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# Matching Occupational Classifications to Vocational Education Program Codes



Tomorrow's Manpower Needs Supplement 3 (Revised)

U.S. Department of Labor Bureau of Labor Statistics 1975

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# Matching Occupational Classifications to Vocational Education Program Codes

Tomorrow's Manpower Needs Supplement 3 (Revised)

U.S. Department of Labor John T. Dunlop, Secretary Bureau of Labor Statistics Julius Shiskin, Commissioner 1975



### **Preface**

The manpower and educational legislation enacted during the last several decades has continuously underscored the need for manpower planning and information on current and projected occupational requirements. To help guide educators and manpower planners, the Bureau of Labor Statistics (BLS), in cooperation with the Manpower Administration, prepared *Tomorrow's Manpower Needs* (TMN), BLS Bulletin 1606 (1969). This four-volume report presented detailed national manpower projections by occupation and industry, together with a guide to their use in developing similar reports at the State and local levels. Since the procedures outlined require that local manpower analysts have the most recent and accurate national manpower information available, BLS has periodically revised and updated its data and refined its methods. The full series of publications is as follows:

Tomorrow's Manpower Needs:

Volume I Developing Area Manpower Projections.

Volume II National Trends and Outlook: Industry Employment and Occupational

Structure.

Volume III National Trends and Outlook: Occupational Employment.

Volume IV The National Industry-Occupational Matrix and Other Manpower Data.

Supplement 1 Revised Projections of Construction Manpower Requirements (1970).

Supplement 2 New and Revised National Industry Projections to 1975 and Procedures for Adjusting Wage and Salary Employment to Total Employment (1970).

Volume IV The National Industry-Occupational Matrix and Other Manpower Data,

Revised 1971 Bulletin 1737 (1972).

Research Report on Manpower Projection Methods, Bulletin 1769 (1973).

Supplement 3 Matching Occupational Classifications to Vocational Education Program

Codes (1973).

Supplement 4 Estimating Occupational Separations from the Labor Force for States

(1974).

In an effort to further improve the base data and projection methodology for States and local areas, the BLS, in cooperation with the Manpower Administration and the individual State employment security agencies, has begun to develop the Occupational Employment Statistics Program (OES). The OES program consists of three elements—the Occupational Employment Survey, the National/State Industry-Occupation Matrix System (which will incorporate OES survey data), and a continuous program of research into methodological improvements in all aspects of the program. The previously informal program of research called Tomorrow's Manpower Needs (TMN) now becomes part of the broad OES program as the National/State Industry-Occupation Matrix System.

The following report updates the information contained in TMN Supplement 3 by substituting 1970 census data for the 1960 base used in the earlier study.

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### Introduction

One of the most complex problems facing educational planners is how to use available occupational supply and demand data for the purpose of setting prudent planning priorities. In addition to the myriad factors which make interpretation of the data difficult, such as the occupational and geographic mobility of workers, the educational planner is faced with occupational and educational classification systems which discourage a systematic matching of supply and demand data.<sup>2</sup>

In the course of meetings between staff members of the Bureau of Labor Statistics and vocational educators seeking to use BLS manpower data for planning purposes, it became clear that a link was needed between data published by the Bureau on projected employment by occupation and data published by the Department of Health, Education, and Welfare's Office of Education on enrollments in vocational programs. The difficulty of translating the occupational projections into specific curriculum needs apparently was hindering the efficient use of the projections for educational planning. The desire to alleviate this problem was the impetus for the original publication of this supplement. The change to projections based on the more detailed 1970 census data and subsequent requests from educators for an update of Supplement 3 made it advisable to issue this revised edition.

This report provides a bridge between the system used to classify occupations in the BLS matrix system and the system used by the Office of Education to classify instructional programs. The bridge, in the form of a conversion table, may enable educational planners to make better use of BLS manpower projections. For instance, planners may find it useful in translating the information State employment agencies provide to vocational educators as directed under the Reports and Analysis Letter No. 685 (May 15, 1970), "Annual

<sup>1</sup> For a discussion of labor supply factors and a bibliography of publications concerning labor supply, see *Occupational Supply: Concepts and Sources of Data for Manpower Analysis*, Bull. 1816 (Bureau of Labor Statistics, 1974).

<sup>2</sup>With some success, national demand data have been combined with the available national training data in *Occupational Manpower and Training Needs*, Bull. 1824 (Bureau of Labor Statistics, 1974).

Report on State and Area Occupational Requirements for Vocational Education."<sup>3</sup>

Unfortunately, the classification systems as they are presently constructed do not permit a clear-cut matching of categories on a one-to-one basis. Perhaps the fundamental barrier to a perfect matching of manpower projections and instructional programs is that the various classification systems were developed for different purposes. The vocational education instruction codes were created primarily to facilitate educational planning, to standardize terminology, and to simplify reporting of educational statistics. The instructional programs are composites of subject matter organized to assist the teaching of certain skills that often encompass a variety of jobs. On the other hand, the occupational classification schemes incorporated in manpower projections were designed primarily to enumerate jobs which require extensive formal or specialized training or in which large numbers of people are employed. In short, the problem is that the cluster of jobs in an instructional program frequently differs from the cluster of jobs under an occupational heading.

Since a one-to-one matching of the occupational categories cannot yet be achieved, vocational education and other training planners still lack suitable information for some occupations. However, the conversion table presented in this report should enable innovative planners to solve many of these matching problems. For example, those using the table could aggregate the various occupational titles and instructional programs at different levels of detail to achieve a better match between occupational demand and supply. To illustrate, the matrix titles Electric power line and cable installers and repairers, Telephone installers and repairers, and Telephone line installers and repairers could be aggregated to match the sum of the instructional programs "Lineman," "Communications," and "Industrial Electricity."

Moreover, since in many localities there is a large

<sup>3</sup>One of the options open to the State employment security agency under RAL 685 is the use of BLS manpower projections developed as part of the National/State Matrix Program. Supply data from vocational education programs and other sources are required in the annual report.

difference between the supply of trained workers and the estimated occupational demand in specific occupations, a precise matching may not be required for judicious planning. In fact, *relative* measures of unmet need, that is, a *ranking* of the difference between supply and demand in each instructional program (or group of programs), may be a better method for setting planning priorities.<sup>4</sup>

<sup>4</sup>This approach has been suggested by many vocational education researchers. For example, see Robert C. Young, William V. Clive, and Benton E. Miles, *Vocational Education Planning: Manpower Priorities and Dollars* (Columbus, Ohio State University, Center for Vocational and Technical Education, 1972).

The conversion table is designed as only a temporary aid for those concerned with matching the various occupational classification systems. The final clarification of occupational classification systems awaits the completion of the *Standard Occupational Classification System* sponsored by the Office of Management and Budget.<sup>5</sup>

<sup>5</sup>The Office of Management and Budget is preparing a new occupational classification system such that each of the various agencies' classification systems will be comparable with the new system as well as with each of the other classifications.

### **Occupational and Educational Classification Systems**

Inasmuch as an understanding of the various classification systems and their limitations is essential to the effective use of the conversion table contained in this report, the following sections outline the major characteristics of each system.

# The BLS National/State Matrix System occupational classification

The occupational classification used in the BLS National/State Matrix System is based on the system used in the 1970 Census of Population. The BLS matrix and the Bureau of the Census both classify occupations into broad socioeconomic groups—professional and technical, clerical, operatives, etc., with residual categories for each socioeconomic group so that the sum of all categories will equal total employment.

Although the census and the BLS matrix occupational categories are virtually identical, they are arranged somewhat differently. For example, the matrix sums the two broad census groups Operatives, except Transport, and Transport Equipment Operatives into a single group entitled Operatives. Also, the occupational heading Drill Press Operatives appears in the intermediate group Semiskilled Metalworking Operatives in the BLS matrix scheme instead of in the intermediate group Precision Machine Operatives as it appears under the census scheme. For the convenience of the vocational education planner who wishes to use BLS manpower projections, the occupational categories in the conversion table of this report are listed in the BLS matrix format.

The BLS matrix uses a number of other sources to supplement data from the 1970 Census of Population when they are considered to be more reliable. The major supplemental sources are Federal regulatory and non-regulatory agencies, professional societies, and the U.S. Civil Service Commission.

The content of the occupational groups remains, however, virtually identical to those used in the census. For example, although the statistics on employment of physicians taken from the American Medical Association differ from the census data, the occupational listing is, with only minor differences, the same as that in the

census category. Therefore, the conversion table in this report shows census categories as well as BLS matrix titles.

### The Bureau of the Census occupational classification

The 1970 Census of Population made use of three types of questionnaires. One, distributed to 80 percent of the households within the country, contained a limited number of population and housing questions. The remaining 20 percent of the households, split into 5-percent and 15-percent samples, were asked additional questions regarding the social and economic characteristics of their members. Detailed questions dealing with occupation and industry of employment were included in both the 5-percent and 15-percent samples. These responses were classified into 441 occupational categories and cross-tabulated for 227 industrial categories. The sum of these occupational or industrial categories equals total employment.

The 441 occupational categories are arranged into 12 major groups and identified by 3-digit and single-letter codes as follows:

N	and	001 to 195	Professional, technical, and kindred workers
		201 to 245	Managers and admin- istrators, except farm
		260 to 285	Salesworkers
P, Q	and	301 to 395	Clerical and kindred workers
R, S	and	401 to 580	Craft and kindred workers
T	and	601 to 695	Operatives, except transport
U	and	701 to 715	Transport equip- ment opera- tives
V	and	740 to 785	Laborers, except farm

<sup>6</sup> The list of specific occupational categories is shown on pp. X-XIV of the Alphabetical Index of Occupations and Industries, (Bureau of the Census, 1971). The BLS National/State Matrix System utilizes 421 detailed occupational categories instead of 441 and 201 detailed industrial sectors instead of 221 because the census includes residual and allocated categories not included in the matrix.

