
Social Security Administration

WORKING PAPER

Developing an Initial Classification System

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This working paper was prepared by staff of the Social Security Administration's Office of Program Development and Research in the Office of Retirement and Disability Policy for the Occupational Information Development Advisory Panel.

Developing an Initial Classification System

This document describes SSA's proposed plans for developing a classification system, or *taxonomy*, of occupations for use in the Occupational Information System (OIS) being developed to replace the *Dictionary of Occupational Titles* (DOT). We intend for the paper to serve as a starting point for Occupational Information Develop Advisory Panel discussion and deliberation. We will use the Panel's recommendations to develop our final plans and methods for developing an initial classification. In the sections below, we begin by summarizing the various types of taxonomies that we think are needed for the new OIS, and the characteristics that a sound taxonomic structure should possess.

We then describe the two-phase process that SSA will use to develop a new title taxonomy, which will begin by constructing an initial taxonomy that will be used during the initial population of the OIS database. After the database is sufficiently populated using our job-side data collection survey, a revised title taxonomy will be developed. As the OIS database grows over time, periodic updates to the taxonomic structure will be developed.

Before we get into the specifics of developing a classification system, we should pause and recall what SSA's actual requirements are for an OIS and why this process is such a challenge. Briefly, any occupational resource that SSA uses must meet at least three criteria. First of all, the OIS needs to reflect the national existence and incidence of work. The OIS must even include jobs that are only available in certain regions of the country. Secondly, the OIS must reflect work requirements at such a level of aggregation that it enables SSA to compare the work requirements of occupations with an individual's ability to perform work. Thirdly, the OIS must be legally defensible. SSA must meet a burden of proof regarding a determination that a claimant has the ability to perform other work in the national economy. Although the DOT is imperfect, its level of occupational title taxonomy is not overly abstract, and it has withstood challenges in court. In short, the level of aggregation of occupations must be granular enough to capture information specific to an occupation to allow for disability evaluation but high enough to be manageable in terms of measurement, data collection, and the utility of the occupational classification system. The OIS must reflect occupations that are aggregated so that they are as homogeneous as possible for elements that are most critical to SSA. Determining this level of aggregation presents perhaps one of the biggest challenges for the new OIS.

Role of Taxonomies in the OIS

Job- and Person-side taxonomies. Several different types of taxonomic structures will be used in the new OIS. Figure 1 summarizes the two taxonomies that are most relevant to the *content model* that will be implemented in the new OIS. These taxonomies tell us what *kind of information* we should collect to describe work activities and characteristics (the *job side* of Figure 1) versus the personal attributes of workers or claimants (the *person side* of Figure 1).

A common characteristic of taxonomies is that they tend to exhibit a hierarchical structure, ranging from high detail at the lower end to high abstraction at the upper end. The various degree-of-specificity levels of the taxonomy are denoted by the Level 1 through Level 5 labels on the right.

Occupational title taxonomy. Although the above two taxonomies of work-content and worker-characteristics are critically important in the new OIS, they are not the focus of this paper. Rather, the taxonomy that is of interest here concerns the way in which *occupational titles* are identified and described.

Simply put, the two taxonomic structures illustrated in Figure 1 tell us *how to describe* the aspects of the world of work that are relevant to disability determination. The occupational title taxonomy, in contrast, tells us *what organizational entities* should be described in the new OIS. In the DOT, the rated entities were *occupations*, and we intend to continue to use that level of analysis in the new OIS as well.

Figure 2 illustrates the hierarchical nature of title taxonomies. The lower end of Figure 2 provides the most specificity, describing individual *positions* in the economy. Here, a position is defined as the tasks, duties, and responsibilities that are assigned to a single worker; unless there are unfilled positions, the number of positions equals the number of employees in an organization.

In a very important sense, the position represents the only “real” or non-hypothetical aspect of the title taxonomy. That is, positions clearly exist, and the work that is performed by the position *incumbent* can be objectively observed and described. In contrast, all of the higher-level entities in Figure 2 are to varying degrees *hypothetical constructs* that we use to simplify the task of describing work.

The *job* defines the level of abstraction above the position (denoted Level 2); as Figure 2 illustrates, jobs are formed by combing similar positions within a given organization. Given that the different people who perform a job often perform it somewhat differently, or perform it in different situations or locations, the job represents an *abstraction* or hypothetical entity. The key characteristic that must be satisfied when clustering positions to form jobs is that the work performed (and worker requirements) across the positions in question must be *similar enough that they can share the same job description and selection standards*.

Although some degree of within-title variability is typically seen between the work activities performed by the various positions in a given job, it must not be so large that a single job description cannot accurately describe all of the positions in the title. Likewise, cross-position variability cannot exist to the point that different *levels* or *types* of worker-requirement characteristics (abilities, skills, experience, knowledge) are required to perform the different positions in a job. In such cases, a single job description or set of selection standards is not sufficient, and the title should be split into more homogeneous clusters.

The horizontal dashed line in Figure 2 separates entities that exist *within* individual organizations or companies (below the line) versus entities that exist *across* organizations. The *occupation* defines the next level of abstraction (i.e., Level 3) in Figure 2; occupations are defined as collections of jobs that exist across a number of organizations, and that are similar enough with respect to their work activities and worker requirements that they can be treated interchangeably *for some purpose*. The term *job family* is at times used synonymously with occupation.

It is important to stress the purpose-specific nature of the above definition. That is, collections of jobs may be similar enough to share an occupational or job-family title for some applied purposes (e.g., to set employee-selection standards using general cognitive or physical ability tests), but not similar enough to be viewed as interchangeable for others (e.g., developing a training program).

In our context, the purposes that concern SSA when forming an occupational taxonomy center on the various decisions that must be made during the disability determination process. Although to some degree these purposes may appear to be similar to those involved in employee selection and/or placement applications, they may also diverge in important respects. In particular, for many of the uses to which this information will be put, SSA arguably requires more finely-delineated occupations for disability-determination than might be needed for other purposes (e.g., setting compensation rates, determining whether a general ability test is a valid predictor of job performance). This is due to the fact that for SSA's purposes, the occupational groupings must be sufficiently homogeneous with respect to all of the work activity and/or worker-requirement attributes that are relevant to the disability adjudication issue at hand.

Because the number of these attributes could potentially be quite large, this implies that the number of occupational titles required to form homogeneous clusters could also be appreciably larger than the number seen in, for example, the SOC taxonomy. However, such a system could still be sufficiently more parsimonious than the DOT taxonomy, as it is possible that many titles that are distinct in the DOT would be found to be sufficiently homogeneous on the disability-related attributes of interest to us to justify being combined into a common title.

As a result of this divergence, the taxonomic structure that SSA determines is optimal for our needs may well differ substantially from the occupational taxonomies that are

deemed adequate for other purposes by other organizations. As was discussed in more detail in the *SSA Concerns Regarding O*NET* (2009) document, this is one of the reasons why SSA determined that the O*NET system, and its underlying Standard Occupational Classification (SOC) title taxonomy, was not suitable for our disability adjudication needs. Instead, we need a level of specificity closer to that seen in the DOT.

The next level up in terms of abstraction (Level 4) in the Figure 2 hierarchy consists of clusters of DOT-level occupations that are deemed similar-enough for some purpose(s) to be able to share a common description of their activities and worker requirements. The *occupational units* (OUs) used by the O*NET and SOC taxonomies provide examples of this level of abstraction.

Although this level of abstraction may be deemed adequate to address some applied functions, SSA has determined that it is too abstract for disability evaluation. That is, because dozens or hundreds of DOT-level occupations are combined to form a single OU in the O*NET/SOC taxonomies, the amount of within-OU variability with respect to both work activity and worker-trait requirements is often substantial. This issue is discussed further in the following section.

Finally, at Level 5 of the hierarchy are the types of job families that many proponents of *validity generalization* (VG) view as representing the correct level of abstraction for identifying worker-selection requirements on general cognitive, physical, and similar tests. Although some authors have argued that only two or three Level 5 clusters are needed for employee selection purposes using a VG-based argument, it would of course be possible to specify a larger number than the three shown in Figure 2 and still define clusters having this highest level of abstraction.

Given that SSA has determined that the degree of abstraction seen in the Level 4 clusters used in O*NET/SOC is too abstract for disability adjudication, these Level 5 clusters are of little interest in our taxonomic work. In the following section, we examine the desirable characteristics of an effective title taxonomy.

Characteristics of a Good Title Taxonomy

Describes all jobs in the economy. Perhaps it appears somewhat obvious, but it bears stating that one essential characteristic of a good title taxonomy for SSA's purposes is that it comprehensively describes all work that exists in the economy, and that it is able to classify every job or occupation in the economy into one of its title clusters. That is, while some sectors of the labor market may be more important to SSA disability adjudication than others, the OIS should reflect all the work in the U.S. economy based on the extent to which the OIS groupings of occupations result in acceptable levels of homogeneity for elements that are most critical to SSA.

Indeed, the O*NET/SOC taxonomy does not classify *one in five* DOT occupations into a functional OU category. Instead, they have been grouped with “all other” titles that are not rated, and for which O*NET does not report occupational information.

Clearly, SSA does not have the luxury of developing a title taxonomy that is so abstract, or constructed in such a non-comprehensive fashion, that DOT-level occupations by the thousands cannot meaningfully be slotted into it (as is the case with the O*NET/SOC taxonomy). Being able to exhaustively define all work as it exists in the economy is essential for any taxonomy used at SSA because we must evaluate claimants’ past work and, at times, we must assess the extent to which claimants’ skill may transfer to other work for which they retain the functional capacity to do.

Consistent level of granularity. Another presumably obvious characteristic that should be possessed by a high-quality title taxonomy is that its occupational clusters should define a consistent level of detail or granularity across the taxonomy. That is, regardless of the total number of titles, it should not be the case that some titles are much more finely defined than others.

For example, although approximately one in eight O*NET/SOC titles contains only one DOT occupation, others contain hundreds (and in one case, almost 1,600) individual DOT occupations. Similarly, an examination of the titles in the SOC taxonomy suggests that it defines work using a highly variable level of granularity. That is, although the O*NET/SOC taxonomy reflects separate titles for *Industrial-Organizational Psychologist, School Psychologist, Clinical Psychologist, Counseling Psychologist, and Psychologist/All Other*; it combines over 700 DOT occupations as diverse as *Dispatcher, Wrecking Supervisor, Uranium Processing Plant Supervisor, Head Grease Maker, Chief Projectionist, and Mexican Food Cook* into a single title called *First Line Supervisors/Managers of Production and Operating Workers*. Also, the O*NET/SOC has separate titles for *Gaming Change Persons and Booth Cashiers* and *Gaming Cage Workers*, but 18 other titles including *Food Checker, Toll Collector, and Paymaster of Purses* are combined into a single OU labeled *Cashiers*.

Acceptably low within-title heterogeneity. Perhaps the most critical characteristic that a high-quality occupational title taxonomy will exhibit concerns the degree of within-title variability that is present between the jobs that are combined to form Level 3 occupations (or the occupations that are combined to form Level 4 clusters). The bottom-line test of whether this has been done accurately is to ask whether all of the entities that are clustered together to form a title are *similar enough* with respect to the relevant work activities and worker-trait requirements of interest to share a single description of their activities (and set of worker-requirement standards).

To illustrate why heterogeneity poses such a problem for SSA, Figure 3 presents a bubble plot of the numbers of DOT occupations that receive various combinations of ratings on the *Strength* (the vertical axis) and *SVP* (horizontal axis) scales from the DOT for the SOC title of *Carpenters*. Solid circles represent the DOT occupations considered “core”

by the O*NET, and the dashed circles represent ones that would be ignored when computing the OU-mean levels of *Strength* or *SVP* for this title. Figure 4 presents a plot of the factor-score profiles for the DOT occupations that were grouped to form this SOC cluster (each line connects the scores for each DOT title on ten factors that were extracted from the 63 DOT worker-requirement scales).

As an inspection of the results in Figures 3 and 4 readily indicates, a massive level of within-OU variability exists in this SOC title, both with respect to the relatively focused issue of the overall *Strength* and *SVP* requirements (which range from *Unskilled* to *Skilled*, and from *Medium* to *Very Heavy*) as well as the more detailed similarity on the collection of characteristics rated by the DOT. Unfortunately, the level of within-title variability shown in this example is widespread in the O*NET/SOC taxonomy.

In sum, for SSA's purposes, it is essential that we satisfy all of the above criteria. Arguably, the root cause of the fundamental problems seen in the O*NET/SOC title taxonomy can be traced back to the manner in which the occupations were classified. Classification is a critical and formative step in the development of an effective OIS.

