actors And Directors	27-2099	Entertainers and Performers, Sports ar	
50.0599	Dramatic/Theater Arts	34056	Producers, Directors, Actors, And C	1	194	Artists, Performers, And Related Worke	27-2099	Entertainers and Performers, Sports ar	
50.0599	Dramatic/Theater Arts	39999	Other professional, paraprofessiona	1	034	Business And Promotion Agents	27-4014	Sound Engineering Technicians	3
50.0599	Dramatic/Theater Arts	39999	Other professional, paraprofessiona	1	194	Artists, Performers, And Related Worke	27-4014	Sound Engineering Technicians	3
50.0599	Dramatic/Theater Arts	39999	Other professional, paraprofessiona	1	235	Technicians, N.E.C.	27-4014	Sound Engineering Technicians	3
50.0599	Dramatic/Theater Arts	68005	Hairdressers, hairstylists & cosmet	1	458	Hairdressers And Cosmetologists	39-5091	Makeup Artists, Theatrical and Perform	2
51.9999	Health	24599	All Other Physical and Life Science	1	225	Science Technicians, N.E.C.	19-4091	Environmental Science and Protection	3
51.9999	Health	24599	All Other Physical and Life Science	1	225	Science Technicians, N.E.C.	19-4099	Life, Physical, and Social Science Tech	
51.9999	Health	27308	Human Services Workers	1	174	Social Workers	21-1093	Social and Human Service Assistants	2
51.9999	Health	32311	Corrective And Manual Arts Therap	1	103	Physical Therapists	29-1129	Therapists, All Other	
51.9999	Health	32317	Recreational Therapists	1	105	Therapists, N.E.C.	29-1125	Recreational Therapist	4
51.9999	Health	32398	Therapists, NEC	1	000		00-0000		
51.9999	Health	32399	All Other Therapists	1	105	Therapists, N.E.C.	29-1129	Therapists, All Other	
51.9999	Health	32502	Registered Nurses	1	095	Registered Nurses	29-1111	Registered Nurse	4
51.9999	Health	32505	Licensed Practical Nurses	1	207	Licensed Practical Nurses	29-2061	Licensed Practical and Licensed Vocat	3
51.9999	Health	32508	Emergency Medical Technicians	1	208	Health Technologists And Technicians,	29-2041	Emergency Medical Technicians and P	2
51.9999	Health	32518	Pharmacy Technicians	1	203	Clinical Laboratory Technologists And T	29-2052	Pharmacy Technicians	2
51.9999	Health	32523	Dietetic Technicians	1	097	Dietitians	29-2051	Dietetic Technician	4
51.9999	Health	32902	Medical & Clinical Laboratory Tech	1	203	Clinical Laboratory Technologists And T	29-2011	Medical and Clinical Laboratory Techno	4
51.9999	Health	32905	Medical And Clinical Laboratory Te	1	203	Clinical Laboratory Technologists And T	29-2012	Medical and Clinical Laboratory Techni	2
51.9999	Health	32905	Medical And Clinical Laboratory Te	1	208	Health Technologists And Technicians,	29-2012	Medical and Clinical Laboratory Techni	2
51.9999	Health	32908	Dental Hygienists	1	204	Dental Hygienists	29-2021	Dental Hygienists	3
51.9999	Health	32910	Clinical Lab Technol/Techs	1	000		00-0000		
51.9999	Health	32911	Medical Records Technicians	1	205	Health Record Technologists And Tech	29-2071	Medical Records and Health Informatio	3
51.9999	Health	32916	Radiologic Technols/Techs	1	000		00-0000		
51.9999	Health	32919	Radiologic Technologists (32917 cd	1	206	Radiologic Technicians	29-2032	Diagnostic Medical Sonographers	
51.9999	Health	32919	Radiologic Technologists	1	206	Radiologic Technicians	29-2034	Radiologic Technologists and Technici	4
51.9999	Health	32923	Electroneurodiagnostic Technologis	1	208	Health Technologists And Technicians,	29-2099	Health Technologists and Technicians,	
51.9999	Health	32925	Cardiology Technologists	1	208	Health Technologists And Technicians,	29-2031	Cardiovascular Technologists and Tec	3
51.9999	Health	32926	Electrocardiograph Technicians	1	208	Health Technologists And Technicians,	29-2031	Cardiovascular Technologists and Tec	3
51.9999	Health	32928	Surgical Technologists And Techni	1	208	Health Technologists And Technicians,	29-2055	Surgical Technologists	3