W	and	801 to 802	Farmers and farm managers
		821 to 824	Farm laborers and farm labor supervisors
X, Y	and	901 to 965	Service workers, except private household
Z	and	980 to 984	Private household workers

The Classified Index of Occupations and Industries<sup>7</sup> presents the individual job titles for each category in the census classification system.

# Dictionary of Occupational Titles (DOT) classification and codes

Nearly 22,000 occupations are defined in the *Dictionary of Occupational Titles*. Each occupation in the DOT has a 6-digit code number to reflect the kind and level of work performed, and three additional digits may be assigned to further differentiate occupations. The 6-digit code numbers are used primarily by State employment services for classifying applicants and job openings and for other operating purposes. They also may be used by educators for defining job duties, career ladders, and occupational skill and training requirements.

The first three digits of the DOT code arrange jobs according to some combination of work field, purpose, material, product, service, subject matter, generic term, and/or industry. The first digit arranges jobs into nine broad categories:

- O Professional, technical, and managerial occupa-
- 1 stions
- 2 Clerical and sales occupations
- 3 Service occupations
- 4 Farming, fishery, forestry, and related occupations
- 5 Processing occupations
- 6 Machine trades occupations
- 7 Benchwork occupations
- 8 Structural work occupations
- 9 Miscellaneous occupations

These categories are divided into 84 2-digit divisions, and the divisions are divided into 603 separate 3-digit groups. Each additional digit adds greater specificity to the category. For example, the three digits of the code 201 indicate:

First digit: Category 2 (clerical and sales

occupations)

Second digit: Division 20 (stenography, typing,

filing, and related occupa-

tions)

Third digit: Group 201 (secretaries)

The fourth, fifth, and sixth digits of the code numbers specify the worker functions in relation to data, people, and things. Each one of the job requirements is arranged in a hierarchy. Each job is identified with the highest appropriate relationship for each of the three job-requirement classifications. Together, the second three digits of the code number are designed to express the level of complexity at which the worker is required to function for each job.

The worker function relationships are:

Data (4th digit)	Pe	ople (5th digit)		Things (6th digit)
0 synthesizing	0 r	nentoring	0	setting up
1 coordinating	1 r	negotiating	1	precision working
2 analyzing	2 i	nstructing	2	operating-controlling
3 compiling	3 s	supervising	3	driving-operating
4 computing	4 d	liverting	4	manipulating
5 copying	5 p	persuading	5	tending
6 comparing	6 s	peaking-signaling	6	feeding-offbearing
7 no significant	7 s	erving	7	handling
8 relationship	8 r	no significant relationship	8	no significant relationship

For example, the second three digits of the code for *Secretary* (.368) indicate:

Fourth digit: the worker function "compiling"-(3) in the "data" hierarchy
Fifth digit: the worker function "speaking-

the worker function "speakingsignaling"-(6) in the "people" hier-

archy

Sixth digit: no significant relationship-(8) in the

"things" hierarchy

In addition, the three digits indicate that secretaries must report and/or carry out prescribed actions; gather, collate, or classify information; exchange information; and give assignments and/or directions to assistants.<sup>10</sup>

The third group of three digits (seventh, eighth, and ninth) provides a unique suffix code for each job title defined in the DOT. The suffix code differentiates particular jobs within 6-digit job titles. Where a 6-digit code number is applied to only one job title, the suffix code is 010. Jobs that have identical 6-digit *Dictionary* codes begin with the 010 suffix code and progress in

<sup>&</sup>lt;sup>7</sup>U.S. Census of Population, 1970: Classified Index of Industries and Occupations (Bureau of the Census, 1971).

<sup>&</sup>lt;sup>8</sup> For a detailed explanation of the classification structure, see pp. XV-XXIV of Vol. 1 of the *Dictionary of Occupational Titles*, *Third Edition* (U.S. Department of Labor, 1965).

<sup>&</sup>lt;sup>9</sup> Suffix Codes for Jobs Defined in the Dictionary of Occupational Titles, Third Edition (U.S. Department of Labor, 1967).

<sup>&</sup>lt;sup>10</sup>The relationships of worker functions within the data, people, and things hierarchies are explained and defined more fully on pp. 649-50 in app. A in vol. II of the *Dictionary of Occupational Titles*.

additive steps of 4, such as 014, 018, 022. For example, the 6-digit DOT title Secretary (201.368) is further differentiated into the following 9-digit job titles:

201.368-010 Legal secretary 201.368-014 Medical secretary

201.368-018 Secretary

#### Office of Education classification

The codes for the instructional programs in the Office of Education classification system were intended to help local and State education agencies identify, classify, and describe information about subject matter and curriculum activities. Twenty subject-matter areas plus one area for cocurricular activities and one area for general elementary and secondary education were identified in Standard Terminology for Curriculum and Instruction in Local and State School Systems. 11

Seven of the 22 areas are frequently referred to as vocational-technical, and are:

01. Agriculture

04. Distributive education

07. Health occupations education

09. Home economics

14. Office occupations

16. Technical education

17. Trade and industrial occupations

The selection of the vocational-technical education areas, including the subject matter in them, was determined by (1) an extensive study of record and report forms of local school systems and State education agencies, (2) an extensive review of the professional literature concerned with subject-matter areas and cocurricular activities, and (3) conferences with numerous persons in State education agencies, local school systems, colleges and universities, and the U.S. Office of Education.

The Office of Education classification system was intended to provide a distinct identity for each program area and for each instructional program within it. Although the handbook of standard terminology contains 10-digit codes, the vocational-technical instruc-

<sup>11</sup>State Educational Records and Report Series: Handbook VI (U.S. Department of Health, Education, and Welfare, 1970). tional programs have been limited largely to six digits. In several subject-matter areas, 8-digit codes were provided for greater detail. The interpretation of each position in the codes is as follows:

First 2-digit position: Subject-matter area (e.g., 14, office occupations)

Second 2-digit position: Principal segment of sub-

ject matter (e.g., 14.02, business data processing systems occupations)

Third 2-digit position: Division of principal seg-

ment (e.g., 14.0202, peripheral equipment oper-

ators)

Fourth 2-digit position: First-level detail of division

of principal segment (e.g., 14.020201, keypunch and coding equipment opera-

tors)

Fifth 2-digit position: Second-level detail of divi-

sion of principal segment (no vocational education examples in office occupations; however, there are a few 10-digit codes in agri-

culture).

The vocational education instructional programs specified by the codes are defined in *Vocational Education* and *Occupations*. The descriptions of the instructional programs are actually composites of subject matter rather than well-defined courses. Students may have to take courses in other areas of vocational or general education to round out their training. Moreover, the programs are not associated with any particular level of education and are, instead, general descriptions which may be related to several educational levels.

Vocational Education and Occupations also relates the instructional programs in the seven vocationaltechnical areas to DOT codes and titles. As indicated earlier, this relationship serves as the link between the BLS matrix and the vocational education codes. The other 15 instructional areas have not been linked to occupations.

<sup>12</sup> Vocational Education and Occupations (U.S. Department of Health, Education, and Welfare; U.S. Department of Labor, 1969).

### The Conversion Table

#### Source of data

The source of data for the conversion table (table 1) was a special tabulation from a sample household survey taken in April 1971 by the Bureau of the Census as part of its regular Current Population Survey (CPS).<sup>13</sup> The roughly 60,000 individual responses were allocated to census occupational categories by the Census Bureau and were independently coded to the 1965 Dictionary of Occupational Titles (usually at the 9-digit level) by the Occupational Analysis Field Centers, part of the U.S. Employment Service, under the direction of the Manpower Administration.

#### Construction of the table

The conversion table was developed by first relating the BLS matrix occupational classification system to the Dictionary of Occupational Titles and then relating the DOT to the vocational education program codes and titles. The first step was facilitated by the census-to-DOT conversion produced from the CPS sample data. Since the BLS matrix occupational categories are virtually synonymous with the census categories, a link is thereby established between the BLS matrix and the DOT. The second step was made possible by the table in Vocational Education and Occupations that links the DOT to vocational education program codes and titles. Thus, the DOT serves as a bridge between the BLS matrix and the vocational education system.

Since a complete listing in the conversion table of all of the DOT codes and titles associated with each BLS matrix category would be unwieldy and would aggravate problems of interpretation, only those DOT occupational titles and codes that constitute at least 5 percent of the total estimated employment in the related matrix category are listed. After the DOT codes and titles which constituted at least 5 percent of estimated employment within each matrix category were determined, each specific DOT occupation was related to its correspond-

<sup>13</sup>Unpublished data developed for the Interdepartmental Committee on Occupational Classification, Office of Management and Budget, Executive Office of the President. ing vocational education code and title (if any) by using the table in *Vocational Education and Occupations*.

Three rankings occur within each matrix title of the conversion table. These rankings serve to indicate the relative importance of the entries in relation to employment.

Ranking vocational programs. The first ranking is that of the vocational programs within each matrix title in those cases where more than one vocational program was associated with a particular matrix category. In all such cases, the number of DOT records within the matrix category that were related to each vocational program were summed, and the vocational programs were ranked vertically in terms of their percentage contribution to total estimated employment in the matrix category. For example, in the conversion table, the matrix title Foresters and conservationists is associated with two vocational programs, "Forests" and "Soil." The fact that "Forests" appears first, (that is, above "Soil") indicates that the DOT occupations for which one would be trained in "Forests" are relatively more numerous within this specific matrix title than the DOT occupations for which one would be trained in "Soil."

Ranking DOT codes within each vocational program. The second ranking is that of the DOT codes and titles within each vocational program. In cases where a particular vocational education program was matched with a cluster of DOT occupational titles, those DOT codes and titles were ranked vertically in terms of their percentage contribution to the total estimated employment associated with that vocational program within the matrix title. For example, the vocational program "Forests" is matched with four DOT titles which are ranked vertically. The fact that Forest Fire Fighter appears first indicates that it contributes a greater percentage to the total estimated employment in the cluster than do Fire Lookout, Forester Aid, and Fire Patrolman.