Developing an Initial Classification System

Picking a starting point. The process of developing an initial title taxonomy for use in SSA's new OIS presents something of a chicken-and-egg situation. That is, to begin collecting data and populating our OIS, we must know *which* organizational entities (Figure 2) we will be targeting for description. However, until we have a large database in hand that was collected using the items contained in our SSA-optimized content model (the job-side of Figure 1), we will not be able to identify an optimal title taxonomy (particularly, with respect to meeting the third taxonomic goal of adequate within-title homogeneity).

Obviously, we need to start somewhere. The strategy we plan to follow involves developing an *initial* classification taxonomy that we do not anticipate will be retained over the long-term, but that will be adequate for beginning the data collection process and providing a way to transition from the DOT-based taxonomic system now used by SSA.

This initial taxonomy will be informed and refined by job analysis data that SSA is able to gain access to *prior* to developing and using our own data-collection instruments that implement the job-side of the content domain illustrated in Figure 1. Because the DOT is the taxonomic system now used, the initial taxonomy must be constructed in a fashion that links each DOT occupation to the tentative clusters that will be used to guide sampling when data collection is initiated for the new OIS.

Accordingly, unless additional databases can be located that describe the full range of DOT titles on attributes that we find to be relevant to the disability determination process, it is anticipated that we will rely on the most recent versions of RHAJ-type scale ratings produced by the DOT. Although several dozen scales rated by the RHAJ process define a

broad range of work activity and worker-requirement data, to develop the final taxonomy to be used in the new OIS we would prefer to have a higher level of detail (and verifiability) for selected data elements than is possible using the RHAJ scales. Some of the RHAJ scales are appropriate for SSA's purposes.

Information relevant to the prevalence of work in the economy – either in general, or with respect to the occupations that are most prevalent in actual disability claims – will also be considered when developing the initial taxonomy. Table 1 presents a listing of the SOC-level titles and the numbers of employees in each (as of May 2008), as well as information regarding the average level of variability within each SOC title between its DOT occupations.

As an inspection of the information in Table 1 indicates, a small number of SOC titles may capture a large percentage of the workforce (e.g., the top 50 SOCs contain over 50% of all employees). Such information (particularly information on the occupations having the highest numbers of claimants) can be very helpful in prioritizing our initial data collection efforts.

Can't we just use the SOC? Simply put, no. That is, SSA cannot simply use the SOC system directly without linkage or crosswalk. SSA needs an occupational classification system that offers more specificity than one aggregated at the SOC level. Therefore, although it would dramatically simplify matters if SSA could just adopt the SOC or O*NET/SOC title taxonomies as the basis for forming our new OIS, the concerns we identify above in those taxonomies preclude such a course of action.

We will of course be mindful of the need to develop a way to crosswalk the titles contained in the SSA title taxonomy back to the SOC. However, there is no question that the O*NET/SOC level of abstraction is too abstract for SSA to use directly, as an examination of the within-SOC variability indices presented in Table 1 illustrates.

For each SOC cluster, Table 1 reports within-cluster variability measures derived from the average profile difference (measured as a Euclidean distance) between each DOT title in the cluster and the SOC-mean profile. To define each DOT occupation's characteristics, scores on the 10-factor solution produced by Harvey and Wilson (2009) were used. These ten factors were formed by statistically combining ratings of 63 separate DOT work-activity and worker-requirement scales from the RHAJ.

Table 1 expresses the average within-cluster distance for each SOC in two ways: the 'zDist' value is the standardized distance (mean = 0, SD = 1) across all SOC clusters; the 'pctMaxDist' value expresses the average distance as a percentage of the value seen in the SOC title with the highest variability (which occurred for *Actors*, which receives a value of 100). For both indices, numerically larger values indicate higher within-SOC heterogeneity.

For example, the *Cashiers* SOC title contains 18 DOT titles that were rated on the DOT RHAJ scales; the standardized-distance index of 0.17 indicates that it lies slightly above the mean level of within-title heterogeneity seen across all SOC titles. The percent-distance index indicates that the average within-title variability across the DOT titles in the *Cashiers* SOC is 43% of the maximum value seen in the *Actors* title.

Two general points can be made regarding the within-title heterogeneity results in Table 1. First, even within-cluster distance values that lie well below the average may still reflect levels of heterogeneity that are unacceptably high for SSA's purposes. For example, the results in Figures 3-4 for *Carpenters* clearly show that excessive levels of disagreement on both *Strength* and *SVP* exist between the DOT-level titles grouped to form this SOC. However, the average distance in *Carpenters* is only 57% of the level seen in the most-heterogeneous SOC (*Actors*).

Likewise, although all of the example occupations that were examined in the Harvey and Wilson (2009) study were deemed to exhibit excessive levels of within-title variability, some of them scored below the average level of within-SOC variability (e.g., *Sewing Machine Operators*, which lies one-half standard deviation below the mean, and is only 33% of the maximum distance). In light of the fact that only 13 of the top 100 SOC titles by employment show percent-distance values under 30% – and of these, only 4 have at least 5 DOT titles, and only 1 has more than 10 – the Table 1 results indicate that with respect to the work demands measured by the RHAJ scales, the SOC system is too internally heterogeneous for SSA's needs.

Second, the amount of within-SOC disagreement across DOT titles is largely unrelated to the number of DOT titles that were combined to form the SOC title. Although combining hundreds or thousands of DOT titles to form a single SOC title clearly invites problems with respect to within-title heterogeneity, unacceptably high levels can be seen even in clusters with far fewer DOT-level titles. For example, the *Electricians* title has only 14 DOT titles, but a very high level of disagreement; among the 20 SOC titles showing the highest within-title disagreement, 14 contain less than 10 DOT titles. These results highlight the importance of identifying and measuring all of the work-activity and worker-requirement criteria of importance to SSA, and then ensuring that our occupational clusters are relatively homogeneous with respect to these characteristics.

Analytic strategies. In terms of the analytical procedure to be used, SSA will evaluate the performance of a range of multivariate techniques with respect to analyzing the profile similarities between the DOT occupations. For example, factor analytic methods may be used to first reduce the dimensionality of the DOT ratings to a more parsimonious profile (e.g., as was done to compute the factor scores in Figure 4), and follow by using hierarchical clustering methods to identify groupings of relatively homogeneous DOT titles.

The potential for working backward from the existing SOC taxonomy (i.e., by splitting SOC clusters of DOT titles until relatively homogeneous clusters are identified) will also

be examined. Such an approach offers advantages with respect to allowing the development of a crosswalk from the new SSA OIS taxonomic system to the SOC.

Hybrid methods incorporating *genetic algorithm* (GA) methods will also be evaluated. Here, we could combine a brute-force agglomerative clustering approach such as Ward's method (which begins with all DOT-level occupations in separate clusters) with a custom GA that allows consideration to be given to the known constraints that exist (i.e., the ways in which the DOT-to-SOC crosswalk links these two taxonomic domains). This type of hybrid approach could allow us to avoid being limited by mistaken linkages in the current DOT-to-SOC crosswalk, while still being able to be highly sensitive to the need to form relatively homogeneous clusters of DOT titles.

In sum, with respect to developing our initial taxonomy for the new OIS, there is no one single “true” cluster solution for clustering DOT titles that is optimal for SSA. This is particularly the case due to the fact that we are limited to using existing data to describe each DOT occupation. In the final analysis, SSA will evaluate a range of methods, and in conjunction with the Advisory Panel, evaluate a number of possible solutions to determine which will be chosen for actual use.

Role of Advisory Panel. SSA will rely on the Advisory Panel's recommendations to inform its development of an initial classification taxonomy of occupations. These recommendations should be premised on the fact that the process of developing SSA's initial classification taxonomy will need to be iterative (i.e., starting with the initial taxonomy noted above, and refining it as better data become available). After it is developed, the Advisory Panel will also be asked to review and comment on the classification taxonomy that SSA develops initially.

The Advisory Panel will be asked to offer its recommendations regarding the factors that SSA should consider selecting when conducting the statistical analysis that will be used to group DOT-level occupations to form the entities in the initial OIS taxonomic system. For example, if the Advisory Panel concurs that SSA should begin the development process by selecting DOT elements that are the most critical for disability evaluation purposes, the Advisory Panel could offer its input regarding ways to prioritize those elements in terms of their relevance.

If possible, the Advisory Panel can also suggest which DOT elements might be reasonable proxies for psychosocial, behavioral, and cognitive aspects of work. Likewise, if additional non-DOT based descriptors of the DOT occupations exist that the Advisory Panel considers relevant, they could also offer suggestions toward that end.

Developing the Final/Revised Classification System

Forming optimal clusters. After the initial title taxonomy noted above is formed, and the initial round of data-collection and database population for the new OIS is underway using the new job-side data collection processes, SSA will have enough data to begin the

process of analytically determining a revised classification system that is optimal with respect to the taxonomic criteria noted above. As was stressed earlier, ensuring the comprehensiveness of the taxonomy while maintaining adequate levels of homogeneity with respect to work activity and worker requirements are paramount in this regard.

Techniques like the ones used to form the initial taxonomy will again be used in this phase. However, given that we will at that point have access to more detailed and defensible profiles of ratings on each occupation (i.e., based on the use of our new job-side data collection instrument), we should be able to produce a taxonomic system that is far closer to the ideals described above than will be possible in the initial system.

Linking to the SOC. In view of the mandate to be SOC-compliant, SSA will develop appropriate means for linking the taxonomic elements that we rate in our new OIS back to the more abstract occupational clusters defined by the SOC.

Presumably this will take the form of a standard type of crosswalk in which each SSA occupational title is slotted into one of the SOC classifications. However, SSA should also investigate the desirability of using other methods (e.g., ones based on “fuzzy” clustering methods that focus on *probabilities* of membership of each SSA title in a given SOC) to optimize our ability to provide a meaningful interface back to the SOC standard.

Role of Advisory Panel. As in all prior steps of the process of developing the new OIS, SSA will consult closely with the Advisory Panel to obtain their input and advice regarding all aspects of the process of finalizing and updating the title taxonomy.

Maintenance Over Time. In light of the constantly changing nature of work, it is clear that the task of developing an occupational taxonomy is one that is never actually finished. In our case, two change-related factors necessitate the use of an ongoing process of updating and maintaining the taxonomy.

First, it is unavoidably the case that work changes over time, due to changes in the economy, technology, demographics, and other factors. These changes require us to continually focus on identifying both emerging new occupations, as well as ones that have effectively become obsolete.

Second, as the OIS database grows in size and coverage over time, such changes may also have implications for the taxonomic structure. That is, the relative of numbers of occupations present in the database representing qualitatively different types of work will exert an impact on the overall taxonomic structure. When combined with the changes in the nature of the work itself that occur over time, it may well be necessary to modify the taxonomic structure over time to ensure that the titles maintain an adequate degree of homogeneity. This can occur both with respect to splitting titles that have grown more homogeneous, as well as combining titles that have grown more similar over time.

Figure 1. The job- and person-side taxonomies of work-related information.