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
51.9999	Health	32931	Psychiatric Technicians	1	207	Licensed Practical Nurses	29-2053	Psychiatric Technicians	3
51.9999	Health	32995	Health Prof & Parapro, NEC	1	000		00-0000		
51.9999	Health	32999	All Other Health Professionals, Par	1	208	Health Technologists And Technicians,	29-2054	Respiratory Therapy Technicians	
51.9999	Health	32999	All Other Health Professionals, Par	1	208	Health Technologists And Technicians,	29-2091	Orthotists and Prosthetists	3
51.9999	Health	32999	All Other Health Professionals, Par	1	208	Health Technologists And Technicians,	29-2099	Health Technologists and Technicians,	
51.9999	Health	32999	All Other Health Professionals, Par	1	208	Health Technologists And Technicians,	29-9010	Occupational Health and Safety Specia	
51.9999	Health	32999	All Other Health Professionals, Par	1	208	Health Technologists And Technicians,	29-9012	Occupational Health and Safety Techni	
51.9999	Health	32999	All Other Health Professionals, Par	1	208	Health Technologists And Technicians,	29-9099	Healthcare Practitioners and Technical	
51.9999	Health	66002	Dental Assistants	1	445	Dental Assistants	31-9091	Dental Assistants	3
51.9999	Health	66005	Medical Assistants	1	446	Health Aides, Except Nursing	31-9092	Medical Assistants	3
51.9999	Health	66005	Medical Assistants	1	446	Health Aides, Except Nursing	31-9093	Medical Equipment Preparers	2
51.9999	Health	66005	Medical Assistants	1	446	Health Aides, Except Nursing	31-9099	Healthcare Support Workers, All Other	
51.9999	Health	66008	Nursing Aides, Orderlies, And Attend	1	207	Licensed Practical Nurses	31-1012	Nursing Aides, Orderlies, and Attendan	2
51.9999	Health	66008	Nursing Aides, Orderlies, And Attend	1	447	Nursing Aides, Orderlies, And Attendant	31-1012	Nursing Aides, Orderlies, and Attendan	2
51.9999	Health	66014	Psychiatric Aides	1	446	Health Aides, Except Nursing	31-1013	Psychiatric Aides	2
51.9999	Health	66014	Psychiatric Aides	1	447	Nursing Aides, Orderlies, And Attendant	31-1013	Psychiatric Aides	2
51.9999	Health	66017	Physical And Corrective Therapy A	1	446	Health Aides, Except Nursing	31-2021	Physical Therapist Assistants	2
51.9999	Health	66017	Physical And Corrective Therapy A	1	446	Health Aides, Except Nursing	31-2022	Physical Therapist Aides	2
51.9999	Health	66021	Occupational Therapy Assistants A	1	446	Health Aides, Except Nursing	31-2011	Occupational Therapist Assistants	2
51.9999	Health	66021	Occupational Therapy Assistants A	1	446	Health Aides, Except Nursing	31-2012	Occupational Therapist Aides	2
51.9999	Health	66026	Pharmacy Aides	1	446	Health Aides, Except Nursing	31-9095	Pharmacy Aides	
51.9999	Health	66099	All Other Health Service Workers	1	446	Health Aides, Except Nursing	31-9093	Medical Equipment Preparers	2
51.9999	Health	66099	All Other Health Service Workers	1	469	Personal Service Occupations, N.E.C.	31-9093	Medical Equipment Preparers	2
51.9999	Health	66099	All Other Health Service Workers	1	446	Health Aides, Except Nursing	31-9099	Healthcare Support Workers, All Other	
51.9999	Health	66099	All Other Health Service Workers	1	469	Personal Service Occupations, N.E.C.	31-9099	Healthcare Support Workers, All Other	
51.9999	Health	89917	Precision Optical Goods Workers	1	677	Optical Goods Workers	51-9083	Ophthalmic Laboratory Technicians	3, 4
51.9999	Health	89921	Precision Dental Laboratory Techni	1	678	Dental Laboratory And Medical Applianc	51-9081	Dental Laboratory Technicians	3
51.9999	Health	89921	Precision Dental Laboratory Techni	1	874	Production Helpers	51-9081	Dental Laboratory Technicians	3
51.9999	Health	89923	Medical Appliance Makers	1	684	Miscellaneous Precision Workers, N.E.C	51-9082	Medical Appliance Technicians	2