Ranking DOT codes with no corresponding vocational programs. The final ranking is that of the DOT codes with no corresponding vocational education programs. Many DOT codes and titles appear in the conversion table which are not associated with any vocational program. These DOT occupations were

ranked vertically in terms of their percentage contribution to the total employment constituted by the cluster of all DOT titles within the matrix category that have no association with a vocational program. For instance, in the matrix category *Foresters and conservationists*, Forester (DOT 040.081-038) is associated with no vocational program; however, if other DOT occupations

had met the 5-percent criterion within the matrix category, then a ranking would have been necessary. Whenever a single DOT occupation or a cluster of DOT occupations which have no associated vocational programs occurs within a matrix category, they are always ranked after the listing of clusters that are associated with vocational programs.

#### Illustration of ranking in conversion table

1970 Census code	National/State	Vocational education system			Dictionary of upational Titles
	matrix title	Code	Program title	Code	Title
025	Foresters and conservation-ists	01.0601	Forests	441.887-010	Forest Fire Fighter
				441.168-010 441.384-010 441.687-010	Fire Lookout Forester Aid Fire Ranger
		01.0603 (¹)	Soil	040.081-074 040.081-038	Soil Conservationist Forester

<sup>&</sup>lt;sup>1</sup>The DOT code has more than 5 percent of the total estimated employment in the National/State matrix occupa-

tional title but there is no corresponding specifically detailed vocational education instructional program code.

### Interpreting the table

The listing of codes and titles in order of their percentage contribution to total estimated employment provides the vocational education planner with some rough notion of the relative importance to be attached to the various instructional programs and their job content. For example, in the illustration, the conversion table shows that those DOT occupations for which one would be trained in "Forests" are relatively more numerous than those for which one would be trained in "Soil" within the specific matrix title Foresters and conservationists. The conversion table, however, provides no basis for comparing the significance of either of these vocational education programs with programs associated with other specific matrix titles. In addition, though the conversion table indicates that those employed in the DOT occupation Forest Fire Fighter are relatively more numerous than those employed in the DOT occupation Fire Lookout, it does not allow any comparison between, say, Forest Fire Fighter and Soil Conservationist. Similarly, DOT occupations which have no corresponding vocational programs may be compared only with other DOT occupations within the matrix title which have no associated vocational programs. In the illustration cited above, no comparison may be made between Forest Fire Fighter and Forester, since the former is associated with a vocational program and the latter is not. To sum up, comparisons of relative employment can only be made within a single matrix category and within a single vocational program.

Planners should be cautioned also that some DOT codes and associated instructional programs may be overemphasized while other important codes and programs may not appear in the table. This problem arises because the 5-percent criterion has been applied to matrix occupational categories that differ in size. As a result, specific DOT job titles and associated instructional programs in the smaller matrix categories may be listed in the table even though their employment is relatively small nationally. Conversely, specific DOT codes and associated instructional programs that contain relatively large employment nationally may not be listed in the table because they appear in large matrix categories.

### Limitations of the table

Educators and other training program planners should be cautioned that this table has several important limitations. First, the source of data is a small, limited sample that has errors of coding or judgment or both. Some important DOT titles and jobs and related vocational educational instructional programs may have been overlooked, while others may have been overemphasized. Second, the structure of the various occupational and educational classification systems does not allow a one-to-one matching of the several systems. The following is a more specific discussion of the problems and limitations of the table.

As noted earlier, the source of data for the conversion table was a sample household enumeration conducted in April 1971 by the Bureau of the Census as part of its regular Current Population Survey (CPS). One major shortcoming of this survey is that it includes few questions on the characteristics of a worker's job and the industry of employment. It is evident that the employment service coders had to exercise a considerable amount of judgment in allocating jobs to a very detailed DOT structure. For example, the job title Child monitor is listed only in census codes 942 and 980 in the 1970 census Classified Index of Occupations but it is assigned to five census codes in the 1971 CPS (942, Child care workers, except private household; 952, School monitors; 980, Child care workers, private household; 981, Cooks, private household; 984, Cleaners and servants, private household). This report assumes that the judgments made in the 1971 CPS allocation of the DOT codes to the census are correct, and, even if they are not correct, typical of the judgments made in the 1970 census. In effect, it is assumed that the same coding problems existed in classifying job titles in the 1970 census. The aim here is to reveal the classification problem rather than mislead educational planners into the belief that the data are without error.

Since the 1971 CPS Survey was only a snapshot of employment and the distribution of employment may have changed sufficiently so as to render the CPS estimates inaccurate today, the information incorporated in the conversion table must be used with caution. It should be considered as only an approximate ranking of DOT code by employment.

A particular DOT or vocational education code may appear a number of times because it may be related to more than one matrix occupation. There are two fundamental reasons why the vocational education codes tend to appear over a wider range of matrix titles than do the DOT codes. First, the Bureau of the Census allocates specific job titles to census occupational categories in a manner that is not germane to the DOT structure. For example, Advertising Layout Man, a professional occupation in the DOT (DOT code 141.081), is included in the census titles Compositors and typesetters (Census 422), a craft occupation, and Painters and sculptors (Census 190), a professional occupation. Second, the vocational education programs are often composites that have similar skills but may lie in different DOT classifications. For example, the job content of the instructional program "Advertising Services" (04.01) has 15 associated 3-digit DOT codes that span four DOT occupational divisions (professional, technical, and managerial occupations; clerical and sales occupations; service occupations; and miscellaneous occupations). As a result, the projected demand for any specific vocational program or any specific DOT code may be distributed over a wide number of matrix occupational titles. Table 2 of this report shows the matrix titles associated with each vocational education program listed in table 1.

While some of the vocational education programs are for clusters of jobs and are applicable to a number of matrix titles, others are not broad enough to match the matrix titles. These titles tend to be for jobs whose skills may be taught as part of the subject matter of several instructional programs. For example, there is no single vocational program for patternmakers; the skills of patternmakers are introduced in several programs, e.g., "Metal Patternmaking" (17.2309) and "Woodworking" (17.3699).

Another hindrance to matching vocational education codes with matrix categories is the difference in the spectrum of the labor force covered by the two systems. The BLS matrix covers all occupations, while the instructional programs provide training for a small fraction of the total number of workers. Specifically, most of the occupations in the professional, technical, and kindred group of the matrix require a college education, rather than vocational training, and, as a result, have no corresponding vocational education instructional program.<sup>14</sup> Although vocational programs do train technicians (and have corresponding codes), vocational education generally is not directly applicable to most professional occupations, and it would be inaccurate to relate vocational education codes to professional occupations. The reader should note, however, that though there is no vocational program for some occupations (such as a supervisory level nurse), the flow of workers into these occupations will presumably emanate from those trained for entry level positions which are associated with vocational programs.

The large number of jobs in the matrix residual titles presents another major barrier. Approximately one-tenth of the total employment in the 1970 census was included in general (residual) categories and was not identified by specific occupation. The residuals are too broad to classify into specific vocational education programs, even though many of the occupations in these large groups have relatively uniform skill or training requirements. Since many of the vocational education training programs are buried in the residuals, the matrix

14While there is a classification system for higher education, it has not been defined in terms of its jobs or occupations and therefore cannot be converted into any of the occupational classification schemes of this report. See A Taxonomy of Instructional Programs in Higher Education (U.S. Department of Health, Education, and Welfare, 1970).

cannot be used to make projections for all of the individual vocational education programs. Moreover, the many jobs included in the residuals may have widely differing growth rates, and one overall projection would be of limited value to planners.

Even if a match between a matrix occupational title and a vocational education instructional program in the table is perfect (no other program codes matched with the occupational title and no other occupational title matched with the vocational education program), one cannot necessarily conclude that a perfect match exists in reality. There may be DOT occupations associated with the vocational education program which are not germane to the matched matrix title and which have not been listed in the table because they are insignificant. For example, the instructional program "Ship and Boat Operation and Maintenance" (17.0802) is matched with the matrix title Boat Operators and has no other match in the table with a specific matrix occupational title

(other than a residual). Nevertheless, there are other DOT titles for which "Ship and Boat Operation and Maintenance" is the appropriate instructional program that are included in the census title Officers, pilots, pursers; Ship (e.g. Pilot, ship, DOT 197.133-026) but are not listed in the table.

In short, a perfect match of BLS matrix occupational titles and instructional programs is impossible without serious modification of one or the other of the classification systems. Although this report is intended to alleviate the problem of matching, educators and other training planners still face some difficulties in using data on supply and demand by occupation. However, the table may enable innovative planners to reorder the various classification systems into more closely matchable groups. It is a temporary tool for matching classification systems; the only permanent solution can come from the completion of the Standard Occupational Classification System.