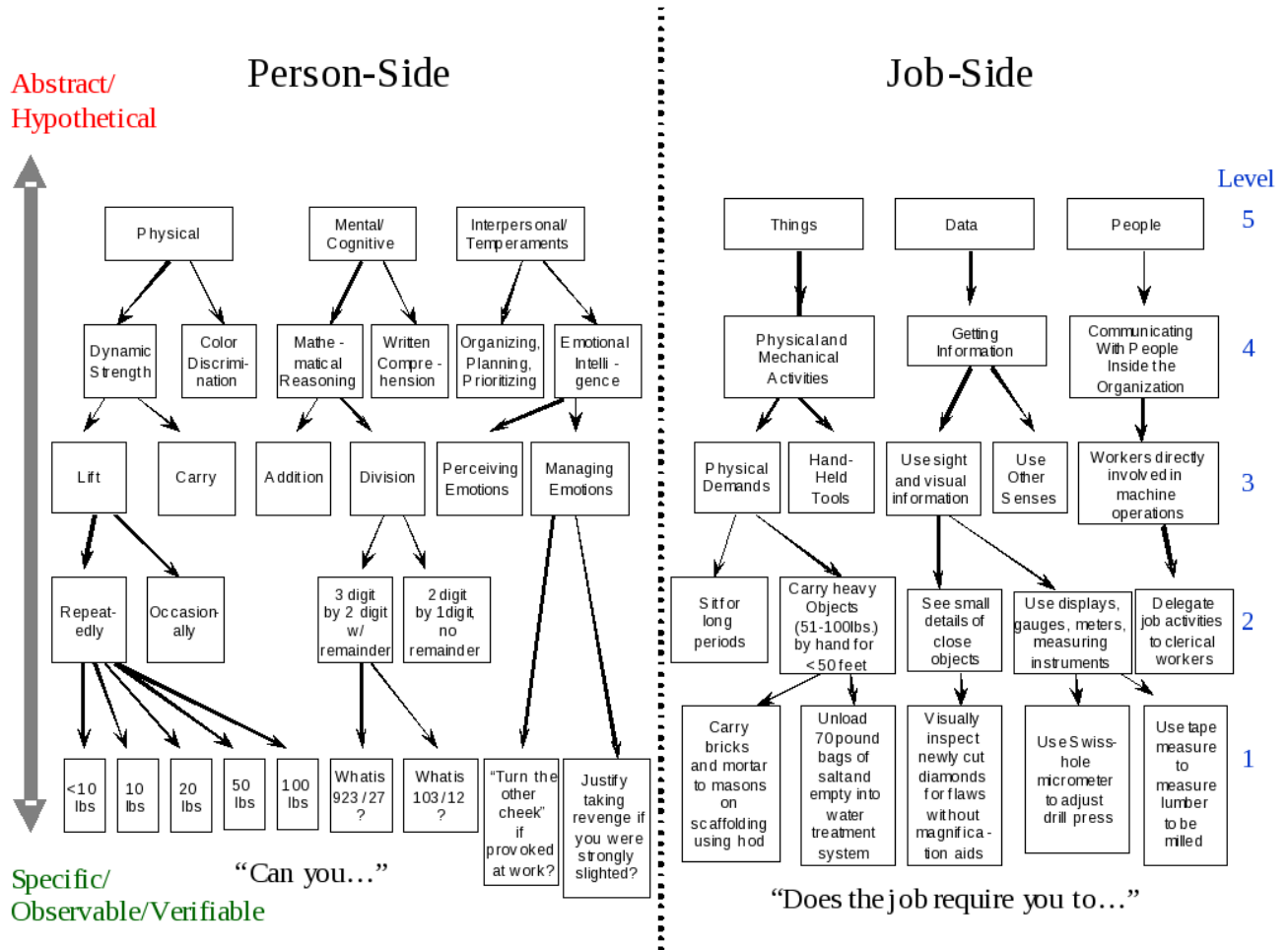


Figure 2. Hierarchy of organizational/occupational entities contained in a title taxonomy.

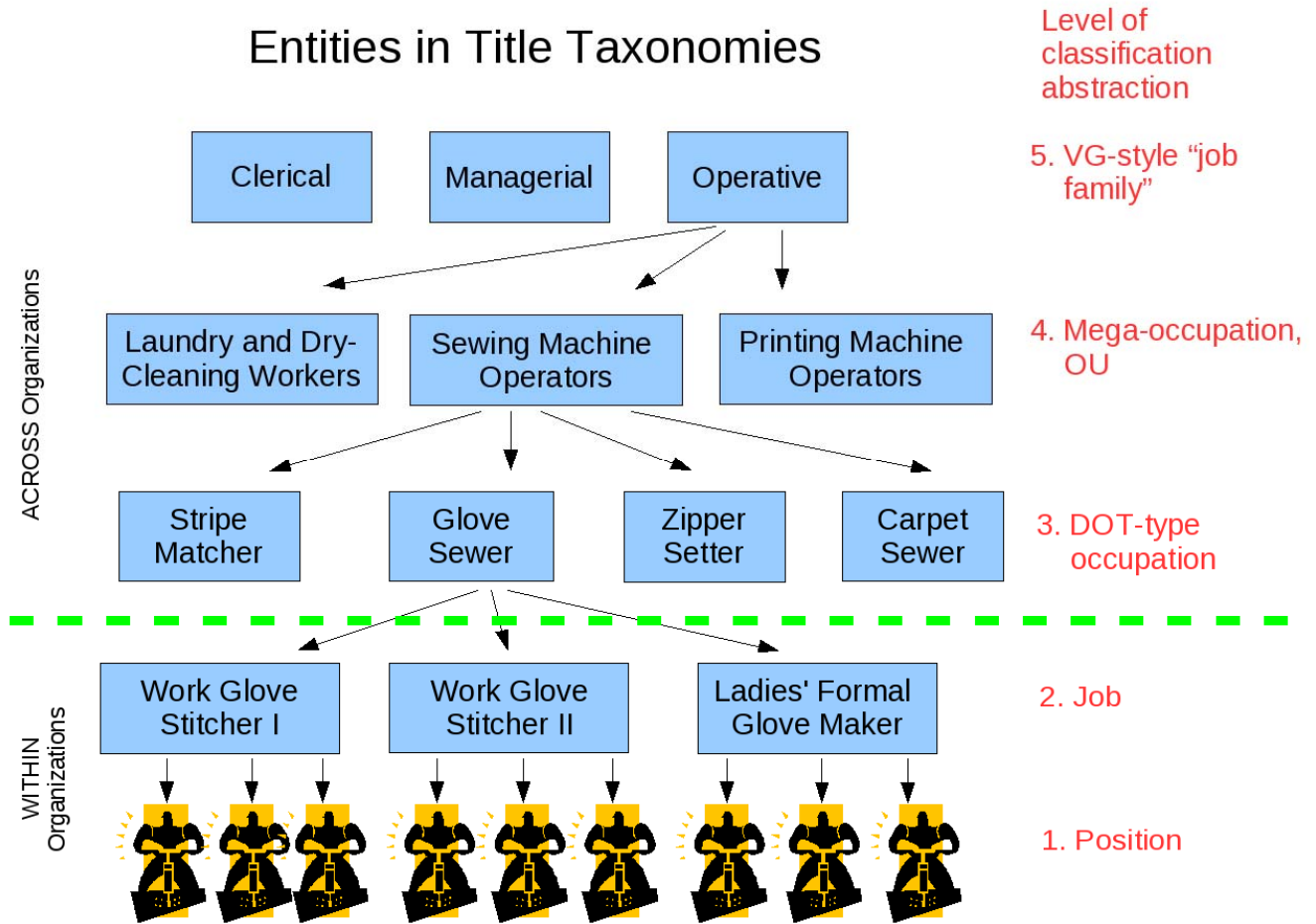


Figure 3. Within-OU variability in the *Carpenters* SOC title on *Strength* and *SVP*.

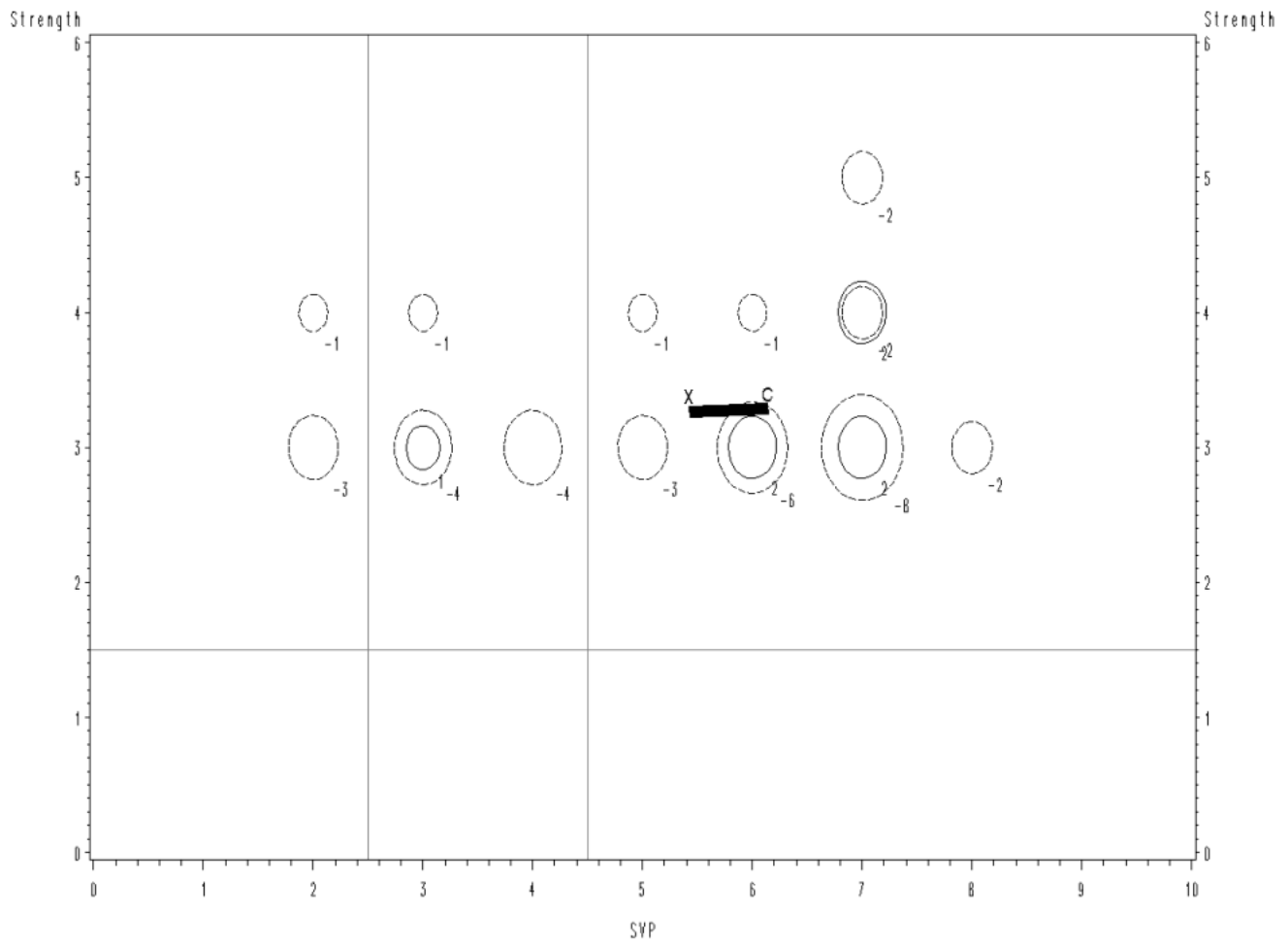


Figure 4. Within-OU variability in *Carpenters* SOC across the 10-factor solution produced by factor analyzing ratings of the occupations on 63 DOT rating scales.

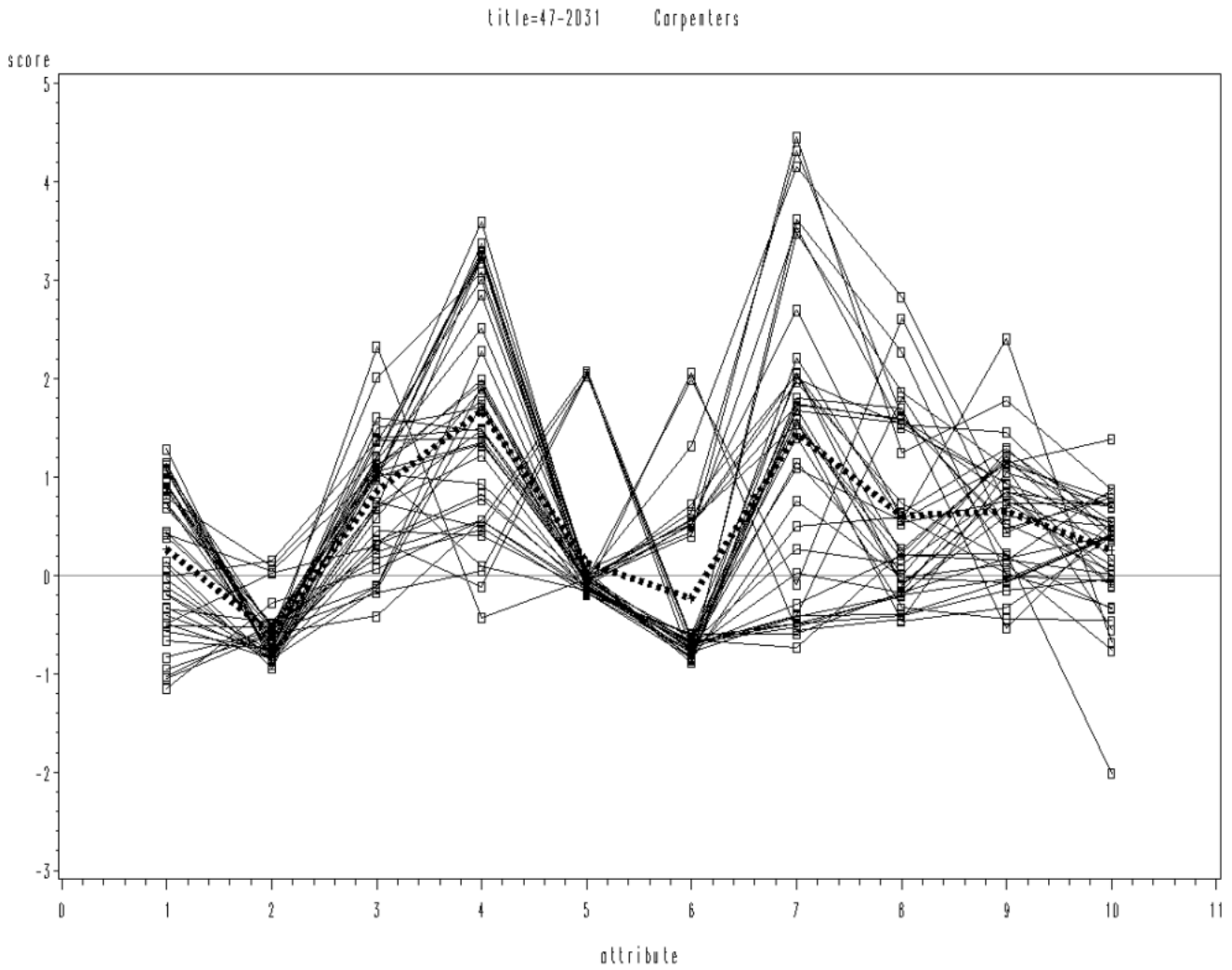


Table 1. Employment by SOC Classification and Within-OU Variability (May 2008).