52.9999A	Information Technolo	22505	Electrical And Electronic Engineerin	1	213	Electrical And Electronic Technicians	17-3023	Electrical and Electronic Engineering T	4
52.9999A	Information Technolo	22505	Electrical And Electronic Engineerin	1	213	Electrical And Electronic Technicians	17-3024	Electro-Mechanical Technicians	4
52.9999A	Information Technolo	22599	All Other Engineering And Related	1	216	Engineering Technicians, N.E.C.	17-3024	Electro-Mechanical Technicians	4
52.9999A	Information Technolo	22599	All Other Engineering And Related	1	216	Engineering Technicians, N.E.C.	17-3029	Engineering Technicians, Except Draft	
52.9999A	Information Technolo	25102	Systems Analysts, Electronic Data	1	064	Computer Systems Analysts And Scient	15-1051	Computer Systems Analysts	3
52.9999A	Information Technolo	25102	Systems Analysts, Electronic Data	1	064	Computer Systems Analysts And Scient	15-1081	Network Systems and Data Communic	4
52.9999A	Information Technolo	25103	Data Base Administrators	1	064	Computer Systems Analysts And Scient	15-1061	Database Administrators	4
52.9999A	Information Technolo	25104	Computer Support Specialists	1	064	Computer Systems Analysts And Scient	15-1041	Computer Support Specialists	4
52.9999A	Information Technolo	25104	Computer Support Specialists	1	235	Technicians, N.E.C.	15-1041	Computer Support Specialists	4
52.9999A	Information Technolo	25104	Computer Support Specialists	1	064	Computer Systems Analysts And Scient	15-1071	Network and Computer Systems Admi	4
52.9999A	Information Technolo	25104	Computer Support Specialists	1	235	Technicians, N.E.C.	15-1071	Network and Computer Systems Admi	4
52.9999A	Information Technolo	25105	Computer Programmers	1	229	Computer Programmers	15-1021	Computer Programmers	4
52.9999A	Information Technolo	25106	Computer Programmers	1	000		00-0000		
52.9999A	Information Technolo	25108	Computer Programmer Aides	1	229	Computer Programmers	15-1021	Computer Programmers	4
52.9999A	Information Technolo	25111	Programmers, Numerical Tool And	1	233	Tool Programmers, Numerical Control	51-4012	Numerical Tool and Process Control Pr	3
52.9999A	Information Technolo	25196	Computer Sciencists, NEC	1	000		00-0000		
52.9999A	Information Technolo	25199	All Other Computer Scientists	1	064	Computer Systems Analysts And Scient	15-1011	Computer and Information Scientists, F	
52.9999A	Information Technolo	25199	All Other Computer Scientists	1	064	Computer Systems Analysts And Scient	15-1071	Network and Computer Systems Admi	4

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
52.9999A	Information Technolo	25199	All Other Computer Scientists	1	064	Computer Systems Analysts And Scient	15-1081	Network Systems and Data Communic	4
52.9999A	Information Technolo	25199	All Other Computer Scientists	1	064	Computer Systems Analysts And Scient	15-1099	Computer Specialists, All Other	
52.9999A	Information Technolo	31505	Technical Assistants, Library	1	164	Librarians	25-4031	Library Technicians	2
52.9999A	Information Technolo	35199	Engineering Techns, NEC	1	000		00-0000		
52.9999A	Information Technolo	56011	Computer Operators, Except Peripl	1	308	Computer Operators	43-9011	Computer Operators	3
52.9999A	Information Technolo	56014	Peripheral Edp Equipment Operato	1	309	Peripheral Equipment Operators	43-9011	Computer Operators	3
52.9999A	Information Technolo	85705	Data Processing Equipment Repair	1	523	Electronic Repairers, Communications	49-2011	Computer, Automated Teller, and Offic	3, 4
52.9999A	Information Technolo	85717	Electronics Repairers, Commercial	1	523	Electronic Repairers, Communications	49-2094	Electrical and Electronics Repairers, C	3
52.9999A	Information Technolo	93905	Electrical And Electronic Assemble	1	785	Assemblers	51-2022	Electrical and Electronic Equipment As	3