Table 1. Conversion of National/State Matrix titles to vocational education classification system

1970		VOCATIO	NAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CENSUS CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
	PROFESSIONAL, TECHNICAL, AND KINDRED WÖRKERS				
006	ENGINFERS, AERO-	(1)	(1)	002.081-014	AERONAUTICAL ENGINEER
	ASTRONAUTICAL	(1)	(1)	002.081-018	AIRCRAFT DESIGNER
		(1)	(1)	002.081-050	TEST ENGINEER.
010	ENGINEERS.	(1)	(1)	008.081-014	AIRCRAFT CHEMICAL ENGINEER
	CHEMICAL	(1)	(1)	006.081-010	CERAMIC ENGINEER
011	ENGINEERS, CIVIL	(1)	(1)	005.081-014	CIVIL ENGINEER
		(1)	(1)	005.081-022	HIGHWAY ENGINEER
		(1)	(1)	005.081-018	CONSTRUCTION
		(1)	(1)	005.081-058	ENGINEER Structural
012	ENGINEERS,	(1)	(1)	003.081-018	ENGINEER ELECTRICAL
	ELECTRICAL	(1)	(1)	003.081-034	ENGINEER ELECTRONIC
013	ENGINEERS,	(1)	(1)	012.188-030	ENGINEER INDUSTRIAL
	INDUSTRIAL	(1)	(1)	012.081-010	ENGINEER SAFETY ENGINEER
		(1)	(1)	012.188-062	QUALITY CONTROL
		(1)	(1)	020.088-022	ENGINEER OPERATIONS
014	ENGINEERS,	(1)	(1)	007.081-038	RESEARCH ANALYST MECHANICAL
015	MECHANICAL ENGINEERS,	(1)	(1)	011.081-022	ENGINEER METALLURGIST,
	METALLURGICAL	(1)	(1)	011.081-030	PHYSICAL WELDING ENGINEER
020	ENGINEERS, MINING	(1)	(1)	010.081-018	MINING ENGINEER
021	ENGINEERS, PETROLEUM	(1)	(1)	010.081-022	PETROLEUM ENGINEER
022	ENGINEERS, SALES	04.12	INDUSTRIAL	163.118-026	MANAGER, SALES
		(1)	MARKETING (1)	007.081-038	MECHANICAL
		(1)	(1)	007.151-010	ENGINEER HEATING
023	ENGINEERS, OTHER	16.0113	MECHANICAL TECHNOLOGY	007-181-022	ENGINEER ENGINEERING ASSISTANT, MECHANICAL
		(1)	(1)	007.081-038	EQUIPMENT MECHANICAL
042	AGRICULTURAL SCIENTISTS	(1)	(1)	040.081-046	ENGINEER HORTICULTURIST
043	ATMOSPHERIC AND SPACE SCIENTISTS	16.0699	MISCELLANEOUS TECHNICAL EDUCATION OTHER	025.288-018	WEATHER OBSERVER
		(1)	EDUCATION, OTHER (1)	025.088-014	METEOROLOGIST
044	BIOLOGICAL	07.0201	CYTOLOGY	078.281-014	CYTOTECHNOLOGIST
	SCIENTISTS	(1)	(CYTOTECHNOLOGY) (1)	041.081-094	MICROBIOLOGIST
		(1)	(1)	041.081-034	BIOLOGIST

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 ENSUS	NATIONAL/STATE	VOCATIONA	AL EDUCATION SYSTEM	DICTIONARY OF OCCUPATIONAL TITLES		
CODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE	
044	-CONTINUED	(1)	(1)	041.081-118	PHYSIOLOGIST	
U45	CHEMISTS	(1)	(1)	022.081-014	CHEMIST,	
		(1)	(1)	022.081-042	ANALYTICAL CHEMIST, ORGANIC	
		(1)	(1)	041.081-030	BIOCHEMIST	
		(1)	(1)	022.081-034	CHEMIST, INORGANIC	
		(1)	(1)	011.081-018	METALLURGIST,	
		(1)	(1)	011.081-022	EXTRACTIVE METALLURGIST,	
)5 <b>1</b>	GEOLUGISTS	(1)	(1)	024.081-018	PHYSICAL GEOLOGIST	
		(1)	(1)	024.081-022	GEOLOGIST,	
		(1)	(1)	024.081-038	PETROLEUM GEOPHYSICIST	
052	MARINE SCIENTISTS	(1)	(1)	024.081-058	OCEANOGRAPHER, PHYSICAL	
053	PHYSICISTS AND ASTRONOMERS	(1)	(1)	023.081-010	PHYSICIST	
	AS FROMOTIONS	(1)	(1)	021.088-010	ASTRONOMER	
054	LIFE AND PHYSICAL SCIENTISTS, N.E.C.	(2)	(2)	(2)	(2)	
34	ACTUARTES	(1)	(1)	020.188-010	ACTUARY	
35	MATHEMATICIANS	(1)	(1)	020.088-018	MATHEMATICIAN	
)36	STATISTICIANS	(1)	(1)	020.188-034	STATISTICIAN, APPLIED	
150	AGRICULTURAL AND BIOLOGICAL TECHNICIANS, EXCEPT HEALTH	16.0105	CHEMICAL TECHNOLOGY	029.281-081	LABORATORY TESTER I	
		16.0203	FOOD PROCESSING TECHNOLOGY	029.381-034	LABORATORY TESTER II	
		01.0299	AGRICULTURAL SUPPLIES/SERVICES,	467.384-022	POULTRY INSEMINATOR	
		(1)	OTHER (1)	559.782-146	PHARMACEUTICAL	
151	CHEMICAL	16.0105	CHEMICAL Technology	029.281-018	OPERATOR, SENIOR LABORATORY	
	TECHNICIANS		I ECHNOLOGY	022.281-014	TESTER I CHEMICAL LABORATORY	
				029.281-026	TECHNICIAN TESTER	
52	DRAFTERS	17.13	DRAFTING	007.281-014	DRAFTER, MECHANICAL	
				001.281-010	DRAFTER, ARCHITECTURAL	
				005.281-014	DRAFTER, CIVIL	
				003.281-010	DRAFTER, ELECTRICAL	
		(1)	(1)	017.281-046	DRAFTER, COMMERIAL	
153	ELECTRICAL AND ELECTRONIC ENGINEERING	16.0108	ELECTRONIC TECHNOLOGY	003.181-014	ELECTRONIC TECHNICIAN	
	TECHNICIANS			828.281-022	ELECTRONICS	
		16.0107	ELECTRICAL	003.181-010	MECHANIC ELECTRICAL	
154	INDUSTRIAL ENGINEERING TECHNICIANS	16.011303	TECHNOLOGY PRODUCTION	019.281-018	TECHNICIAN QUALITY CONTROL TECHNICIAN	

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970		VOCATION	IAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
ENSUS CODE	NATIONAL/STATE MATRIX TITLE	cone	PROGRAM TITLE	CODE	TITLE
154	-CUNTINUED	16.0111	INDUSTRIAL TECHNOLOGY	012.188-058	PRODUCTION PLANNER
			TECHNOLOGY	012.188-078	TOOL PLANNER
		(1)	(1)	012.168-010	DIRECTOR, QUALITY
156	MATHEMATICAL TECHNICIANS	(1)	(1)	020.188-022	MATHEMATICAL TECHNICIAN
155	MECHANICAL ENGINEERING TECHNICIANS	16.0113	MECHANICAL TECHNOLOGY	007.181-026	MECHANICAL ENGINEERING TECHNICIAN
161	SURVEYORS	(1)	(1)	018.188-026	SURVEYOR
162	ENGINEERING AND SCIENCE TECHNICIANS, N.E.C.	16.0113	MECHANICAL TECHNOLOGY	007.181-026	MECHANICAL ENGINEERING TECHNICIAN
	N.C.C.			007.181-022	ENGINEERING ASSISTANT, MECHANICAL EQUIPMENT
		16.0105	CHEMICAL TECHNOLOGY	029.281-018	LABORATORY TESTER
J61	CHIROPRACTORS	(1)	(1)	079.108-014	CHIROPRACTOR
062	DENTISTS	(1)	(1)	072.108-010	DENTIST
074	DIETITIANS	(1)	(1)	077-168-014	DIETITIAN
		(1)	(1)	077.168-010	DIETETIC INTERN
063	OPTOMETRISTS	(1)	(1)	079.108-026	OPTOMETRIST
064	PHARMACISTS	04.08	GENERAL	185.168-054	MANAGER, STORE I
		(1)	MERCHANDISE (1)	074.181-010	PHARMACIST
065	PHYSICIANS, MEDICAL AND USTEOPATHIC	(1)	(1)	070.108-026	GENERAL PRACTITIONER
	OSTEUPATHIC	(1)	(1)	070.101-014	SURGEON
		(1)	(1)	070.108-058	PEDIATRICIAN
)7 <u>1</u>	PUDIATRISTS	(1)	(1)	079.108-030	PODIATRIST
075	REGISTERED MURSES	07.0301	NURSING (ASSOCIATE DEGREE)	075.378-014	NURSE, GENERAL DUTY
		(1)	(1)	075.378-018	NURSE, OFFICE
076	THERAPISTS	07.0903	INHALATION THERAPY	079.368-018	INHALATION
		07.0402	PHYSICAL THERAPY	355.878-014	THERAPIST ATTENDANT,
		07.0304	PSYCHIATRIC AIDE	355.878-042	PHYSICAL THERAPY PSYCHIATRIC AIDE
		(1)	(1)	079.378-034	PHYSICAL THERAPIST
		(i)	(1)	079.108-034	SPEECH CLINICIAN
		(1)	(1)	079.128-018	OCCUPATIONAL
		(1)	(1)	045.108-010	THERAPIST COUNSELOR
072	VETERINARIANS	(1)	(1)	073.108-014	VETERINARIAN
		(1)	(1)	073.081-014	VETERINARY
073	OTHER MEDICAL AND HEALTH PRACTITIONERS	(2)	(2)	(2)	ANATOMIST (2)