Note. The 'rank' column shows the rank of the employment in the SOC title as a percentage of total employment; 'emp' = number of employees as of May 2008, 'cumpct' = cumulative percentage of total employment, 'nDOT' = number of DOT titles with DOT trait ratings in the SOC, 'zDist' = standardized average distance of DOT titles in the SOC from the OU-mean profile (higher distances denote more within-OU variability), 'pctMaxDist' = average distance from OU-mean expressed as a percentage of the maximum range of distances seen across all OUs.

Rank	SOC	Description	emp	cumpct	nDOT	zDist	pctMaxDist
1	412031	Retail salespersons	4426280	3.27	47	-0.36	35
2	412011	Cashiers	3545610	5.90	18	0.17	43
3	439061	Office clerks, general	2906600	8.05	72	-0.03	40
4	353021	Combined food preparation and serving workers, including fast fo	2708840	10.05	1	.	0
5	291111	Registered nurses	2542760	11.93	16	0.10	42
6	353031	Waiters and waitresses	2371750	13.69	10	-0.38	35
7	537062	Laborers and freight, stock, and material movers, hand	2335510	15.41	48	1.15	56
8	434051	Customer service representatives	2233270	17.07	8	0.54	48
9	372011	Janitors and cleaners, except maids and housekeeping cleaners	2145320	18.65	15	0.84	52
10	435081	Stock clerks and order fillers	1873390	20.04	38	0.18	43
11	436014	Secretaries, except legal, medical, and executive	1872070	21.42	6	-0.45	34
12	433031	Bookkeeping, accounting, and auditing clerks	1855010	22.80	27	-0.26	37
13	111021	General and operations managers	1697690	24.05	1	.	0
14	533032	Truck drivers, heavy and tractor-trailer	1672580	25.29	16	-0.43	35
15	252021	Elementary school teachers, except special education	1544270	26.43	1	.	0
16	414012	Sales representatives, wholesale and manufacturing, except techn	1493760	27.54	54	-0.47	34
17	436011	Executive secretaries and administrative assistants	1491520	28.64	2	-2.35	9
18	311012	Nursing aides, orderlies, and attendants	1422720	29.69	4	-0.70	31
19	431011	First-line supervisors/managers of office and administrative sup	1404330	30.73	106	-0.36	36
20	499042	Maintenance and repair workers, general	1305170	31.70	8	0.80	51
21	259041	Teacher assistants	1266900	32.63	1	.	0
22	411011	First-line supervisors/managers of retail sales workers	1186270	33.51	11	-0.18	38
23	132011	Accountants and auditors	1133580	34.35	13	-0.13	39
24	512092	Team assemblers	1131060	35.19	2	.	0
25	434171	Receptionists and information clerks	1097610	36.00	14	-0.14	38
26	252031	Secondary school teachers, except special and vocational educati	1090490	36.80	1	.	0

29	29	472061	Construction laborers	1020290	39.10	29	1.39	59
30	30	373011	Landscaping and groundskeeping workers	921900	39.78	13	0.71	50
31	31	372012	Maids and housekeeping cleaners	917120	40.46	9	0.34	45
32	32	533033	Truck drivers, light or delivery services	908960	41.13	6	-0.07	39
33	33	472031	Carpenters	899920	41.79	45	1.27	57
34	34	352014	Cooks, restaurant	899620	42.46	10	-0.66	31
35	35	311011	Home health aides	892410	43.12	1	.	0
36	36	352021	Food preparation workers	880480	43.77	13	-0.54	33
37	37	351012	First-line supervisors/managers of food preparation and serving	805360	44.37	14	-0.67	31
38	38	537064	Packers and packagers, hand	777630	44.94	59	0.15	42
39	39	435071	Shipping, receiving, and traffic clerks	760950	45.50	20	-0.41	35
40	40	292061	Licensed practical and licensed vocational nurses	730500	46.05	1	.	0
41	41	252022	Middle school teachers, except special and vocational education	661820	46.53	2	.	0
42	42	511011	First-line supervisors/managers of production and operating work	658500	47.02	706	0.24	44
43	43	493023	Automotive service technicians and mechanics	649460	47.50	24	-0.08	39
44	44	333051	Police and sheriff's patrol officers	633710	47.97	18	1.85	65
45	45	472111	Electricians	633010	48.44	14	1.71	63
46	46	537051	Industrial truck and tractor operators	620450	48.90	10	0.76	51
47	47	399021	Personal and home care aides	614190	49.35	4	1.18	56
48	48	433071	Tellers	600380	49.80	4	0.14	42
49	49	399011	Child care workers	581670	50.23	7	0.44	46
50	50	471011	First-line supervisors/managers of construction trades and extra	577390	50.65	77	1.10	55
51	51	253099	Teachers and instructors, all other	574540	51.08	3	-0.14	39
52	52	413099	Sales representatives, services, all other	569130	51.50	33	-0.39	35
53	53	352011	Cooks, fast food	559160	51.91	3	-1.73	17
54	54	231011	Lawyers	553690	52.32	11	-0.93	28
55	55	151041	Computer support specialists	545520	52.73	6	0.47	47
56	56	131111	Management analysts	535850	53.12	9	-1.38	22
57	57	353022	Counter attendants, cafeteria, food concession, and coffee shop	527530	53.51	5	-1.14	25
58	58	359021	Dishwashers	521150	53.90	3	-0.01	40
59	59	433021	Billing and posting clerks and machine operators	512120	54.28	41	-0.49	34
60	60	353011	Bartenders	503420	54.65	3	-1.65	18
61	61	113031	Financial managers	500590	55.02	14	-0.64	32
62	62	519198	Helpers--production workers	499870	55.39	553	0.43	46
63	63	151031	Computer software engineers, applications	494160	55.76	.	.	.
64	64	151051	Computer systems analysts	489890	56.12	4	-0.60	32
65	65	319092	Medical assistants	475950	56.47	3	-1.64	18
66	66	519061	Inspectors, testers, sorters, samplers, and weighers	467010	56.82	782	0.74	50
67	67	533022	Bus drivers, school	460100	57.16	.	.	.
68	68	436013	Medical secretaries	454500	57.49	1	.	0
69	69	412021	Counter and rental clerks	448480	57.82	24	-0.05	40
70	70	491011	First-line supervisors/managers of mechanics, installers, and re	443840	58.15	94	1.05	55
71	71	472152	Plumbers, pipefitters, and steamfitters	437540	58.48	14	-0.29	36
72	72	333012	Correctional officers and jailers	428040	58.79	5	-0.27	37
73	73	514041	Machinists	419070	59.10	18	0.46	47
74	74	359011	Dining room and cafeteria attendants and bartender helpers	416410	59.41	4	-0.40	35
75	75	414011	Sales representatives, wholesale and manufacturing, technical an	415120	59.72	35	-0.34	36
76	76	433011	Bill and account collectors	408760	60.02	3	-0.16	38
77	77	472073	Operating engineers and other construction equipment operators	398910	60.32	10	0.13	42

80	80	252011	Preschool teachers, except special education	392170	61.19	1	.	0
81	81	151032	Computer software engineers, systems software	381830	61.47	.	.	.
82	82	533031	Driver/sales workers	372720	61.75	6	0.87	52
83	83	352012	Cooks, institution and cafeteria	370920	62.02	6	-0.59	32
84	84	119199	Managers, all other	365460	62.29	82	0.42	46
85	85	519111	Packaging and filling machine operators and tenders	357480	62.55	74	-0.53	33
86	86	395012	Hairdressers, hairstylists, and cosmetologists	355990	62.82	5	-1.56	19
87	87	435052	Postal service mail carriers	354570	63.08	2	-1.59	19
88	88	359031	Hosts and hostesses, restaurant, lounge, and coffee shop	349990	63.34	1	.	0
89	89	419041	Telemarketers	345220	63.59	1	.	0
90	90	112022	Sales managers	333910	63.84	9	-0.76	30
91	91	211093	Social and human service assistants	332880	64.09	4	-1.95	14
92	92	537061	Cleaners of vehicles and equipment	330850	64.33	57	0.67	49
93	93	151071	Network and computer systems administrators	327850	64.58	3	-1.56	19
94	94	413021	Insurance sales agents	327780	64.82	4	-1.69	18
95	95	292052	Pharmacy technicians	324110	65.06	3	-1.86	15
96	96	132072	Loan officers	321850	65.30	3	-0.47	34
97	97	512099	Assemblers and fabricators, all other	318060	65.53	29	-0.02	40
98	98	111011	Chief executives	301930	65.75	73	-0.46	34
99	99	332011	Fire fighters	298900	65.98	5	1.49	60
100	100	319091	Dental assistants	293090	66.19	1	.	0
101	101	131023	Purchasing agents, except wholesale, retail, and farm products	286990	66.40	5	-0.39	35
102	102	399032	Recreation workers	282680	66.61	6	0.96	53
103	103	435061	Production, planning, and expediting clerks	281660	66.82	61	0.22	43
104	104	499041	Industrial machinery mechanics	280620	67.03	81	0.84	52
105	105	519199	Production workers, all other	280160	67.24	1587	0.29	44
106	106	131031	Claims adjusters, examiners, and investigators	277230	67.44	4	-1.91	14
107	107	113021	Computer and information systems managers	276820	67.65	2	-1.70	17
108	108	411012	First-line supervisors/managers of non-retail sales workers	275390	67.85	16	0.27	44
109	109	211021	Child, family, and school social workers	274140	68.05	12	-0.72	31
110	110	439021	Data entry keyers	272810	68.25	10	-1.05	26
111	111	439199	Office and administrative support workers, all other	272190	68.46	19	0.04	41
112	112	413031	Securities, commodities, and financial services sales agents	271900	68.66	7	-0.49	34
113	113	291051	Pharmacists	266410	68.85	3	-0.37	35
114	114	291069	Physicians and surgeons, all other	262850	69.05	11	-1.28	23
115	115	499021	Heating, air conditioning, and refrigeration mechanics and insta	261610	69.24	10	1.14	56
116	116	172051	Civil engineers	261360	69.44	12	0.03	41
117	117	393091	Amusement and recreation attendants	258820	69.63	25	0.66	49
118	118	119111	Medical and health services managers	258130	69.82	9	-0.16	38
119	119	436012	Legal secretaries	257810	70.01	1	.	0
120	120	232011	Paralegals and legal assistants	253040	70.20	4	0.37	45
121	121	472141	Painters, construction and maintenance	250310	70.38	4	-1.11	25
122	122	493031	Bus and truck mechanics and diesel engine specialists	248620	70.56	10	0.39	46
123	123	434151	Order clerks	248030	70.75	11	-0.84	29
124	124	113011	Administrative services managers	246930	70.93	6	-0.46	34
125	125	211012	Educational, vocational, and school counselors	243100	71.11	8	1.11	55
126	126	514031	Cutting, punching, and press machine setters, operators, and ten	242970	71.29	74	-0.01	40
127	127	251199	Postsecondary teachers, all other	242780	71.47	.	.	.
128	128	452092	Farmworkers and laborers, crop, nursery, and greenhouse	242390	71.65	19	0.61	49