52.9999B	Wholesale/Retail Sale	21302	Wholesale And Retail Buyers, Exce	1	029	Buyers, Wholesale And Retail Trade Ex	13-1022	Wholesale and Retail Buyers, Except F	3
52.9999B	Wholesale/Retail Sale	21308	Purchasing Agents, Except Wholes	1	033	Purchasing Agents And Buyers, N.E.C.	13-1023	Purchasing Agents, Except Wholesale,	4
52.9999B	Wholesale/Retail Sale	34008	Public Relations Specialists And Pu	1	197	Public Relations Specialists	27-3031	Public Relations Specialists	4
52.9999B	Wholesale/Retail Sale	41002	First-Line Supervisors And Manage	1	243	Supervisors And Proprietors, Sales Occ	41-1011	First-Line Supervisors/Managers of Re	3
52.9999B	Wholesale/Retail Sale	41002	First-Line Supervisors And Manage	1	277	Street And Door-To-Door Sales Worker	41-1011	First-Line Supervisors/Managers of Re	3
52.9999B	Wholesale/Retail Sale	41002	First-Line Supervisors And Manage	1	243	Supervisors And Proprietors, Sales Occ	41-1012	First-Line Supervisors/Managers of No	3
52.9999B	Wholesale/Retail Sale	41002	First-Line Supervisors And Manage	1	277	Street And Door-To-Door Sales Worker	41-1012	First-Line Supervisors/Managers of No	3
52.9999B	Wholesale/Retail Sale	43002	Sales agents, insurance	1	253	Insurance Sales Occupations	41-3021	Insurance Sales Agents	3
52.9999B	Wholesale/Retail Sale	43008	Sales agents, real estate	1	254	Real Estate Sales Occupations	41-9022	Real Estate Sales Agents	2
52.9999B	Wholesale/Retail Sale	43014	Sales Agents, Securities, Commod	1	255	Securities And Financial Services Sales	41-3031	Securities, Commodities, and Financia	3, 4
52.9999B	Wholesale/Retail Sale	43017	Sales Agents, Selected Business S	1	257	Sales Occupations, Other Business Se	41-3099	Sales Representatives, Services, All O	
52.9999B	Wholesale/Retail Sale	43021	Travel Agents	1	274	Sales Workers, Other Commodities	41-3041	Travel Agents	2
52.9999B	Wholesale/Retail Sale	43023	Sales Agents, Advertising	1	256	Advertising And Related Sales Occupat	41-3011	Advertising Sales Agents	3
52.9999B	Wholesale/Retail Sale	43099	All Other Sales Representatives Ar	1	266	Sales Workers, Furniture And Home Fu	41-3099	Sales Representatives, Services, All O	
52.9999B	Wholesale/Retail Sale	43099	All Other Sales Representatives Ar	1	274	Sales Workers, Other Commodities	41-3099	Sales Representatives, Services, All O	
52.9999B	Wholesale/Retail Sale	43099	All Other Sales Representatives Ar	1	283	Demonstrators, Promoters And Models,	41-3099	Sales Representatives, Services, All O	
52.9999B	Wholesale/Retail Sale	49005	Sales Representatives, Scientific A	1	259	Sales Representatives, Mining, Manufac	41-4011	Sales Representatives, Wholesale and	2, 3
52.9999B	Wholesale/Retail Sale	49008	Sales Representatives, Except Scie	1	259	Sales Representatives, Mining, Manufac	41-4012	Sales Representatives, Wholesale and	2
52.9999B	Wholesale/Retail Sale	49008	Sales Representatives, Except Scie	1	267	Sales Workers, Radio, Tv, Hi-Fi, And Ap	41-4012	Sales Representatives, Wholesale and	2
52.9999B	Wholesale/Retail Sale	49008	Sales Representatives, Except Scie	1	268	Sales Workers, Hardware And Building	41-4012	Sales Representatives, Wholesale and	2
52.9999B	Wholesale/Retail Sale	49008	Sales Representatives, Except Scie	1	274	Sales Workers, Other Commodities	41-4012	Sales Representatives, Wholesale and	2
52.9999B	Wholesale/Retail Sale	49011	Salespersons, Retail	1	259	Sales Representatives, Mining, Manufac	41-2031	Retail Salespersons	2
52.9999B	Wholesale/Retail Sale	49011	Salespersons, Retail	1	263	Sales Workers, Motor Vehicles And Boe	41-2031	Retail Salespersons	2
52.9999B	Wholesale/Retail Sale	49011	Salespersons, Retail	1	264	Sales Workers, Apparel	41-2031	Retail Salespersons	2
52.9999B	Wholesale/Retail Sale	49011	Salespersons, Retail	1	265	Sales Workers, Shoes	41-2031	Retail Salespersons	2
52.9999B	Wholesale/Retail Sale	49011	Salespersons, Retail	1	266	Sales Workers, Furniture And Home Fu	41-2031	Retail Salespersons	2