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS	NATIONAL/STATE	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
080	CLINICAL TECHNOLOGISTS AND TECHNICIANS	07.0203	MEDICAL LABORATORY ASSISTING	078.281-018	MEDICAL TECHNOLOGIST
		]		078.381-010	MEDICAL LABORATORY
		07.0202	HISTOLOGY	078.381-081	ASSISTANT TISSUE TECHNOLOGIST
081	DENTAL HYGIENISTS	07.0102	DENTAL HYGIENE (ASSOCIATE DEGREE)	078.368-014	DENTAL HYGIENIST
082	HEALTH RECORD TECHNOLOGISTS AND TECHNICIANS	(1)	(1)	100.388-018	MEDICAL RECORD Librarian
	TESTINI STANS	(1)	(1)	100.168-010	BOOKMOBILE LIBRARIAN
		(1)	(1)	100-,168-030	LIBRARIAN, REFERENCE LIBRARY
		(1)	(1)	100.168-038	PATIENTS'LIBRARIAN
083	RADIOLOGIC TECHNOLOGISTS AND TECHNICIANS	17.2002	RADIOGRAPHER	199.381-010	RADIOGRAPHER
	1207/1102/4/15			078.368-030	RADIOLOGIC TECHNOLOGIST
				079.368-030	X-RAY CLERK
084	THERAPY ASSISTANTS	07.0402	PHYSICAL THERAPY	355.878-014	ATTENDANT, PHYSICAL THERAPY
085	OTHER HEALTH TECHNOLOGISTS AND TECHNICIANS	07.0902	ELECTROCARDIOGRAPH TECHNICIAN	078.369-018	ELECTROCARDIOGRAPH TECHNICIAN
	TEO!!!!CIANG	07.0305	SURGICAL TECHNICIAN (OPERATING ROOM TECHNICIAN)	079.378-042	SURGICAL TECHNICIAN
		07.0304	PSYCHIATRIC AIDE	355.878-042	PSYCHIATRIC AIDE
		07.0203	MEDICAL TECHNOLOGY ASSISTING	078.281-018	MEDICAL TECHNOLOGIST
163	AIRPLANE PILOTS	16.0601	COMMERCIAL PILOT	196.283-014	AIRPLANE PILOT,
164	AIR TRAFFIC CONTROLLERS	17.0403	GROUND OPERATIONS	193.168-018	AIR TRAFFIC CONTROL SPECIALIST, TOWER
				193.168-014	AIR TRAFFIC CONTROL SPECIALIST,
165	EMBALMERS	04.15	PERSONAL SERVICES	187.168-026	STATION DIRECTOR, FUNERAL
		17.0909	MORTUARY SCIENCE	338.381-010	EMBALMER
170	FLIGHT ENGINEERS	17.0402	AIRCRAFT	621.281-038	FLIGHT ENGINEER
171	RADIO OPERATORS	(1)	OPERATIONS (1)	379.368-010	DISPATCHER, RADIO
		(1)	(1)	003.187-050	RADIO ENGINEER
		(1)	(1)	193.282-022	RADIO OFFICER
172	TOOL PROGRAMMERS, NUMERICAL CONTROL	16.0113	MECHANICAL TECHNOLOGY	007.187-002	TOOL PROGRAMMER, Numerical control
173	OTHER TECHNICIANS,	16.0108	ELECTRONIC	003.181-014	ELECTRONIC
	EXCEPT HEALTH	16.0105	TECHNOLOGY CHEMICAL	029.281-018	TECHNICIAN LABORATORY
003	COMPUTER	14.0203	TECHNOLOGY Programmers	020.188-026	TESTER I PROGRAMMER,
	PROGRAMMERS	16.0117	SCIENTIFIC DATA PROCESSING	020.188-030	BUSINESS PROGRAMMER, ENGINEERING AND
004	COMPUTER SYSTEMS ANALYSTS	14.0204	SYSTEMS ANALYSTS	012.168-022	SCIENTIFIC SYSTEMS ANALYST, BUSINESS ELECTRONIC DATA

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	NIATTONIA! ACTATE	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
ENSUS CuDE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
004	-CONTINUED	14.0203	PROGRAMMERS	020.188-026	PROGRAMMER, BUSINESS
		(1)	(1)	020.088-010	ENGINEERING
		(1)	(1)	003.187-058	ANALYST SYSTEMS ENGINEER, ELECTRONIC DATA
005	COMPUTER SPECIALISTS, N.E.C.	14.0204	SYSTEMS ANALYSTS	012.168-022	PROCESSING SYSTEMS ANALYST, BUSINESS ELECTRONIC DATA
		(1)	(1)	020.088-010	PROCESSING ENGINEERING ANALYST
91	ECONOMISTS	04.01	ADVERTISING SERVICES	050.088-034	MARKET-RESEARCH ANALYST
		(i)	(1)	050.088-014	ECONOMIST
		(1)	(1)	020.188-018	FINANCIAL ANALYST
92	PULITICAL SCIENTISTS	(1)	(1)	051.088-014	POLITICAL SCIENTIST
93	PSYCHUL GGISTS	(1)	(1)	045.108-034	PSYCHOLOGIST, SCHOOL
		(1)	(1)	045.108-022	PSYCHOLOGIST, CLINICAL
		(1)	(1)	045.088-014	PSYCHOLOGIST, EDUCATIONAL
		(1)	(1)	090.288-010	FACULTY MEMBER, COLLEGE OR
		(1)	(1)	045.108-026	UNIVERSITY PSYCHOLOGIST,
194	SUCTOLOGISTS	(1)	(1)	090.228-010	COUNSELING FACULTY MEMBER, COLLEGE OR
95	URBAN AND REGIONAL	(1)	(1)	199,168-014	UNIVERSITY URBAN PLANNER
	PLANNERS	(1)	(1)	199.288-018	TRAFFIC TECHNICIAN
96	OTHER SOCIAL SCIENTISTS	(1)	(1)	052.088-018	HISTORIAN
		(1)	(1)	055.088-018	ARCHEOLOGIST
41	ADULT EDUCATION	(1)	(1)	091.228-018	TEACHER, SECONDARY
	TEACHERS	(1)	(1)	097.228-026	SCHOOL INSTRUCTOR, VOCATIONAL
		(1)	(1)	099.228-038	TRAINING TEACHER, ADULT
		(1)	(1)	090.228-026	EDUCATION TEACHER, TECHNICAL
102	AGRICULTURE TEACHERS	(1)	(1)	090.228-010	EDUCATION FACULTY MEMBER, COLLEGE OR
123	ART, DRAMA, MUSTC TEACHERS	(1)	(1)	090.228-010	UNIVERSITY FACULTY MEMBER, COLLEGE OR
		(1)	(1)	152.028-010	UNIVERSITY TEACHER, MUSIC
103	ATMOSPHERIC, FARTH, MARINE, SPACE TEACHERS	(1)	(1)	024.081-018	GEOLOGIST
104	BIOLOGY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR
		(1)	(1)	090.999-010	UNIVERSITY GRADUATE ASSISTANT
115	BUSINESS AND COMMERCE TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	MATIONAL (CTATE	VOCATION	NAL EDUCATION SYSTEM	DICTIONARY OF OCCUPATIONAL TITLES		
ENSUS CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE	
105	CHEMISTRY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY	
24	COACHES AND PHYSICAL EDUCATION TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY	
.16	ECONOMICS TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR	
25	EDUCATION TEACHERS	(1)	(1)	090.228-010	UNIVERSITY FACULTY MEMBER, COLLEGE OR UNIVERSITY	
.42 N)	ELEMENTARY SCHOOL TEACHERS	,(1)	(1)	092.228-010	TEACHER, ELEMENTARY SCHOOL	
.11	ENGINEERING TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR	
.26	ENGLISH TEACHERS	(1)	(1)	090.228-010	UNIVERSITY FACULTY MEMBER, COLLEGE OR	
		(1)	(1)	091.228-018	UNIVERSITY TEACHER, SECONDARY SCHOOL	
30	FORFIGN LANGUAGE TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY	
		(1)	(1)	091.228-081	TEACHER, SECONDAR'SCHOOL	
13	HEALTH SPECIALTIES TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY	
		(1)	(1)	075.128-022	NURSE INSTRUCTOR	
.20	HISTORY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY	
.31	HOME FCONOMICS TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY	
		(1)	(1)	091.228-018	TEACHER, SECONDARY	
.32	LAW TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY	
112	MATH TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER. COLLEGE OR UNIVERSITY	
10	PHYSICS TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR	
143	PREKINDERGARTEN AND KINDERGARTEN	(1)	(1)	092.228-014	UNIVERSITY TEACHER, KINDERGARTEN	
	TEACHERS	(1)	(1)	092.228-010	TEACHER, ELEMENTARY SCHOOL	
14	PSYCHOLOGY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY	
44	SECONDARY SCHOOL TEACHERS	(1)	(1)	091.228-018	TEACHER, SECONDAR SCHOOL	
.21	SOCIOLOGY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR	
22	SUCIAL SCIENCE TEACHERS, N.E.C.	(1)	(1)	090.228-010	UNIVERSITY FACULTY MEMBER, COLLEGE OR	
135	MISCELLANEOUS TEACHERS, COLLEGE AND UNIVERSITY	(1)	(1)	090.228-010	UNIVERSITY FACULTY MEMBER, COLLEGE OR UNIVERSITY	