131	131	439041	Insurance claims and policy processing clerks	237800	72.18	8	-1.11	25
132	132	132051	Financial analysts	236720	72.36	1	.	0
133	133	172141	Mechanical engineers	233610	72.53	12	-0.03	40
134	134	151081	Network systems and data communications analysts	230410	72.70	1	.	0
135	135	434081	Hotel, motel, and resort desk clerks	230230	72.87	1	.	0
136	136	193021	Market research analysts	230070	73.04	2	-0.93	28
137	137	399031	Fitness trainers and aerobics instructors	229030	73.21	2	0.81	51
138	138	412022	Parts salespersons	226530	73.38	1	.	0
139	139	252041	Special education teachers, preschool, kindergarten, and element	226250	73.55	23	-0.41	35
140	140	434111	Interviewers, except eligibility and loan	224690	73.71	6	-1.25	23
141	141	516011	Laundry and dry-cleaning workers	221230	73.88	23	0.02	41
142	142	119021	Construction managers	220550	74.04	9	0.99	54
143	143	119032	Education administrators, elementary and secondary school	219100	74.20	3	-0.93	28
144	144	531031	First-line supervisors/managers of transportation and material-m	218480	74.36	42	0.80	51
145	145	131051	Cost estimators	218400	74.52	1	.	0
146	146	131079	Human resources, training, and labor relations specialists, all	217440	74.68	10	-0.33	36
147	147	434199	All other information and record clerks	215780	74.84	3	0.28	44
148	148	512022	Electrical and electronic equipment assemblers	215230	75.00	61	0.00	40
149	149	172112	Industrial engineers	214580	75.16	20	-0.11	39
150	150	434131	Loan interviewers and clerks	212340	75.32	7	-0.70	31
151	151	271024	Graphic designers	209290	75.47	1	.	0
152	152	292034	Radiologic technologists and technicians	208570	75.63	6	-2.04	13
153	153	292041	Emergency medical technicians and paramedics	207610	75.78	2	-0.63	32
154	154	131073	Training and development specialists	206890	75.94	5	-0.45	34
155	155	131071	Employment, recruitment, and placement specialists	205800	76.09	6	0.35	45
156	156	434071	File clerks	204760	76.24	3	-0.72	31
157	157	433051	Payroll and timekeeping clerks	203210	76.39	3	-0.58	33
158	158	472051	Cement masons and concrete finishers	201730	76.54	4	0.06	41
159	159	119051	Food service managers	196080	76.68	12	-0.14	38
160	160	492022	Telecommunications equipment installers and repairers, except li	195170	76.83	22	0.96	53
161	161	515023	Printing machine operators	193510	76.97	87	0.59	48
162	162	435032	Dispatchers, except police, fire, and ambulance	193210	77.11	27	-0.75	30
163	163	151099	Computer specialists, all other	191780	77.26	1	.	0
164	164	516031	Sewing machine operators	190440	77.40	128	-0.54	33
165	165	319099	Healthcare support workers, all other	189890	77.54	4	-0.14	38
166	166	353041	Food servers, nonrestaurant	188390	77.68	3	-0.56	33
167	167	531021	First-line supervisors/managers of helpers, laborers, and materi	186230	77.81	14	0.18	43
168	168	435053	Postal service mail sorters, processors, and processing machine	185770	77.95	.	.	.
169	169	533021	Bus drivers, transit and intercity	184160	78.09	4	-0.26	37
170	170	371011	First-line supervisors/managers of housekeeping and janitorial w	183560	78.22	7	-0.60	32
171	171	119041	Engineering managers	182300	78.36	10	0.21	43
172	172	272022	Coaches and scouts	175720	78.49	3	1.94	67
173	173	252012	Kindergarten teachers, except special education	174530	78.62	1	.	0
174	174	292021	Dental hygienists	173090	78.75	1	.	0
175	175	533041	Taxi drivers and chauffeurs	170520	78.87	6	0.08	41
176	176	172199	Engineers, all other	169240	79.00	6	-0.76	30
177	177	352015	Cooks, short order	168770	79.12	1	.	0
178	178	292071	Medical records and health information technicians	168650	79.25	4	-1.49	20
179	179	499052	Telecommunications line installers and repairers	168050	79.37	2	-0.46	34

182	182	292011	Medical and clinical laboratory technologists	166510	79.74	9	0.23	43
183	183	513022	Meat, poultry, and fish cutters and trimmers	166150	79.86	25	0.33	45
184	184	434161	Human resources assistants, except payroll and timekeeping	164340	79.99	8	-0.65	32
185	185	419022	Real estate sales agents	164080	80.11	3	-0.29	36
186	186	434181	Reservation and transportation ticket agents and travel clerks	163880	80.23	11	-0.50	34
187	187	472211	Sheet metal workers	163480	80.35	3	-1.34	22
188	188	253021	Self-enrichment education teachers	163190	80.47	11	2.37	72
189	189	173023	Electrical and electronic engineering technicians	162330	80.59	15	0.39	46
190	190	413011	Advertising sales agents	161550	80.71	7	0.40	46
191	191	119141	Property, real estate, and community association managers	159700	80.83	13	-0.50	34
192	192	172071	Electrical engineers	154670	80.94	14	-0.61	32
193	193	113051	Industrial production managers	154030	81.06	13	0.38	45
194	194	432011	Switchboard operators, including answering service	153860	81.17	5	-0.88	28
195	195	254021	Librarians	151170	81.28	15	-0.38	35
196	196	292012	Medical and clinical laboratory technicians	149670	81.39	3	-1.16	25
197	197	499098	Helpers--installation, maintenance, and repair workers	149350	81.50	49	0.78	51
198	198	252043	Special education teachers, secondary school	147210	81.61	1	.	0
199	199	493021	Automotive body and related repairers	147200	81.72	5	0.17	43
200	200	132052	Personal financial advisors	146690	81.83	2	.	0
201	201	419099	Sales and related workers, all other	146480	81.94	15	1.15	56
202	202	514072	Molding, coremaking, and casting machine setters, operators, and	145760	82.05	43	0.18	43
203	203	132099	Financial specialists, all other	145110	82.15	1	.	0
204	204	537063	Machine feeders and offbearers	144820	82.26	291	-0.08	39
205	205	514011	Computer-controlled machine tool operators, metal and plastic	143030	82.37	13	-0.34	36
206	206	513011	Bakers	141130	82.47	8	-1.31	23
207	207	519023	Mixing and blending machine setters, operators, and tenders	140120	82.57	209	0.01	41
208	208	172072	Electronics engineers, except computer	139930	82.68	12	0.24	44
209	209	499099	Installation, maintenance, and repair workers, all other	139100	82.78	46	0.76	51
210	210	439051	Mail clerks and mail machine operators, except postal service	137350	82.88	14	-0.62	32
211	211	536021	Parking lot attendants	136470	82.98	3	0.17	43
212	212	474051	Highway maintenance workers	136420	83.08	2	-0.03	40
213	213	131022	Wholesale and retail buyers, except farm products	132420	83.18	2	-1.43	21
214	214	211022	Medical and public health social workers	131730	83.28	1	.	0
215	215	211023	Mental health and substance abuse social workers	131010	83.38	1	.	0
216	216	537081	Refuse and recyclable material collectors	129080	83.47	1	.	0
217	217	391021	First-line supervisors/managers of personal service workers	129070	83.57	15	0.55	48
218	218	472081	Drywall and ceiling tile installers	128740	83.66	4	1.02	54
219	219	513021	Butchers and meat cutters	128210	83.76	3	-1.70	17
220	220	439022	Word processors and typists	128010	83.85	7	-0.62	32
221	221	392021	Nonfarm animal caretakers	126740	83.95	10	1.24	57
222	222	493042	Mobile heavy equipment mechanics, except engines	125930	84.04	3	1.60	62
223	223	251071	Health specialties teachers, except engineers	125100	84.13	.	.	.
224	224	251191	Graduate teaching assistants	124380	84.22	1	.	0
225	225	492011	Computer, automated teller, and office machine repairers	122400	84.31	13	-0.16	38
226	226	259031	Instructional coordinators	122180	84.40	5	-1.27	23
227	227	517011	Cabinetmakers and bench carpenters	120960	84.49	21	0.37	45
228	228	472181	Roofers	120200	84.58	3	0.26	44
229	229	119151	Social and community service managers	117150	84.67	13	-0.24	37
230	230	493011	Aircraft mechanics and service technicians	116310	84.75	7	0.34	45

233	233	434031	Court, municipal, and license clerks	115070	85.01	5	0.08	41
234	234	173011	Architectural and civil drafters	114910	85.10	13	0.23	43
235	235	434121	Library assistants, clerical	114740	85.18	7	0.03	41
236	236	254031	Library technicians	113510	85.27	4	-1.16	25
237	237	251194	Vocational education teachers, postsecondary	112940	85.35	20	1.14	56
238	238	211015	Rehabilitation counselors	112700	85.43	2	-2.38	8
239	239	434061	Eligibility interviewers, government programs	112510	85.52	6	-0.40	35
240	240	512041	Structural metal fabricators and fitters	111620	85.60	7	0.26	44
241	241	499051	Electrical power-line installers and repairers	111580	85.68	13	2.65	76
242	242	339092	Lifeguards, ski patrol, and other recreational protective service	111560	85.76	3	0.49	47
243	243	171011	Architects, except landscape and naval	110990	85.85	2	-1.21	24
244	244	518031	Water and liquid waste treatment plant and system operators	110300	85.93	5	-0.10	39
245	245	273041	Editors	110010	86.01	18	0.68	50
246	246	371012	First-line supervisors/managers of landscaping, lawn service, and	108940	86.09	6	0.68	50
247	247	211099	Community and social service specialists, all other	107910	86.17	.	.	.
248	248	439011	Computer operators	107450	86.25	3	-0.64	32
249	249	291127	Speech-language pathologists	107340	86.33	2	-2.07	12
250	250	393031	Ushers, lobby attendants, and ticket takers	107340	86.33	3	-2.07	12
251	251	472021	Brickmasons and blockmasons	106570	86.41	5	0.63	49
252	252	291062	Family and general practitioners	106270	86.49	11	1.72	64
253	253	211014	Mental health counselors	106210	86.56	5	-1.96	14
254	254	333021	Detectives and criminal investigators	104650	86.64	.	.	.
255	255	519196	Paper goods machine setters, operators, and tenders	104480	86.72	16	1.70	63
256	256	473013	Helpers--electricians	104170	86.80	5	-0.29	36
257	257	291126	Respiratory therapists	104050	86.87	7	1.84	65
258	258	519121	Coating, painting, and spraying machine setters, operators, and	103870	86.95	1	.	0
259	259	252042	Special education teachers, middle school	103310	87.03	79	0.09	42
260	260	259099	Education, training, and library workers, all other	100650	87.10	2	.	0
261	261	252032	Vocational education teachers, secondary school	99900	87.17	4	-0.30	36
262	262	191042	Medical scientists, except epidemiologists	99800	87.25	.	.	.
263	263	396031	Flight attendants	99750	87.32	5	0.42	46
264	264	513092	Food batchmakers	99480	87.40	2	-0.11	39
265	265	132053	Insurance underwriters	99170	87.47	5	-0.59	32
266	266	131081	Logisticians	98690	87.54	1	.	0
267	267	493093	Tire repairers and changers	98590	87.61	1	.	0
268	268	351011	Chefs and head cooks	98520	87.69	2	-0.01	40
269	269	193031	Clinical, counseling, and school psychologists	98040	87.76	9	-0.57	33
270	270	119033	Education administrators, postsecondary	97880	87.83	9	0.50	47
271	271	211092	Probation officers and correctional treatment specialists	97410	87.90	14	-0.37	35
272	272	513023	Slaughterers and meat packers	97130	87.98	4	-0.54	33
273	273	435031	Police, fire, and ambulance dispatchers	97000	88.05	4	0.00	40
274	274	113071	Transportation, storage, and distribution managers	96360	88.12	4	-0.55	33
275	275	435021	Couriers and messengers	96300	88.19	64	0.08	41
276	276	474011	Construction and building inspectors	96110	88.26	7	-0.05	40
277	277	291122	Occupational therapists	96000	88.33	16	0.88	52
278	278	331012	First-line supervisors/managers of police and detectives	94800	88.40	2	-0.65	32
279	279	514021	Extruding and drawing machine setters, operators, and tenders, m	92840	88.47	22	1.00	54
280	280	514033	Grinding, lapping, polishing, and buffing machine tool setters,	92160	88.54	14	-0.28	37
281	281	393011	Gaming dealers	91990	88.61	73	-0.19	38
				91130	88.68	1	.	0