52.9999B	Wholesale/Retail Sale	49011	Salespersons, Retail	1	267	Sales Workers, Radio, Tv, Hi-Fi, And Ap	41-2031	Retail Salespersons	2
52.9999B	Wholesale/Retail Sale	49011	Salespersons, Retail	1	268	Sales Workers, Hardware And Building	41-2031	Retail Salespersons	2
52.9999B	Wholesale/Retail Sale	49011	Salespersons, Retail	1	274	Sales Workers, Other Commodities	41-2031	Retail Salespersons	2
52.9999B	Wholesale/Retail Sale	49011	Salespersons, Retail	1	283	Demonstrators, Promoters And Models,	41-2031	Retail Salespersons	2
52.9999B	Wholesale/Retail Sale	49014	Salespersons, Parts	1	269	Sales Workers, Parts	41-2022	Parts Salespersons	2
52.9999B	Wholesale/Retail Sale	49021	Stock Clerks, Sales Floor	1	274	Sales Workers, Other Commodities	43-5081	Stock Clerks and Order Fillers	1, 2
52.9999B	Wholesale/Retail Sale	49023	Cashiers	1	276	Cashiers	43-3041	Gaming Cage Workers	
52.9999B	Wholesale/Retail Sale	49995	Sales & Related Workers, NEC	1	000		00-0000		
52.9999B	Wholesale/Retail Sale	49999	All Other Sales And Related Worke	1	284	Auctioneers	41-9099	Sales and Related Workers, All Other	
52.9999B	Wholesale/Retail Sale	49999	All Other Sales And Related Worke	1	285	Sales Support Occupations, N.E.C.	41-9099	Sales and Related Workers, All Other	
52.9999B	Wholesale/Retail Sale	53123	Adjustment Clerks	1	376	Investigators And Adjusters, Except Ins	43-4021	Correspondence Clerks	2
52.9999B	Wholesale/Retail Sale	53123	Adjustment Clerks	1	376	Investigators And Adjusters, Except Ins	43-4051	Customer Service Representatives	2

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Census	CensusTitle	SOCcode	SOCtitle	jobzone
52.9999B	Wholesale/Retail Sale	53908	Advertising Clerks	1	325	Classified-Ad Clerks	43-4151	Order Clerks	2
52.9999B	Wholesale/Retail Sale	55323	Order Clerks, Materials, Merchandi	1	327	Order Clerks	43-4151	Order Clerks	2
52.9999B	Wholesale/Retail Sale	58005	Dispatchers, Except Police, Fire, A	1	359	Dispatchers	43-5032	Dispatchers, Except Police, Fire, and A	2
52.9999B	Wholesale/Retail Sale	58005	Dispatchers, Except Police, Fire, A	1	363	Production Coordinators	43-5032	Dispatchers, Except Police, Fire, and A	2
52.9999B	Wholesale/Retail Sale	58011	Transportation Agents	1	364	Traffic, Shipping, And Receiving Clerks	43-5011	Cargo and Freight Agents	2
52.9999B	Wholesale/Retail Sale	58011	Transportation Agents	1	373	Expediters	43-5011	Cargo and Freight Agents	2
52.9999B	Wholesale/Retail Sale	58023	Stock Clerks, Stockroom, Warehou	1	365	Stock And Inventory Clerks	43-5081	Stock Clerks and Order Fillers	1, 2
52.9999B	Wholesale/Retail Sale	58026	Order Fillers, Wholesale And Retail	1	365	Stock And Inventory Clerks	43-5081	Stock Clerks and Order Fillers	1, 2
52.9999B	Wholesale/Retail Sale	58097	Stock Clerks	1	000		00-0000		
52.9999B	Wholesale/Retail Sale	58098	Material Recording Wkrs, NEC	1	000		00-0000		
52.9999B	Wholesale/Retail Sale	58099	All Other Material Recording, Sched	1	364	Traffic, Shipping, And Receiving Clerks	43-9199	Office and Administrative Support Wor	
52.9999B	Wholesale/Retail Sale	58099	All Other Material Recording, Sched	1	365	Stock And Inventory Clerks	43-9199	Office and Administrative Support Wor	
52.9999B	Wholesale/Retail Sale	58099	All Other Material Recording, Sched	1	374	Material Recording, Scheduling, And Di	43-9199	Office and Administrative Support Wor	
52.9999C	Financial Services	21199	All Other Financial Specialists	1	025	Other Financial Officers	13-2052	Personal Financial Advisors	3
52.9999C	Financial Services	21199	All Other Financial Specialists	1	025	Other Financial Officers	13-2099	Financial Specialists, All Other	
52.9999C	Financial Services	21505	Special Agents, Insurance	1	027	Personnel, Training, And Labor Relati	13-1199	Business Operations Specialists, All Of	