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970		VOCATION	NAL EDUCATION SYSTEM	DICTIONARY OF OCCUPATIONAL TITLES		
ODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE	
40	TEACHERS, COLLEGE AND UNIVERSITY, NOT SPECIFIED	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY	
33	THEOLOGY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR	
34	TRADE, INDUSTRIAL, TECHNICAL TEACHERS	(1)	(1)	090.228-010	UNIVERSITY FACULTY MEMBER, COLLEGE OR UNIVERSITY	
		(1)	(1)	097.228-026	INSTRUCTOR, VOCATIONAL TRAINING	
45	TEACHERS, EXCEPT	(1)	(1)	152.028-010	DIRECTOR, STAGE	
	UNIVERSITY N.E.C.	(1)	(1)	151.028-014	INSTRUCTOR,	
		(1)	(1)	099.228-042	TUTOR	
		(1)	(1)	091.228-018	TEACHER, SECONDARY	
		(1)	(1)	149.028-010	TEACHER, ART	
75	ACTORS	(1)	(1)	150.048-010	ACTOR	
80	ATHLETES AND KINDRED WORKERS	01.0101	ANIMAL SCIENCE	153.228-026	HORSE TRAINER I	
	NINONE S WOMENS	(1)	(1)	153.228-022	GOLF PROFESSIONAL	
		(1)	(1)	099.228-010	ATHLETIC COACH	
		(1)	(1)	153.348-010	ATHLETE	
		(1)	(1)	153.228-042	INSTRUCTOR, PHYSICAL EDUCATION	
		(1)	(1)	153.228-046	INSTRUCTOR, RIDING	
		(1)	(1)	153.228-050	INSTRUCTOR,	
81	AUTHURS	(1)	(1)	130.008-014	LITERARY WRITER	
		(1)	(1)	139.288-314	WRITER, TECHNICAL PUBLICATIONS	
82	DANCERS	(1)	(1)	151.048-010	DANCER	
63	DESIGNERS	17.0701	INTERIOR DECORATING	142.051-014	INTERIOR DESIGNER AND DECORATOR	
		(1)	(1)	142.081-018	CLOTHES DESIGNER	
84	EDITORS AND REPORTERS	04.01	ADVERTISING SERVICES	132.088-010	COPYWRITER	
	NET DITTENS	(1)	(1)	132.268-018	REPORTER	
		(1)	(1)	132.038-034	EDITOR, TRADE OR TECHNICAL PUBLICATION	
		(1)	(1)	132.068-022	EDITOR, MAGAZINE	
		(1)	(1)	132.018-014	EDITOR, MANAGING, NEWSPAPER	
		(1)	(1)	132.038-014	EDITOR, DEPARTMENT	
		(1)	(1)	132.288-038	EDITORIAL ASSISTANT	
85	MUSICIANS AND	(1)	(1)	152.048-030	MUSICIAN, INSTRUMENTAL	
	COMPOSERS	(1)	(1)	152.048-038	POPULAR SINGER	
90	PAINTERS AND SCULPTORS	17.07	COMMERCIAL ART	141.031-014	DIRECTOR, ART	
	1 33321 1333	17.0703	PRODUCT DESIGN	970.381-042	PAINTER, HAND	

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970		VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
196	-CONTINUED	(1)	(1)	141.081-042	ILLUSTRATOR
		(1)	(1)	144.081-018	PAINTER
		(1)	(1)	142.081-038	DISPLAY ARTIST
191	PHOTOGRAPHERS	04.15	PERSONAL SERVICES	143.062-022	MANAGER, PHOTOGRAPHIC
		(1)	(1)	143.062-038	GALLERY OR STUDIO PHOTOGRAPHER, NEWS
		(1)	(1)	143.062-034	PHOTOGRAPHER, COMMERCIAL
		(1)	(1)	143.062-042	PHOTOGRAPHER, PORTRAIT
.92	PUBLIC RELATIONS SPECIALISTS AND PUBLICITY WRITERS	04.01	ADVERTISING SERVICES	165.068-018	PUBLIC RELATIONS PRACTITIONER I
	MATTERS			165.068-010	DEALER-CONTACT SPECIALIST
		(1)	(1)	165.068-022	PUBLIC RELATIONS PRACTITIONER II
193	RADIG AND TV ANNOUNCERS	(1)	(1)	159.148-010	ANNOUNCER
		(1)	(1)	159.148-014	ANNOUNCER
		(1)	(1)	131.068-010	NEWS ANALYST, BROADCAST
.94	WRITERS, ARTISTS, AND ENTERTAINERS, N.E.C.	01.0101	ANIMAL SCIENCE	153.228-026	HORSE TRAINER I
		(1)	(1)	159.148-022	DISC JOCKEY
		(1)	(1)	139.288-014	WRITER, TECHNICAL PUBLICATIONS
		(1)	(1)	159.228-014	DOG TRAINER
001	ACCGUNTANTS	14.0303	GENERAL OFFICE CLERKS	219.488-010	ACCOUNTING CLERK
		(1)	(1)	160.188-010	ACCOUNTANT
		(1)	(1)	160.188-038	AUDITOR
002	ARCHITECTS	(1)	(1)	001.081-010	ARCHITECT
33	ARCHIVISTS AND CURATORS	(1)	(1)	102.118-010	CURATOR
		(1)	(1)	102.381-010	MUSEUM TECHNICIAN
086	CLERGY	(1)	(1)	120.108-010	CLERGY
90	RELIGIOUS WORKERS, EXCEPT CLERGY	(1)	(1)	120.108-014	DIRECTOR OF RELIGIOUS ACTIVITIES
024	FARM MANAGEMENT ADVISORS	01.02	AGRICULTURAL SUPPLIES/SERVICES	096.128-014	COUNTY AGRICULTURAL AGENT
25	FORESTERS AND CONSERVATIONISTS	01.0601	FORESTS	441.887-010	FOREST FIRE FIGHTER
	JON SERVICE TONES (S			441.168-010	FIRE LOOKOUT
				441.384-010	FORESTER AID
				441.687-010	FIRE RANGER
		01.0603	SOIL	040.081-074	SOIL CONSERVATIONIST
		(1)	(1)	040.081-038	FORESTER
026	HOME MANAGEMENT ADVISORS	(1)	(1)	096.128-030	HOME ECONOMIST

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 ENSUS	NATIONAL/STATE	VOCATION	NAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
30	JUDGES	(1)	(1)	111.108-010	JUDGE
ا 1د	LAWYERS	(1)	(1)	110.108-010	LAWYER
<b>3</b> 2	LIBRARIANS	14.0499	INFORMATION COMMUNICATION	249.368-050	LIBRARY ASSISTANT
		(1)	OCCUPATIONS, OTHER	100.168-026	LIBRARIAN
		(1)	(1)	100.168-010	BOOKMOBILE
		(1)	(1)	100.168-018	LIBRARIAN CHILDREN'S
		(1)	(1)	100.168-030	LIBRARIAN LIBRARIAN,
55	OPERATIONS AND SYSTEMS RESEARCHERS	14.0804	DATA-METHODS AND SYSTEMS PROCEDURES ANALYSTS	161.268-010	REFERENCE LIBRARY CLERICAL TECHNICIAN
	AND ANALYSTS	(1)	(1)	012.168-022	SYSTEMS ANALYST, BUSINESS ELECTRONIC DATA
٥٥	PERSONNEL AND LABOR RELATIONS WORKERS	14.0602	INTERVIEWERS AND TEST TECHNICIANS	166.268-014	PROCESSING EMPLOYMENT INTERVIEWER
	MUKKEK2	14.0603	PERSONNEL	166.118-022	MANAGER,
		(1)	ASSISTANTS	045.108-010	PERSONNEL COUNSELOR
95	RESEARCH WORKERS, NOT SPECIFIED	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	090.999-010	GRADUATE ASSISTAN
		(1)	(1)	189.118-014	DIRECTOR, RESEARC AND DEVELOPMENT
		(1)	(1)	189.118-010	ASSOCIATION EXECUTIVE
11	RECREATION WORKERS	04.18	RECREATION AND	195.168-026	DIRECTOR, RECREATION CENTER
}		(1)	(1)	187.118-046	RECREATION SUPERVISOR
		(1)	(1)	195.228-014	RECREATION LEADER
		(1)	(1)	187.118-070	SUPERINTENDENT, RECREATION
		(1)	(1)	187.118-014	DIRECTOR COMMUNITY ORGANIZATION
		(1)	(1)	159.228-010	COUNSELOR, CAMP
00	SOCIAL WORKERS	(1)	(1)	195.108-010	CASEWORKER
		(1)	(1)	045.108-010	COUNSELOR
		(1)	(1)	195.108-050	SOCIAL WORKER, PSYCHIATRIC
		(1)	(1)	195.108-030	PAROLE OFFICER
		(1)	(1)	195.108-034	PROBATION OFFICER
74	VOCATIONAL ANÓ EDUCATIONAL COUNSELORS	(1)	(1)	045.108-010	COUNSELOR
	000113223113	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
,	MANAGERS AND ADMINISTRATORS, EXCEPT FARM			:	
02	BANK OFFICERS AND FINANCIAL MANAGERS	04.04	FINANCE AND CREDIT	186.118-026	MANAGER, FINANCIA INSTITUTION

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970		VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CUDE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
202	-CONTINUED	(1)	(1)	186.288-010	LOAN OFFICER
		(1)	(1)	186.168-010	BANK CASHIFR
		(1)	(1)	186.118-014	CONTROLLER
		(1)	(1)	186.118-054	VICE PRESIDENT,
		(1)	(1)	186.118-022	BANK PRESIDENT
210	CREDIT AND COLLECTION MANAGERS	14.0899	SUPERVISORY AND ADMINISTRATIVE OCCUPATIONS, OTHER	168.168-050	MANAGER. CREDIT AND COLLECTION
203	BUYFRS AND SHIPPERS, FARM	01.0401	FOOD PRODUCTS	162.168-010	BUYER, GRAIN
	PRODUCTS			162.158-054	BUYER, LIVESTOCK
				162.158-082	FIELD-CONTACT
		04.06	FOOD DISTRIBUTION	162.158-074	TECHNICIAN COMMISSION AGENT,
		01.01	AGRICULTURAL	180.118-010	LIVESTOCK FIELD CONTRACTOR
:05	BUYERS, WHOLESALE	04.08	PRODUCTION GENERAL	162.158-050	BUYER II
	AND RESAIL TRADE		MERCHANDISE	185.168-054	MANAGER, STORF I
		04.99	DISTRIBUTIVE	162.158-102	PURCHASING AGENT
25	PURCHASING AGENTS	04.99	DISTRIBUTIVE	162.158-102	PURCHASING AGENT
	AND BUYERS, NEC	04.17	EDUCATION, OTHER REAL ESTATE	191.118-050	RIGHT-OF-WAY AGENT
		(1)	(1)	223.368-014	PROCUREMENT CLERK
31	SALES MANAGERS AND DEPARTMENT HEADS,	04.08	GENERAL MERCHANDISE	299.138-022	MANAGER, DEPARTMENT
	KETAIL TRADE			185.168-054	MANAGER, STORE I
		04.12	INDUSTRIAL	163.118-026	MANAGER, SALES
			MARKETING	183.118-010	MANAGER, BRANCH
		04.06	FOOD DISTRIBUTION	299.138-014	DEPARTMENT HEAD.
		04.16	PETROLEUM	185.168-058	SUPERMARKET MANAGER, STORE II
:33	SALES MANAGERS, EXCEPT RETAIL TRADE	04.12	INDUSTRIAL MARKETING	163.118-026	MANAGER, SALES
	TRADE			183.118-010	MANAGER, BRANCH
201	ASSESSORS, CONTRULLERS, AND TREASURERS; LUCAL PUBLIC ADMINISTRATIUN	14.0802	BUDGET MANAGEMENT ANALYSTS	161.118-018	TREASURER
	ADMINISTRATION	(1)	(1)	188.188-010	ASSESSOR
		(1)	(1)	188.168-098	REVENUE AGENT
13	CONSTRUCTION INSPECTORS, PUBLIC AUMINISTRATION	17.2899	PUBLIC SERVICE OCCUPATIONS, OTHER	168.168-010	BUILDING INSPECTOR
	AUMINISIKATIUN			168.168-026	ELECTRICAL Inspector
				168.284-010	SAFETY INSPECTOR I
212	HEALTH ADMINISTRATORS	(1)	(1)	187.118-062	SUPERINTENDENT, HOSPITAL