284	284	173022	Civil engineering technicians	88140	88.87	4	1.10	55
285	285	514081	Multiple machine tool setters, operators, and tenders, metal and	87800	88.94	31	-0.06	40
286	286	434141	New accounts clerks	87300	89.00	2	-0.96	27
287	287	413041	Travel agents	86420	89.07	1	.	0
288	288	319094	Medical transcriptionists	86200	89.13	2	.	0
289	289	435011	Cargo and freight agents	85950	89.19	3	-2.25	10
290	290	291021	Dentists, general	85910	89.26	5	-1.91	14
291	291	514111	Tool and die makers	85610	89.32	23	-0.37	35
292	292	339099	Protective service workers, all other	85440	89.38	4	2.00	67
293	293	519041	Extruding, forming, pressing, and compacting machine setters, op	85130	89.45	163	-0.24	37
294	294	536031	Service station attendants	84480	89.51	6	-0.46	34
295	295	419011	Demonstrators and product promoters	83540	89.57	9	0.72	50
296	296	192031	Chemists	83080	89.63	3	-0.32	36
297	297	473012	Helpers--carpenters	81260	89.69	5	1.05	55
298	298	192041	Environmental scientists and specialists, including health	80120	89.75	.	.	.
299	299	473015	Helpers--pipefitters, plumbers, pipefitters, and steamfitters	79870	89.81	3	-0.09	39
300	300	433061	Procurement clerks	79610	89.87	2	-0.98	27
301	301	439071	Office machine operators, except computer	79470	89.93	6	-0.21	38
302	302	211011	Substance abuse and behavioral disorder counselors	79180	89.99	1	.	0
303	303	292056	Veterinary technologists and technicians	78920	90.04	2	.	0
304	304	533099	Motor vehicle operators, all other	78610	90.10	2	-1.35	22
305	305	435051	Postal service clerks	78250	90.16	3	-1.10	25
306	306	272012	Producers and directors	78060	90.22	24	1.04	54
307	307	419031	Sales engineers	78030	90.28	10	-0.54	33
308	308	492094	Electrical and electronics repairers, commercial and industrial	77270	90.33	8	1.54	61
309	309	532011	Airline pilots, copilots, and flight engineers	77090	90.39	4	0.86	52
310	310	173013	Mechanical drafters	77070	90.45	17	-0.54	33
311	311	251121	Art, drama, and music teachers, postsecondary	76810	90.50	.	.	.
312	312	519032	Cutting and slicing machine setters, operators, and tenders	76500	90.56	159	-0.19	38
313	313	399099	Personal care and service workers, all other	75780	90.62	18	1.84	65
314	314	292099	Health technologists and technicians, all other	74990	90.67	10	-0.38	35
315	315	132041	Credit analysts	74400	90.73	3	-1.67	18
316	316	173029	Engineering technicians, except drafters, all other	73870	90.78	10	0.44	46
317	317	499043	Maintenance workers, machinery	73650	90.84	38	1.12	56
318	318	172061	Computer hardware engineers	73370	90.89	2	.	0
319	319	253011	Adult literacy, remedial education, and GED teachers and instruc	73050	90.94	2	.	0
320	320	173026	Industrial engineering technicians	72820	91.00	3	0.48	47
321	321	435111	Weighers, measurers, checkers, and samplers, recordkeeping	72720	91.05	33	0.01	40
322	322	194021	Biological technicians	72200	91.11	8	-0.05	40
323	323	291071	Physician assistants	71950	91.16	2	-1.04	26
324	324	190996	Veterinary assistants and laboratory animal caretakers	71950	91.21	.	.	.
325	325	173031	Surveying and mapping technicians	71920	91.27	8	1.20	57
326	326	251011	Business teachers, postsecondary	69690	91.32	34	-2.71	4
327	327	472221	Structural iron and steel workers	68670	91.37	4	0.18	43
328	328	339091	Crossing guards	68530	91.42	3	-0.70	31
329	329	434011	Brokerage clerks	68430	91.47	6	-1.30	23
330	330	211029	Social workers, all other	68230	91.52	.	.	.
331	331	172011	Aerospace engineers	67800	91.57	9	0.03	41
332	332	516021	Pressers, textile, garment, and related materials	67500	91.62	35	-0.22	37

335	335	132081	Tax examiners, collectors, and revenue agents	66030	91.77	2	-2.03	13
336	336	194031	Chemical technicians	65830	91.82	10	0.21	43
337	337	537032	Excavating and loading machine and dragline operators	65160	91.86	8	0.58	48
338	338	434041	Credit authorizers, checkers, and clerks	65020	91.91	4	-0.04	40
339	339	111031	Legislators	64650	91.96			
340	340	271026	Merchandise displayers and window trimmers	63320	92.01	3	0.23	43
341	341	372021	Pest control workers	63180	92.05	6	0.79	51
342	342	132082	Tax preparers	63030	92.10	1		0
343	343	492098	Security and fire alarm systems installers	62720	92.15	2	-1.71	17
344	344	132031	Budget analysts	62630	92.19	2	-1.01	27
345	345	475071	Roustabouts, oil and gas	62540	92.24	4	-1.30	23
346	346	512023	Electromechanical equipment assemblers	62310	92.29	10	-0.48	34
347	347	251123	English language and literature teachers, postsecondary	62230	92.33			
348	348	211091	Health educators	62120	92.38	1		0
349	349	312021	Physical therapist assistants	61820	92.42	1		0
350	350	274021	Photographers	61670	92.47	9	1.20	57
351	351	472071	Paving, surfacing, and tamping equipment operators	61230	92.51	12	1.01	54
352	352	515022	Prepress technicians and workers	61170	92.56	59	0.25	44
353	353	113049	Human resources managers, all other	60980	92.60	2	-0.58	33
354	354	152031	Operations research analysts	60860	92.65	1		0
355	355	515011	Bindery workers	60560	92.69	15	0.09	42
356	356	292081	Opticians, dispensing	59470	92.74	2		0
357	357	232093	Title examiners, abstractors, and searchers	59390	92.78	5	-0.35	36
358	358	311013	Psychiatric aides	59050	92.83	2	-0.37	35
359	359	194099	Life, physical, and social science technicians, all other	58070	92.87	10	1.51	61
360	360	271023	Floral designers	57500	92.91	2	0.99	54
361	361	514034	Lathe and turning machine tool setters, operators, and tenders,	56500	92.95	38	0.15	42
362	362	251081	Education teachers, postsecondary	55880	92.99			
363	363	474099	Construction and related workers, all other	55820	93.04	18	1.40	59
364	364	171022	Surveyors	55780	93.08	8	0.41	46
365	365	299099	Healthcare practitioners and technical workers, all other	55750	93.12	3	0.89	52
366	366	292053	Psychiatric technicians	54800	93.16	1		0
367	367	472151	Pipelayers	54440	93.20	1		0
368	368	291031	Dietitians and nutritionists	53630	93.24	6	0.18	43
369	369	331021	First-line supervisors/managers of fire fighting and prevention	53300	93.28	5	1.51	61
370	370	473011	Helpers--brickmasons, blockmasons, stonemasons, and tile and mar	53300	93.32	5	1.95	67
371	371	271025	Interior designers	53290	93.36	2	1.62	62
372	372	299011	Occupational health and safety specialists	53250	93.40	15	1.09	55
373	373	319095	Pharmacy aides	53190	93.44			
374	374	291131	Veterinarians	53110	93.47	14	0.54	48
375	375	519011	Chemical equipment operators and tenders	52890	93.51	30	-0.07	39
376	376	172081	Environmental engineers	52590	93.55	3	-0.83	29
377	377	399041	Residential advisors	52240	93.59	1		0
378	378	251042	Biological science teachers, postsecondary	51930	93.63			
379	379	514122	Welding, soldering, and brazing machine setters, operators, and	51840	93.67	26	0.27	44
380	380	517041	Sawing machine setters, operators, and tenders, wood	51830	93.71	52	-0.05	40
381	381	112031	Public relations managers	51730	93.74	5	-0.48	34
382	382	472121	Glaziers	51730	93.78	4	1.18	56
383	383	395092	Manicurists and pedicurists	51590	93.82	2	-2.09	12

386	386	472044	Tile and marble setters	51210	93.94	5	0.91	53
387	387	273022	Reporters and correspondents	50690	93.97	2	-0.85	29
388	388	359099	Food preparation and serving related workers, all other	50420	94.01	4	-0.20	38
389	389	519122	Painters, transportation equipment	50310	94.05	4	-0.62	32
390	390	396011	Baggage porters and bellhops	49770	94.08	4	-1.14	25
391	391	119031	Education administrators, preschool and child care center/progra	49630	94.12	9	-0.75	30
392	392	519132	Photographic processing machine operators	49550	94.16	23	0.10	42
393	393	331099	First-line supervisors/managers, protective service workers, all	49310	94.19	2	0.13	42
394	394	292032	Diagnostic medical sonographers	48920	94.23	2	.	0
395	395	292031	Cardiovascular technologists and technicians	48040	94.27	10	0.11	42
396	396	131121	Meeting and convention planners	47960	94.30	1	.	0
397	397	273042	Technical writers	47460	94.34	3	-0.11	39
398	398	291067	Surgeons	47070	94.37	1	.	0
399	399	272042	Musicians and singers	47030	94.41	3	3.08	82
400	400	291063	Internists, general	46980	94.44	1	.	0
401	401	251072	Nursing instructors and teachers, postsecondary	46890	94.48	1	.	0
402	402	499044	Millwrights	46250	94.51	6	0.91	53
403	403	173027	Mechanical engineering technicians	45770	94.54	7	0.14	42
404	404	251022	Mathematical science teachers, postsecondary	45710	94.58	.	.	.
405	405	518093	Petroleum pump system operators, refinery operators, and gaugers	45710	94.61	4	2.03	68
406	406	274011	Audio and video equipment technicians	45200	94.64	9	1.95	67
407	407	435041	Meter readers, utilities	44730	94.68	1	.	0
408	408	518091	Chemical plant and system operators	44600	94.71	6	0.06	41
409	409	537021	Crane and tower operators	44490	94.74	14	0.71	50
410	410	312022	Physical therapist aides	44410	94.78	1	.	0
411	411	272011	Actors	44360	94.81	23	4.41	100
412	412	319093	Medical equipment preparers	44340	94.84	2	-1.35	22
413	413	273043	Writers and authors	44170	94.87	13	0.71	50
414	414	393099	Entertainment attendants and related workers, all other	43930	94.91	.	.	.
415	415	499012	Control and valve installers and repairers, except mechanical do	43900	94.94	18	0.63	49
416	416	514199	Metal workers and plastic workers, all other	43690	94.97	166	0.06	41
417	417	512011	Aircraft structure, surfaces, rigging, and systems assemblers	43330	95.00	10	0.66	49
418	418	536099	Transportation workers, all other	43330	95.04	6	1.91	66
419	419	472161	Plasterers and stucco masons	43290	95.07	4	-0.55	33
420	420	119121	Natural sciences managers	43060	95.10	3	-0.62	32
421	421	534011	Locomotive engineers	42760	95.13	1	.	0
422	422	515021	Job printers	42640	95.16	2	.	0
423	423	519081	Dental laboratory technicians	42640	95.19	9	-1.06	26
424	424	474041	Hazardous materials removal workers	42500	95.23	2	-0.37	35
425	425	212011	Clergy	42040	95.26	1	.	0
426	426	537011	Conveyor operators and tenders	41920	95.29	30	0.43	46
427	427	519195	Molders, shapers, and casters, except metal and plastic	41900	95.32	74	0.55	48
428	428	499091	Coin, vending, and amusement machine servicers and repairers	41280	95.35	6	-0.07	39
429	429	519021	Crushing, grinding, and polishing machine setters, operators, an	41270	95.38	172	-0.10	39
430	430	519012	Separating, filtering, clarifying, precipitating, and still mach	41200	95.41	256	0.13	42
431	431	537199	Material moving workers, all other	41140	95.44	25	0.84	52
432	432	331011	First-line supervisors/managers of correctional officers	40840	95.47	2	-0.64	32
433	433	514193	Plating and coating machine setters, operators, and tenders, met	40300	95.50	48	0.04	41
434	434	519022	Grinding and polishing workers, hand	40290	95.53	65	0.17	43