52.9999C	Financial Services	21505	Special Agents, Insurance	1	027	Personnel, Training, And Labor Relati	41-3021	Insurance Sales Agents	3
52.9999C	Financial Services	21921	Claims Examiners, Property And C	1	036	Inspectors And Compliance Officers, Ex	13-1031	Claims Adjusters, Examiners, and Inve	3, 4
52.9999C	Financial Services	43002	Sales Agents And Placers, Insuran	1	253	Insurance Sales Occupations	41-3021	Insurance Sales Agents	3
52.9999C	Financial Services	43014	Sales Agents, Securities, Commod	1	255	Securities And Financial Services Sales	41-3031	Securities, Commodities, and Financial	3, 4
52.9999C	Financial Services	53102	Tellers	1	383	Bank Tellers	43-3071	Tellers	2
52.9999C	Financial Services	53105	New Accounts Clerks	1	316	Interviewers	43-4141	New Accounts Clerks	2
52.9999C	Financial Services	53111	Loan Interviewers	1	376	Investigators And Adjusters, Except Ins	43-4131	Loan Interviewers and Clerks	2
52.9999C	Financial Services	53114	Credit Authorizers	1	389	Administrative Support Occupations, N.	43-3041	Gaming Cage Workers	
52.9999C	Financial Services	53121	Loan And Credit Clerks	1	316	Interviewers	43-4131	Loan Interviewers and Clerks	2
52.9999C	Financial Services	53121	Loan And Credit Clerks	1	389	Administrative Support Occupations, N.	43-4131	Loan Interviewers and Clerks	2
52.9999C	Financial Services	53128	Brokerage Clerks	1	336	Records Clerks	43-4011	Brokerage Clerks	2
52.9999C	Financial Services	53302	Insurance Adjusters, Examiners, Ai	1	375	Insurance Adjusters, Examiners, And In	13-1031	Claims Adjusters, Examiners, and Inve	3, 4
52.9999C	Financial Services	53302	Insurance Adjusters, Examiners, Ai	1	375	Insurance Adjusters, Examiners, And In	43-9041	Insurance Claims and Policy Processin	2
52.9999C	Financial Services	53508	Bill And Account Collectors	1	378	Bill And Account Collectors	43-3011	Bill and Account Collectors	2
52.9999D	Business and Admini	21111	Tax Preparers	1	337	Bookkeepers, Accounting And Auditing	13-2082	Tax Preparers	2
52.9999D	Business and Admini	21508	Employment Interviewers, Private C	1	027	Personnel, Training, And Labor Relati	13-1071	Employment, Recruitment, and Placem	3
52.9999D	Business and Admini	21508	Employment Interviewers, Private C	1	027	Personnel, Training, And Labor Relati	13-1079	Human Resources, Training, and Labo	
52.9999D	Business and Admini	21511	Personnel, Training, And Labor Rel	1	027	Personnel, Training, And Labor Relati	13-1071	Employment, Recruitment, and Placem	3
52.9999D	Business and Admini	21511	Personnel, Training, And Labor Rel	1	197	Public Relations Specialists	13-1071	Employment, Recruitment, and Placem	3
52.9999D	Business and Admini	21511	Personnel, Training, And Labor Rel	1	027	Personnel, Training, And Labor Relati	13-1072	Compensation, Benefits, and Job Anal	3
52.9999D	Business and Admini	21511	Personnel, Training, And Labor Rel	1	197	Public Relations Specialists	13-1072	Compensation, Benefits, and Job Anal	3
52.9999D	Business and Admini	21511	Personnel, Training, And Labor Rel	1	027	Personnel, Training, And Labor Relati	13-1079	Human Resources, Training, and Labo	
52.9999D	Business and Admini	21511	Personnel, Training, And Labor Rel	1	197	Public Relations Specialists	13-1079	Human Resources, Training, and Labo	
52.9999D	Business and Admini	53123	Adjustment Clerks	1	376	Investigators And Adjusters, Except Ins	43-4021	Correspondence Clerks	2
52.9999D	Business and Admini	53123	Adjustment Clerks	1	376	Investigators And Adjusters, Except Ins	43-4051	Customer Service Representatives	2
52.9999D	Business and Admini	53126	Statement Clerks	1	336	Records Clerks	43-3021	Billing and Posting Clerks and Machine	1, 2
52.9999D	Business and Admini	53128	Brokerage Clerks	1	336	Records Clerks	43-4011	Brokerage Clerks	2