 $\textbf{Table 1.} \quad \textbf{Conversion of National/State Matrix titles to vocational education classification} \\ \textbf{system-Continued}$ 

1970 ENSUS	NATIONAL/STATE	VOCATION	NAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
212	-CONT INUED	(1)	(1)	187.118-066	SUPERINTENDENT,
		(1)	(1)	075.128-034	NURSE SUPERVISOR
215	INSPECTORS, EXCEPT CUNSTRUCTION, PUBLIC	17.03	AUTOMOBILE SFRVICES	379.384-010	AUTOMOBILE TESTER
	ADMINISTRATION	(1)	(1)	168.287-042	FOOD AND DRUG
		(1)	(1)	379.268-014	INSPECTOR DRIVERS LICENSE
		(1)	(1)	168.168-034	EXAMINER IMMIGRATION
		(1)	(1)	168.168-042	INSPECTOR INVESTIGATOR
222	OFFICIALS AND ADMINISTRATORS, N. E. C.	14.0801	ADMINISTRATIVE ASSISTANTS	169.168-014	ADMINISTRATIVE ASSISTANT
224	POSTMASTERS AND MAIL SUPERINTENDENTS	14.0403	MAIL AND POSTAL CLERKS	232.138-010	SUPERVISOR, MAILS
				188.168-086	POSTMASTER
235	SCHOOL ADMINISTRATORS, COLLEGE	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
	0022201	(1)	(1)	090.118-018	DEAN OF STUDENTS
		(1)	(1)	090.168-034	REGISTRAR, COLLEGI
		(1)	(1)	090.118-010	ACADEMIC DEAN
		(1)	(1)	090.168-010	DEPARTMENT HEAD, COLLEGE OR
240	SCHOOL ADMINISTRATORS, ELEMENTARY AND SECONDARY	(1)	(1)	091.118-014	UNIVERSITY PRINCIPAL
	SECONDARI	(1)	(1)	091.118-018	SUPERINTENDENT OF SCHOOLS
		(1)	(1)	091.118-010	PRINCIPAL,
İ		(1)	(1)	099.118-018	PRIVATE SCHOOL SUPERVISOR,
211	FUNERAL DIRECTORS	04.15	PERSONAL SERVICES	187.168-026	EDUCATION DIRECTOR, FUNERAL
216	MANAGERS AND SUPERINTENDENTS, BUILDING	04.17	REAL ESTATE	186.168-022	MANAGER, Apartment House I
				187.168-194	SUPERINTENDENT, BUILDING II
Ì				186.168-034	MANAGER, PROPERTY
		04.11	HOTEL AND LODGING	320.137-010	MANAGER, LODGING FACILITIES
220	OFFICE MANAGERS. N. E. C.	14.0805	OFFICE MANAGERS AND CHIEF CLERKS	169.168-062	MANAGER, OFFICE
221	OFFICERS, PILUTS, AND PURSERS, SHIP	17.08	COMMERICAL FISHING OCCUPATIONS	197.133-010	CAPTAIN, FISHING VESSEL
	NIO FORGERGE SHIF	(1)	(1)	197.133-022	MATE, SHIP
		(1)	(1)	197.133-030	TUGBOAT CAPTAIN
		(1)	(1)	197.168-026	MASTER, SHIP
223	OFFICIALS OF LUDGES, SOCIETIES, AND UNIONS	(1)	(1)	187.118-010	BUSINESS AGENT, LABOR UNION

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

System	Continued				
1970 CENSUS	NATIONAL/STATE	VOCATION	NAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
223	-CONTINUED	(1)	(1)	189.118-022	PRESIDENT
226	RAILROAD	(1)	(1)	198.168-022	CONDUCTOR, ROAD
	CONDUCTORS	(1)	(1)	198.168-014	FREIGHT CONDUCTOR
		(1)	(1)	198.168-010	PASSENGER CAR CONDUCTOR TRAIN
230	RESTAURANT, CAFETERIA, AND BAR MANAGERS	04.07	FOOD SERVICES	187.168-126	MANAGER, RESTAURANT OR COFFEE SHOP
	Jan Hanageng			187.168-106	MANAGER, LIQUOR ESTABLISHMENT
		09.0203	FOOD MANAGEMENT, PRODUCTION, AND SERVICES	187.168-066	MANAGER, CAFETERIA OR LUNCH ROOM
		04.08	GENERAL MERCHANDISE	185.168-054	MANAGER, STORE I
245	MANAGERS AND ADMINISTRATORS, N.E.C.	04.08	GENERAL MERCHANDISE	185.168-054	MANAGER, STORE I
	N.C.C.	(1)	(1)	182.168-010	CONTRACTOR
		(1)	(1)	189.118-022	PRES IDENT
	SALES WORKERS				
260	ADVERTISING AGENTS AND SALES WORKERS	04.01	ADVERTISING SERVICES	258.358-010	SALES AGENT,
	AND SALES WORKERS		SERVICES	253.358-010	ADVERTISING SALES AGENT, RADIO AND TV TIME
				164.168-010	ACCOUNT EXECUTIVE
261	AUCTIONEERS	04.08	GENERAL MERCHANDISE	294.258-010	AUCTIONEER
262	DEMONSTRATORS	04.08	GENERAL MERCHANDISE	297.458-010	DEMONSTRATOR
				289.458-014	SALESPERSON, GENERAL
				294.258-010	AUCT IONEER
				266.358-014	SALESPERSON, COSMETICS AND TOILETRIES
		04.20	RETAIL TRADE, OTHER	289.358-022	SALES AGENT, HOUSE TO HOUSE
		04.02	APPAREL AND ACCESSORIES	263.458-022	SALESPERSON. WOMEN'S GARMENTS
				283.358-010	SALESPERSON, JEWELRY AND OPTICAL GOODS
				283.358-014	SALESPERSON, HOBBIES AND CRAFTS
264	HUCKSTERS AND PEDDLERS	04.20	RETAIL TRADE,	289.358-022	SALES AGENT, HOUSE TO HOUSE
				293.358-026	SOLICITOR
		04.08	GENERAL MERCHANDISE	266.358-014	SALESPERSON, COSMETICS AND TOILETRIES
265	INSURANCE AGENTS, BROKERS, AND UNDERWRITERS	04.13	INSURANCE	250.258-014	SALES AGENT. INSURANCE
	2 Deministration			169.188-014	UNDERWRITER
266	NEWSPAPER CARRIERS AND VENDORS	(1)	(1)	291.868-010	NEWSPAPER CARRIER
		. (1)	(1)	291.858-018	NEWSPAPER VENDOR, STREET

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	NATIONAL (STATE	VOCATION	NAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLE
ENSUS CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
270	REAL ESTATE AGENTS AND BROKERS	04.17	REAL ESTATE	250.358-026	SALES AGENT, REAL ESTATE
271	STOCK AND BOND SALES AGENTS	04.04	FINANCE AND CREDIT	251.258-010	SALES AGENT, SECURITIES
				162.158-022	BROKERS' FLOOR REPRESENTATIVE
				186.168-054	SECURITIES TRADER
281	SALES	(1) 04.12	(1) INDUSTRIAL	020.188-018 289.358-014	FINANCIAL ANALYST SALES AGENT,
201	REPRESENTATIVES, MANUFACTURING	04.12	MARKETING	289.338-014	BOTTLES AND BOTTLING EQUIPMENT
				289.158-010	MANUFACTURER'S REPRESENTATIVE
		04.09	HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPP- LIES AND EQUIPMENT	276.358-010	SALES AGENT, BUILDING AND CONSTRUCTION EQUIPMENT AND SUPPLIES
		04.06	FOOD DISTRIBUTION	262.358-010	SALES AGENT, FOOD PRODUCTS
282	SALES REPRESENTATIVES, WHOLESALE TRADE	04.12	INDUSTRIAL Marketing	289.358-014	SALES AGENT, BOTTLES AND BOTTLING EQUIPMENT
				289.158-010	MANUFACTURER'S REPRESENTATIVE
		04.09	HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPP- LIES AND EQUIPMENT	276.358-010	SALES AGENT, BUILDING AND CONSTRUCTION EQUIPMENT AND SUPPLIES
				276.358-018	SALES AGENT, HARDWARE SUPPLIES
		04.06	FOOD DISTRIBUTION	262.358-010	SALES AGENT,
		04.03	AUTOMOTIVE	280.358-018	FOOD PRODUCTS SALES AGENT, AUTOMOBILE PARTS
283	SALES CLERKS, RETAIL TRADE	04.08	GENERAL MERCHANDISE	290.478-014	SALES CLERK
	, -	04.02	APPAREL AND ACCESSORIES	263.458-022	SALESPERSON, WOMEN'S GARMENTS
				263.358-050	SALESPERSON, SHOE
284	SALES WORKERS, RETAIL TRADE EXCEPT CLERKS	04.03	AUTOMOTIVE	280.358-014	SALES AGENT, AUTOMOBILE
	EACEFI CLERKS	04.10	HOME FURNISHINGS	274.358-034	SALESPERSON, FURNITURE
		į		278.358-014	SALES AGENT, HOUSEHOLD
				278.358-030	EQUIPMENT SALESPERSON, TELEVISION AND APPLIANCES
		04.08	GENERAL MERCHANDISE	290.478-014	SALES CLERK
			TENUINIVISE	289.458-014	SALESPERSON. GENERAL
		04.09	HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES AND	276.358-010	SALES AGENT, BUILDING AND CONSTRUCTION EQUIPMENT AND
			EQUIPMENT	276.358-058	SUPPLIES SALES AGENT, GENERAL HARDWARE