437	437	513093	Food cooking machine operators and tenders	39300	95.62	41	-0.54	33
438	438	512031	Engine and other machine assemblers	39270	95.65	19	0.26	44
439	439	516093	Upholsterers	39090	95.68	9	-0.22	37
440	440	518021	Stationary engineers and boiler operators	39000	95.71	12	0.58	48
441	441	113041	Compensation and benefits managers	38810	95.73	2	-1.42	21
442	442	492097	Electronic home entertainment equipment installers and repairers	38680	95.76	7	0.81	51
443	443	452093	Farmworkers, farm and ranch animals	38110	95.79	25	0.97	53
444	444	452041	Graders and sorters, agricultural products	37500	95.82	12	1.51	61
445	445	499031	Home appliance repairers	37300	95.85	3	-0.61	32
446	446	273011	Radio and television announcers	37290	95.87	3	-1.12	25
447	447	193051	Urban and regional planners	37120	95.90	2	-1.06	26
448	448	475013	Service unit operators, oil, gas, and mining	36850	95.93	3	1.00	54
449	449	273091	Interpreters and translators	36610	95.96	3	0.03	41
450	450	516064	Textile winding, twisting, and drawing out machine setters, oper	36540	95.98	73	0.32	45
451	451	272099	Entertainers and performers, sports and related workers, all oth	36190	96.01	3	0.13	42
452	452	112011	Advertising and promotions managers	36100	96.04	6	0.02	41
453	453	339021	Private detectives and investigators	35820	96.06	12	1.14	56
454	454	373013	Tree trimmers and pruners	35420	96.09	7	2.91	80
455	455	514023	Rolling machine setters, operators, and tenders, metal and plast	34970	96.11	37	0.25	44
456	456	291199	Health diagnosing and treating practitioners, all other	34890	96.14	4	-0.10	39
457	457	518013	Power plant operators	34700	96.17	7	1.62	62
458	458	472041	Carpet installers	34390	96.19	1	.	0
459	459	499062	Medical equipment repairers	34260	96.22	5	1.16	56
460	460	291061	Anesthesiologists	34230	96.24	1	.	0
461	461	271011	Art directors	33670	96.27	3	0.84	52
462	462	274012	Broadcast technicians	33550	96.29	12	1.59	62
463	463	514032	Drilling and boring machine tool setters, operators, and tenders	33550	96.32	27	0.10	42
464	464	194091	Environmental science and protection technicians, including heal	33370	96.34	5	-0.85	29
465	465	394021	Funeral attendants	33060	96.37	2	-0.06	40
466	466	271021	Commercial and industrial designers	32940	96.39	10	0.81	51
467	467	519083	Ophthalmic laboratory technicians	32930	96.41	18	-0.93	28
468	468	173012	Electrical and electronics drafters	32710	96.44	10	-0.09	39
469	469	251021	Computer science teachers, postsecondary	32520	96.46	.	.	.
470	470	119081	Lodging managers	32460	96.49	3	-0.93	28
471	471	535011	Sailors and marine oilers	32420	96.51	6	0.67	49
472	472	519141	Semiconductor processors	32230	96.53	30	0.47	47
473	473	251032	Engineering teachers, postsecondary	32070	96.56	.	.	.
474	474	472082	Tapers	31850	96.58	1	.	0
475	475	396021	Tour guides and escorts	31760	96.61	7	0.70	50
476	476	516052	Tailors, dressmakers, and custom sewers	31700	96.63	13	-0.16	38
477	477	232092	Law clerks	31500	96.65	.	.	.
478	478	271014	Multi-media artists and animators	31500	96.68	.	.	.
479	479	251066	Psychology teachers, postsecondary	31420	96.70	.	.	.
480	480	192042	Geoscientists, except hydrologists and geographers	31260	96.72	10	0.51	47
481	481	532012	Commercial pilots	31250	96.74	4	-0.24	37
482	482	519123	Painting, coating, and decorating workers	31200	96.77	116	0.82	51
483	483	172041	Chemical engineers	30970	96.79	5	-1.24	24
484	484	512091	Fiberglass laminators and fabricators	30890	96.81	2	.	0
485	485	194093	Forest and conservation technicians	30850	96.84	2	0.14	42

488	488	493041	Farm equipment mechanics	30240	96.90	7	0.27	44
489	489	472132	Insulation workers, mechanical	30150	96.93	1	.	0
490	490	211019	Counselors, all other	29980	96.95	1	.	.
491	491	132071	Loan counselors	29430	96.97	1	.	0
492	492	113042	Training and development managers	29350	96.99	3	-1.16	25
493	493	291065	Pediatricians, general	29170	97.01	1	.	0
494	494	514022	Forging machine setters, operators, and tenders, metal and plast	28800	97.03	18	0.83	52
495	495	193099	Social scientists and related workers, all other	28680	97.06	5	1.24	57
496	496	472171	Reinforcing iron and rebar workers	28620	97.08	1	.	0
497	497	472131	Insulation workers, floor, ceiling, and wall	28390	97.10	7	0.25	44
498	498	191029	Biological scientists, all other	28290	97.12	.	.	.
499	499	119039	Education administrators, all other	28090	97.14	3	1.02	54
500	500	473019	Helpers, construction trades, all other	27210	97.16	9	0.84	52
501	501	291011	Chiropractors	27050	97.18	1	.	0
502	502	475012	Rotary drill operators, oil and gas	27020	97.20	3	-0.43	35
503	503	454022	Logging equipment operators	27010	97.22	2	0.20	43
504	504	151011	Computer and information scientists, research	26610	97.24	3	-2.98	0
505	505	493053	Outdoor power equipment and other small engine mechanics	26440	97.26	6	-1.58	19
506	506	119131	Postmasters and mail superintendents	26410	97.28	2	-0.90	28
507	507	251124	Foreign language and literature teachers, postsecondary	26400	97.30	.	.	.
508	508	395094	Skin care specialists	26300	97.32	.	.	.
509	509	514035	Milling and planing machine setters, operators, and tenders, met	26220	97.34	36	-0.29	36
510	510	439031	Desktop publishers	26210	97.36	1	.	0
511	511	391011	Gaming supervisors	26110	97.38	.	.	.
512	512	132061	Financial examiners	26020	97.39	2	-2.00	13
513	513	291041	Optometrists	25970	97.41	1	.	0
514	514	474031	Fence erectors	25710	97.43	1	.	0
515	515	119061	Funeral directors	25680	97.45	1	.	0
516	516	312011	Occupational therapist assistants	25610	97.47	1	.	0
517	517	475081	Helpers--extraction workers	25550	97.49	16	1.16	56
518	518	231023	Judges, magistrate judges, and magistrates	25470	97.51	2	.	0
519	519	172111	Health and safety engineers, except mining safety engineers and	25190	97.53	6	0.02	41
520	520	474021	Elevator installers and repairers	25070	97.55	4	-1.38	22
521	521	373012	Pesticide handlers, sprayers, and applicators, vegetation	25060	97.56	3	0.39	46
522	522	536051	Transportation inspectors	24940	97.58	19	1.38	59
523	523	519071	Jewelers and precious stone and metal workers	24780	97.60	50	-0.30	36
524	524	474071	Septic tank servicers and sewer pipe cleaners	24730	97.62	2	-0.27	37
525	525	519031	Cutters and trimmers, hand	24700	97.64	98	0.33	45
526	526	292051	Dietetic technicians	24620	97.66	1	.	0
527	527	534021	Railroad brake, signal, and switch operators	24610	97.67	6	1.43	60
528	528	211013	Marriage and family therapists	24520	97.69	1	.	0
529	529	273099	Media and communication workers, all other	24470	97.71	2	0.24	44
530	530	251122	Communications teachers, postsecondary	24360	97.73	.	.	.
531	531	532021	Air traffic controllers	24260	97.75	5	-0.49	34
532	532	172131	Materials engineers	24160	97.76	10	-0.89	28
533	533	514191	Heat treating equipment setters, operators, and tenders, metal a	23630	97.78	22	0.43	46
534	534	475011	Derrick operators, oil and gas	23590	97.80	1	.	0
535	535	492092	Electric motor, power tool, and related repairers	23400	97.82	34	0.21	43
536	536	492095	Electrical and electronics repairers, powerhouse, substation, an	23180	97.83	5	0.07	41

539	539	432021	Telephone operators	22820	97.88	2	-2.51	6
540	540	291125	Recreational therapists	22510	97.90	5	0.98	54
541	541	412012	Gaming change persons and booth cashiers	22280	97.92	1	.	0
542	542	191021	Biochemists and biophysicists	22230	97.93	4	-0.23	37
543	543	512021	Coil winders, tapers, and finishers	22160	97.95	8	-0.96	27
544	544	291066	Psychiatrists	22140	97.97	1	.	0
545	545	452091	Agricultural equipment operators	22110	97.98	17	0.73	50
546	546	396032	Transportation attendants, except flight attendants and baggage	21870	98.00	9	-0.84	29
547	547	533011	Ambulance drivers and attendants, except emergency medical techn	21790	98.02	2	2.16	70
548	548	519197	Tire builders	21740	98.03	2	-1.46	21
549	549	517021	Furniture finishers	21630	98.05	6	0.60	48
550	550	292033	Nuclear medicine technologists	21200	98.06	3	-0.89	28
551	551	171012	Landscape architects	21130	98.08	1	.	0
552	552	193022	Survey researchers	21100	98.09	.	.	.
553	553	519131	Photographic process workers	21040	98.11	10	-0.07	39
554	554	251125	History teachers, postsecondary	21020	98.13	.	.	.
555	555	172171	Petroleum engineers	20880	98.14	4	-0.43	35
556	556	451011	First-line supervisors/managers of farming, fishing, and forestr	20800	98.16	49	1.13	56
557	557	493043	Rail car repairers	20780	98.17	8	0.35	45
558	558	173025	Environmental engineering technicians	20740	98.19	4	1.24	57
559	559	173019	Drafters, all other	20720	98.20	2	-1.93	14
560	560	152041	Statisticians	20680	98.22	2	-0.69	31
561	561	472011	Boilermakers	20400	98.23	5	-0.60	32
562	562	396012	Concierges	20380	98.25	.	.	.
563	563	475021	Earth drillers, except oil and gas	20220	98.26	7	0.61	49
564	564	516062	Textile cutting machine setters, operators, and tenders	20170	98.28	35	-0.58	33
565	565	492096	Electronic equipment installers and repairers, motor vehicles	19980	98.29	2	-1.13	25
566	566	251052	Chemistry teachers, postsecondary	19950	98.31	.	.	.
567	567	473014	Helpers--painters, paperhangers, plasterers, and stucco masons	19900	98.32	1	.	0
568	568	274099	Media and communication equipment workers, all other	19770	98.34	.	.	.
569	569	291064	Obstetricians and gynecologists	19750	98.35	2	-2.59	5
570	570	493051	Motorboat mechanics	19640	98.37	4	-0.09	39
571	571	519191	Cementing and gluing machine operators and tenders	19640	98.38	56	-0.34	36
572	572	333011	Bailiffs	19290	98.39	1	.	0
573	573	514051	Metal-refining furnace operators and tenders	19280	98.41	12	0.31	45
574	574	274031	Camera operators, television, video, and motion picture	19270	98.42	5	1.85	65
575	575	194011	Agricultural and food science technicians	18930	98.44	16	0.40	46
576	576	472022	Stonemasons	18910	98.45	5	-0.69	31
577	577	519192	Cleaning, washing, and metal pickling equipment operators and te	18870	98.47	43	-0.37	35
578	578	473016	Helpers--roofers	18730	98.48	.	.	.
579	579	274032	Film and video editors	18720	98.49	4	0.22	43
580	580	499094	Locksmiths and safe repairers	18500	98.51	3	-0.82	29
581	581	251126	Philosophy and religion teachers, postsecondary	18370	98.52	.	.	.
582	582	492091	Avionics technicians	18360	98.53	3	1.23	57
583	583	493022	Automotive glass installers and repairers	18330	98.55	1	.	0
584	584	152011	Actuaries	18220	98.56	1	.	0
585	585	393093	Locker room, coatroom, and dressing room attendants	18170	98.57	17	0.21	43
586	586	194061	Social science research assistants	18120	98.59	1	.	0
587	587	232091	Court reporters	17930	98.60	6	-0.55	33