52.9999D	Business and Admini	53311	Insurance Claims Clerks	1	375	Insurance Adjusters, Examiners, And In	43-9041	Insurance Claims and Policy Processin	2
52.9999D	Business and Admini	53314	Insurance Policy Processing Clerks	1	336	Records Clerks	43-9041	Insurance Claims and Policy Processin	2
52.9999D	Business and Admini	53314	Insurance Policy Processing Clerks	1	389	Administrative Support Occupations, N.	43-9041	Insurance Claims and Policy Processin	2

CIPcode	CIPtitle	OEScode	OESitle	OESsh	Census	CensusTitle	SOCcode	SOCTitle	Jobzone
52.9999D	Business and Adminis	53505	Investigators, Clerical	1	375	Insurance Adjusters, Examiners, And In	43-4199	Information and Record Clerks, All Oth	
52.9999D	Business and Adminis	53505	Investigators, Clerical	1	376	Investigators And Adjusters, Except Ins	43-4199	Information and Record Clerks, All Oth	
52.9999D	Business and Adminis	53702	Court Clerks	1	389	Administrative Support Occupations, N.	43-4031	Court, Municipal, and License Clerks	2, 3
52.9999D	Business and Adminis	53705	Municipal Clerks	1	389	Administrative Support Occupations, N.	43-4031	Court, Municipal, and License Clerks	2, 3
52.9999D	Business and Adminis	53708	License Clerks	1	389	Administrative Support Occupations, N.	43-4031	Court, Municipal, and License Clerks	2, 3
52.9999D	Business and Adminis	55102	Legal Secretaries	1	313	Secretaries	43-6012	Legal Secretaries	3
52.9999D	Business and Adminis	55105	Medical Secretaries	1	313	Secretaries	43-6013	Medical Secretaries	3
52.9999D	Business and Adminis	55108	Secretaries, Except Legal And Mec	1	313	Secretaries	43-6011	Executive Secretaries and Administrati	4
52.9999D	Business and Adminis	55108	Secretaries, Except Legal And Mec	1	313	Secretaries	43-6014	Secretaries, Except Legal, Medical, an	2
52.9999D	Business and Adminis	55198	Secretaries, Except Legal And Mec	1	000		00-0000		
52.9999D	Business and Adminis	55302	Stenographers And/Or Court Repo	1	314	Stenographers	23-2091	Court Reporters	
52.9999D	Business and Adminis	55302	Stenographers And/Or Court Repo	1	314	Stenographers	31-9094	Medical Transcriptionists	
52.9999D	Business and Adminis	55302	Stenographers And/Or Court Repo	1	314	Stenographers	43-9199	Office and Administrative Support Wor	
52.9999D	Business and Adminis	55307	Typists, Including Word Processing	1	315	Typists	43-9022	Word Processors and Typists	2
52.9999D	Business and Adminis	55314	Personnel Clerks, Except Payroll A	1	328	Personnel Clerks, Except Payroll And T	43-4161	Human Resources Assistants, Except	2
52.9999D	Business and Adminis	55317	Correspondence Clerks	1	326	Correspondence Clerks	43-4021	Correspondence Clerks	2
52.9999D	Business and Adminis	55323	Order Clerks, Materials, Merchandi	1	327	Order Clerks	43-4151	Order Clerks	2
52.9999D	Business and Adminis	55328	Statistical Clerks	1	386	Statistical Clerks	43-9111	Statistical Assistants	2
52.9999D	Business and Adminis	55335	Customer Service Representatives	1	327	Order Clerks	43-4051	Customer Service Representatives	2
52.9999D	Business and Adminis	55335	Customer Service Representatives	1	327	Order Clerks	43-4151	Order Clerks	2
52.9999D	Business and Adminis	55338	Bookkeeping, Accounting, And Aud	1	337	Bookkeepers, Accounting And Auditing	43-3031	Bookkeeping, Accounting, and Auditing	2
52.9999D	Business and Adminis	55338	Bookkeeping, Accounting, And Aud	1	344	Billing, Posting, And Calculating Machi	43-3031	Bookkeeping, Accounting, and Auditing	2
52.9999D	Business and Adminis	55338	Bookkeeping, Accounting, And Aud	1	389	Administrative Support Occupations, N.	43-3031	Bookkeeping, Accounting, and Auditing	2
52.9999D	Business and Adminis	55341	Payroll And Timekeeping Clerks	1	338	Payroll And Timekeeping Clerks	43-3051	Payroll and Timekeeping Clerks	2
52.9999D	Business and Adminis	55344	Billing, Cost, And Rate Clerks	1	339	Billing Clerks	43-3021	Billing and Posting Clerks and Machine	1, 2