590	590	499011	Mechanical door repairers	17530	98.64	2	0.84	52
591	591	516099	Textile, apparel, and furnishings workers, all other	17430	98.65	13	0.86	52
592	592	251193	Recreation and fitness studies teachers, postsecondary	17410	98.67	4	.	0
593	593	352019	Cooks, all other	17340	98.68	.	.	.
594	594	433041	Gaming cage workers	17060	98.69	1	.	0
595	595	537073	Wellhead pumpers	17050	98.70	2	0.46	47
596	596	514012	Numerical tool and process control programmers	16990	98.72	3	0.29	44
597	597	271022	Fashion designers	16920	98.73	3	-1.50	20
598	598	439111	Statistical assistants	16900	98.74	7	-0.43	35
599	599	493052	Motorcycle mechanics	16850	98.75	4	-0.80	29
600	600	172161	Nuclear engineers	16640	98.77	11	-0.09	39
601	601	274014	Sound engineering technicians	16600	98.78	7	0.06	41
602	602	251067	Sociology teachers, postsecondary	16440	98.79	.	.	.
603	603	514194	Tool grinders, filers, and sharpeners	16410	98.80	15	-0.68	31
604	604	173024	Electro-mechanical technicians	16290	98.82	2	-1.34	22
605	605	292054	Respiratory therapy technicians	16210	98.83	.	.	.
606	606	516061	Textile bleaching and dyeing machine operators and tenders	16180	98.84	39	0.33	45
607	607	393012	Gaming and sports book writers and runners	16140	98.85	2	-2.52	6
608	608	492093	Electrical and electronics installers and repairers, transportat	15860	98.86	3	-0.41	35
609	609	191031	Conservation scientists	15830	98.87	3	0.51	47
610	610	373019	Grounds maintenance workers, all other	15790	98.89	5	1.53	61
611	611	191022	Microbiologists	15750	98.90	1	.	0
612	612	252023	Vocational education teachers, middle school	15720	98.91	2	.	0
613	613	395093	Shampooers	15570	98.92	.	.	.
614	614	339011	Animal control workers	15480	98.93	4	0.03	41
615	615	391012	Slot key persons	15390	98.94	1	.	0
616	616	514052	Pourers and casters, metal	15390	98.96	8	0.05	41
617	617	439081	Proofreaders and copy markers	15300	98.97	5	-0.97	27
618	618	514071	Foundry mold and coremakers	15240	98.98	5	-0.33	36
619	619	172031	Biomedical engineers	15220	98.99	2	.	0
620	620	299091	Athletic trainers	15070	99.00	1	.	0
621	621	474061	Rail-track laying and maintenance equipment operators	15020	99.01	5	-0.16	38
622	622	291124	Radiation therapists	14850	99.02	1	.	0
623	623	192012	Physicists	14810	99.03	4	0.78	51
624	624	212021	Directors, religious activities and education	14790	99.04	2	-0.94	28
625	625	194041	Geological and petroleum technicians	14570	99.05	15	0.45	46
626	626	518092	Gas plant operators	14500	99.07	5	-0.80	30
627	627	516091	Extruding and forming machine setters, operators, and tenders, s	14440	99.08	7	0.48	47
628	628	251065	Political science teachers, postsecondary	14340	99.09	.	.	.
629	629	452011	Agricultural inspectors	14340	99.10	2	-1.31	23
630	630	472042	Floor layers, except carpet, wood, and hard tiles	14250	99.11	4	-1.16	25
631	631	272021	Athletes and sports competitors	13960	99.12	8	3.05	82
632	632	393019	Gaming service workers, all other	13910	99.13	1	.	0
633	633	272032	Choreographers	13860	99.14	1	.	0
634	634	372019	Building cleaning workers, all other	13580	99.15	3	1.08	55
635	635	499096	Riggers	13490	99.16	8	1.39	59
636	636	434021	Correspondence clerks	13450	99.17	4	-1.19	24
637	637	493092	Recreational vehicle service technicians	13400	99.18	2	-0.69	31
638	638	231021	Administrative law judges, adjudicators, and hearing officers	13370	99.19	5	-0.71	31

641	641	272023	Umpires, referees, and other sports officials	12970	99.22	19	2.55	75
642	642	291129	Therapists, all other	12960	99.23	5	0.25	44
643	643	519082	Medical appliance technicians	12930	99.24	4	0.28	44
644	644	332021	Fire inspectors and investigators	12920	99.25	6	0.90	53
645	645	193011	Economists	12600	99.26	1	.	0
646	646	251063	Economics teachers, postsecondary	12540	99.26	.	.	.
647	647	251112	Law teachers, postsecondary	12490	99.27	.	.	.
648	648	291121	Audiologists	12480	99.28	2	-1.49	20
649	649	518099	Plant and system operators, all other	12370	99.29	11	1.00	54
650	650	251054	Physics teachers, postsecondary	12350	99.30	.	.	.
651	651	537121	Tank car, truck, and ship loaders	12330	99.31	3	-1.11	25
652	652	131061	Emergency management specialists	12260	99.32	1	.	0
653	653	131011	Agents and business managers of artists, performers, and athlete	12110	99.33	9	-1.15	25
654	654	191099	Life scientists, all other	12030	99.34	1	.	0
655	655	194092	Forensic science technicians	11990	99.35	2	-1.05	26
656	656	171021	Cartographers and photogrammetrists	11690	99.36	4	0.15	42
657	657	251111	Criminal justice and law enforcement teachers, postsecondary	11630	99.36	.	.	.
658	658	272031	Dancers	11370	99.37	1	.	0
659	659	131032	Insurance appraisers, auto damage	11280	99.38	1	.	0
660	660	517099	Woodworkers, all other	11260	99.39	4	0.23	43
661	661	535031	Ship engineers	11190	99.40	1	.	0
662	662	271029	Designers, all other	11160	99.41	.	.	.
663	663	475041	Continuous mining machine operators	10920	99.41	1	.	0
664	664	254012	Curators	10820	99.42	7	0.05	41
665	665	191013	Soil and plant scientists	10790	99.43	8	0.00	40
666	666	259021	Farm and home management advisors	10760	99.44	5	-0.78	30
667	667	519194	Etchers and engravers	10760	99.45	29	-0.05	40
668	668	299012	Occupational health and safety technicians	10540	99.45	.	.	.
669	669	191012	Food scientists and technologists	10510	99.46	1	.	0
670	670	395011	Barbers	10330	99.47	2	.	0
671	671	254013	Museum technicians and conservators	10200	99.48	13	0.61	49
672	672	393021	Motion picture projectionists	10200	99.48	2	-1.13	25
673	673	191032	Foresters	10160	99.49	3	1.47	60
674	674	392011	Animal trainers	10030	99.50	2	0.55	48
675	675	251041	Agricultural sciences teachers, postsecondary	10000	99.51	.	.	.
676	676	519193	Cooling and freezing equipment operators and tenders	9940	99.51	20	-0.67	31
677	677	193039	Psychologists, all other	9870	99.52	1	.	0
678	678	518012	Power distributors and dispatchers	9820	99.53	8	0.08	41
679	679	493091	Bicycle repairers	9690	99.53	1	.	0
680	680	291081	Podiatrists	9670	99.54	1	.	0
681	681	192032	Materials scientists	9650	99.55	1	.	0
682	682	251051	Atmospheric, earth, marine, and space sciences teachers, postsec	9650	99.56	.	.	.
683	683	231022	Arbitrators, mediators, and conciliators	9570	99.56	.	.	.
684	684	333041	Parking enforcement workers	9530	99.57	1	.	0
685	685	419091	Door-to-door sales workers, news and street vendors, and related	9520	99.58	8	-0.27	37
686	686	271013	Fine artists, including painters, sculptors, and illustrators	9380	99.58	17	0.68	50
687	687	537072	Pump operators, except wellhead pumps	9280	99.59	20	0.90	53
688	688	475042	Mine cutting and channeling machine operators	9190	99.60	8	0.80	51
689	689	272041	Music directors and composers	9120	99.60	7	0.65	49

692	692	192021	Atmospheric and space scientists	8860	99.62	1	.	0
693	693	173021	Aerospace engineering and operations technicians	8540	99.63	4	-0.05	40
694	694	271019	Artists and related workers, all other	8470	99.64	1	.	0
695	695	514192	Lay-out workers, metal and plastic	8340	99.64	5	2.18	70
696	696	499095	Manufactured building and mobile home installers	8290	99.65	2	-1.32	23
697	697	273012	Public address system and other announcers	8280	99.66	1	.	0
698	698	454011	Forest and conservation workers	8280	99.66	8	2.23	71
699	699	472043	Floor sanders and finishers	8220	99.67	4	.	0
700	700	516041	Shoe and leather workers and repairers	8170	99.67	16	0.08	41
701	701	394011	Embalmers	8090	99.68	2	.	0
702	702	532022	Airfield operations specialists	8050	99.69	1	.	0
703	703	271027	Set and exhibit designers	7940	99.69	7	0.68	50
704	704	251113	Social work teachers, postsecondary	7930	99.70	.	.	.
705	705	475099	Extraction workers, all other	7800	99.70	5	1.63	62
706	706	333031	Fish and game wardens	7720	99.71	2	-0.88	29
707	707	452099	Agricultural workers, all other	7680	99.71	3	0.79	51
708	708	192043	Hydrologists	7590	99.72	4	0.45	46
709	709	251062	Area, ethnic, and cultural studies teachers, postsecondary	7570	99.73	.	.	.
710	710	516092	Fabric and apparel patternmakers	7500	99.73	12	0.32	45
711	711	534041	Subway and streetcar operators	7430	99.74	2	2.47	74
712	712	312012	Occupational therapist aides	7410	99.74	1	.	0
713	713	454021	Fallers	7120	99.75	6	-0.64	32
714	714	516051	Sewers, hand	7050	99.75	21	0.23	43
715	715	536041	Traffic technicians	7030	99.76	1	.	0
716	716	172151	Mining and geological engineers, including mining safety engineer	6900	99.76	9	0.57	48
717	717	152099	Mathematical scientists, all other	6600	99.77	1	.	0
718	718	499097	Signal and track switch repairers	6570	99.77	2	-0.33	36
719	719	172121	Marine engineers and naval architects	6480	99.78	7	-0.33	36
720	720	251031	Architecture teachers, postsecondary	6430	99.78	.	.	.
721	721	194051	Nuclear technicians	6360	99.79	10	1.33	58
722	722	273021	Broadcast news analysts	6310	99.79	3	-1.58	19
723	723	514062	Patternmakers, metal and plastic	6220	99.80	12	-0.91	28
724	724	259011	Audio-visual collections specialists	6160	99.80	2	-1.26	23
725	725	515012	Bookbinders	6150	99.81	2	.	0
726	726	475031	Explosives workers, ordnance handling experts, and blasters	6060	99.81	9	0.62	49
727	727	251069	Social sciences teachers, postsecondary, all other	5720	99.81	.	.	.
728	728	212099	Religious workers, all other	5640	99.82	6	0.94	53
729	729	472053	Terrazzo workers and finishers	5550	99.82	3	0.68	50
730	730	251061	Anthropology and archeology teachers, postsecondary	5500	99.83	.	.	.
731	731	291023	Orthodontists	5500	99.83	1	.	0
732	732	292091	Orthotists and prosthetists	5490	99.84	5	-1.09	26
733	733	534013	Rail yard engineers, dinky operators, and hostlers	5480	99.84	4	0.16	43
734	734	271012	Craft artists	5440	99.84	1	.	0
735	735	492021	Radio mechanics	5440	99.85	3	-0.74	30
736	736	254011	Archivists	5330	99.85	1	.	0
737	737	499063	Musical instrument repairers and tuners	5310	99.86	17	0.49	47
738	738	193091	Anthropologists and archeologists	5230	99.86	4	-1.44	21
739	739	454029	Logging workers, all other	5180	99.86	16	2.94	80
740	740	393092	Costume attendants	5120	99.87	2	-0.36	35

794	794	152091	Mathematical technicians	1100	100.00	2	-1.78	16
795	795	534012	Locomotive firers	970	100.00	1	.	0
796	796	352013	Cooks, private household	960	100.00	1	.	0
797	797	499093	Fabric menders, except garment	960	100.00	6	-0.27	37
798	798	274013	Radio operators	820	100.00	10	-0.02	40
799	799	119012	Farmers and ranchers	490	100.00	19	1.27	58
800	800	291024	Prosthodontists	370	100.00	1	.	0