52.9999D	Business and Adminis	55344	Billing, Cost, And Rate Clerks	1	343	Cost And Rate Clerks	43-3021	Billing and Posting Clerks and Machine	1, 2
52.9999D	Business and Adminis	55344	Billing, Cost, And Rate Clerks	1	344	Billing, Posting, And Calculating Machi	43-3021	Billing and Posting Clerks and Machine	1, 2
52.9999D	Business and Adminis	55344	Billing, Cost, And Rate Clerks	1	368	Weighers, Measurers, Checkers And Sa	43-3021	Billing and Posting Clerks and Machine	1, 2
52.9999D	Business and Adminis	55398	Typists/Word Processors	1	000		00-0000		
52.9999D	Business and Adminis	56002	Billing, Posting, And Calculating Ma	1	344	Billing, Posting, And Calculating Machi	43-3021	Billing and Posting Clerks and Machine	1, 2
52.9999D	Business and Adminis	56017	Data Entry Keyers, Except Compos	1	385	Data-Entry Keyers	43-9021	Data Entry Keyers	2
52.9999D	Business and Adminis	56017	Data Entry Keyers, Except Compos	1	389	Administrative Support Occupations, N.	43-9021	Data Entry Keyers	2
52.9999D	Business and Adminis	56200	Duplicating/Mail/Other Oprs	1	000		00-0000		
52.9999D	Business and Adminis	57308	Postal Service Clerks	1	354	Postal Clerks, Exc. Mail Carriers	43-5051	Postal Service Clerks	2
52.9999D	Business and Adminis	57308	Postal Service Clerks	1	354	Postal Clerks, Exc. Mail Carriers	43-5053	Postal Service Mail Sorters, Processor	
52.9999D	Business and Adminis	58008	Production, Planning, And Expediti	1	363	Production Coordinators	43-5061	Production, Planning, and Expediting C	2
52.9999D	Business and Adminis	58008	Production, Planning, And Expediti	1	368	Weighers, Measurers, Checkers And Sa	43-5061	Production, Planning, and Expediting C	2
52.9999D	Business and Adminis	58008	Production, Planning, And Expediti	1	373	Expediters	43-5061	Production, Planning, and Expediting C	2
52.9999D	Business and Adminis	58011	Transportation Agents	1	364	Traffic, Shipping, And Receiving Clerks	43-5011	Cargo and Freight Agents	2
52.9999D	Business and Adminis	58011	Transportation Agents	1	373	Expediters	43-5011	Cargo and Freight Agents	2
52.9999D	Business and Adminis	58021	Marking Clerks	1	374	Material Recording, Scheduling, And Dis	43-5081	Stock Clerks and Order Fillers	1, 2
52.9999D	Business and Adminis	58023	Stock Clerks, Stockroom, Warehou	1	365	Stock And Inventory Clerks	43-5081	Stock Clerks and Order Fillers	1, 2
52.9999D	Business and Adminis	58026	Order Fillers, Wholesale And Retail	1	365	Stock And Inventory Clerks	43-5081	Stock Clerks and Order Fillers	1, 2
52.9999D	Business and Adminis	58097	Stock Clerks	0.39	000		00-0000		
52.9999D	Business and Adminis	58098	Material Recording Wkrs, NEC	1	000		00-0000		
52.9999D	Business and Adminis	58099	All Other Material Recording, Schem	1	364	Traffic, Shipping, And Receiving Clerks	43-9199	Office and Administrative Support Wor	
52.9999D	Business and Adminis	58099	All Other Material Recording, Schem	1	365	Stock And Inventory Clerks	43-9199	Office and Administrative Support Wor	
52.9999D	Business and Adminis	58099	All Other Material Recording, Schem	1	374	Material Recording, Scheduling, And Dis	43-9199	Office and Administrative Support Wor	

CIPcode	CIPtitle	OEScode	OEStitle	OESsh	Censu	CensusTitle	SOCcode	SOCtitle	jobzone
52.9999D	Business and Admini	59998	Clerical/Admin Wkrs, NEC	1	000		00-0000		
52.9999D	Business and Admini	59999	All Other Clerical And Administrativ	1	327	Order Clerks	43-9199	Office and Administrative Support Wor	
52.9999D	Business and Admini	59999	All Other Clerical And Administrativ	1	336	Records Clerks	43-9199	Office and Administrative Support Wor	
52.9999D	Business and Admini	59999	All Other Clerical And Administrativ	1	389	Administrative Support Occupations, N.	43-9199	Office and Administrative Support Wor	