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 ENSUS	NATIONAL/STATE	VOCATIONA	L EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
UDE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
85	SALES WORKERS OF SERVICES AND CONSTRUCTION	04.99	DISTRIBUTIVE EDUCATION, OTHER GENERAL	257.358-010 290.478-014	SALES AGENT, PUBLIC UTILITIES SALES CLERK
			MERCHANDISE		
		(1)	(1)	293.358-030	TELEPHONE Solicitor
	CLERICAL AND KINDRED WORKERS		!		
70	SECRETARIES, LEGAL	14.0702	SECRETARIES	201.368-010	LEGAL SECRETARY
		]		201.368-018	SECRETARY
71	SECRETARIES,	14.0702	SECRETARIES	201.368-014	MEDICAL SECRETARY
	MEDICAL			201.368-018	SECRETARY
72 Q)	SECRETARIES, N.E.C.	14.0702	SECRETARIES	201.368-018	SECRETARY
76	STENOGRAPHERS	14.0703	STENOGRAPHERS	202.388-014	STENOGRAPHER
				202.388-010	COURT REPORTER
91	TYPISTS	14.0901	CLERK TYPISTS	209.388-022	CLERK TYPIST
		14.0902	TYPISTS	203.588-018	TYPIST
341	BOOKKEEPING AND BILLING MACHINE UPERATORS	14.0104	MACHINE OPERATORS (BILLING, BOOKKEEPING, AND COMPUTING)	217.388-010	PROOF-MACHINE OPERATOR
				214.488-010	PAYROLL CLERK
				217.388-010	TRANSIT CLERK
		14.0303	GENERAL OFFICE	219.388-026	BILLING CLERK II
342	CALCULATING MACHINE OPERATORS	14.0104	CLERKS MACHINE OPERATORS (BILLING, BOOKKEEPING, AND COMPUTING)	216.488-018	CALCULATING MACHINE OPERATOR
				216.488-010	ADDING MACHINE OPERATOR
343	COMPUTER AND PERIPHERAL EQUIPMENT	14.0201	COMPUTER AND CONSOLE OPERATORS	213.382-018	DIGITAL COMPUTER OPERATOR
	OPERATORS	14.0203	PROGRAMMERS	D20.188-026	PROGRAMMER, BUSINESS
144	DUPLICATING	14.0301	DUPLICATING	207.885-010	DUPLICATING MACH-
	MACHINE OPERATORS		MACHINE OPERATORS	207.782-014	DUPLICATING MACH-
				207.782-026	INE OPERATOR II OFFSET-DUPLICATING
45	KEY PUNCH OPERATORS	14.020201	KEY PUNCH AND CODING EQUIPMENT	213.582-010	MACHINE OPERATOR KEY PUNCH OPERATORS
		14.0201	OPERATOR COMPUTER AND	213.382-018	DIGITAL COMPUTER
			CONSOLE OPERATORS	213.138-010	OPERATORS SUPERVISOR, COM-
50	TABULATING	14.020201	KEY PUNCH AND	213.782-010	PUTER OPERATIONS TABULATING MACHINE
	MACHINE OPERATORS	14.0399	CUDING EQUIPMENT FILING, OFFICE MACHINE, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	209.688-042	OPERATOR SORTER

 $\textbf{Table 1. Conversion of National/State Matrix titles to vocational education classification} \\ \textbf{system-Continued}$ 

1970	A.A.T.I.O.V.A.I. 46.T.A.T.S	VOCATION	IAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
NSUS UDE	NATIONAL/STATE MATRIX TITLE	CONE	PROGRAM TITLE	CODE	TITLE
50	-CONTINUED	14.0104	MACHINE OPERATORS (BILLING, BOOKKEEPING, AND	216,488-018	CALCULATING MACHINE OPERATOR
55	UFFICE MACHINE UPERATORS, N.E.C.	14.0404	COMPUTING) MAIL PREPARING AND MAIL HANDLING	234.582-010	ADDRESSING MACHINE
		17.0901	MACHINE OPERATORS PHOTOGRAPHIC LABORATORY AND DARKROOM	979.381-010	COPY CAMERA OPERATOR
		14.0399	UCCUPATIONS FILING, OFFICE MACHINE, AND GENERAL OFFICE CLERICAL	208.885-010	COLLATOR OPERATOR
		14.0303	OCCUPATIONS, OTHER GENERAL OFFICE CLERKS	219.388-254	SORTING CLERK
01	BANK TELLERS	14.0105	TELLERS	212.368-010	TELLER
)3	BILLING CLERKS	14.0303	GENERAL OFFICE	219.388-026	BILLING CLERK II
		14.0399	CLERKS FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	209.588-018	CLERK, GENERAL
05	BUGKKEEPERS	14.0102	BOOKKEEPFRS	210.388 210	BOOKKEEPER
?)		14.0303	GENERAL OFFICE	219.488-010	ACCOUNTING CLERK
10	CASHIERS	04.06	CLERKS FOOD DISTRIBUTION	299.468-010	CASHIER-CHECKER
		04.08	GENERAL	211.468-010	CASHIER II
		14.0103	MERCHANDISE CASHIERS	211.368-010	CASHIER I
11	CLERICAL ASSISTANTS, SOCIAL WELFARE	14.0399	FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL	209.588-018	CLERK, GENERAL
12	CLERICAL SUPER- VISORS, N.E.C.	14.0805	OCCUPATIONS, OTHER OFFICE MANAGERS AND CHIEF CLERKS	169.168-026	CHIEF CLERK II
				169.168-026	MANAGER, OFFICE
		14.0303	GENERAL OFFICE CLERKS	219.388-066	CLERK, GENERAL OFFICE
		14.0201	COMPUTER AND CONSOLE OPERATORS	213.138-010	SUPERVISOR, COMPU- TER OPERATIONS
13	COLLECTORS, BILL AND ACCOUNT	04.08	GENERAL MERCHANDISE	240.368-010	COLLECTOR
		14.99	OFFICE OCCUPATIONS, OTHER	240.388-010	COLLECTION CLERK
۱4	COUNTER CLERKS, EXCEPT FOOD	04.11	HOTEL AND LODGING	242.368-010	HOTEL CLERK
	2,001, 1000	17.16	FABRIC MAINTENANCE SERVICES, DTHER	369.887-018	MARKER
			5001101.57 OTHER	369.877-010	LAUNDERETTE
		(1)	(1)	222.478-010	RETAIL RECEIVING
.5	DISPATCHERS AND STARTERS, VEHICLE	14.0505	TRAFFIC, RATE, AND TRANSPORTATION CLERKS	919.168-010	CLERK DISPATCHER, MOTOR VEHICLE
		(1)	(1)	913.168-022	TAXICAB STARTER
		(1)	(1)	849.138-849	DISPATCHER
20	ENUMERATORS AND Interviewers	14.0499	INFORMATION COMMUNICATION OCCUPATIONS, OTHER	249.268-024	SURVEY WORKER

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 Ensus	NATIONAL/STATE	VOCATION.	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
ODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
21	ESTIMATORS AND INVESTIGATORS, NEC	14.99	OFFICE OCCUPATIONS,	249.368-010	CLAIMS CLERK
				249.368-034	CREDIT REPORTER
		14.0101	ACCOUNTANTS	160.288-018	ESTIMATOR
23	EXPEDITERS AND PRODUCTION CONTROLLERS	14.0501	PLANNING AND PRODUCTION CLERKS	221.168-010	MATERIAL COORDINATOR
				221.168-022	PRODUCTION COORDINATOR
				221.388-054	PRODUCTION
		14.0503	SHIPPING AND	222.368-014	CLERK II EXPEDITER I
25	FILE CLERKS	14.0302	RECEIVING CLERKS FILE CLERKS	206.388-018	FILE CLERK
		14.0603	PERSONNEL	205.368-026	PERSONNEL CLERK
26	INSURANCE ADJUSTERS, EXAMINERS, AND	04.13	INSURANCE	241.168-010	CLAIMS ADJUSTER
	INVESTIGATORS			191.268-018	INVESTIGATOR I
				249.268-010	CLAIM EXAMINER II
		14.0502	QUALITY CONTROL	168.288-014	CLAIM EXAMINER I
30	LIBRARY ATTENDANTS AND ASSISTANTS	14.0499	CLERKS INFORMATION COMMUNICATION	249.368-050	LIBRARY ASSISTANT
		(1)	OCCUPATIONS, OTHER (1)	100.388-014	CLASSIFIER
31	MAIL CARRIERS,	14.0403	MAIL AND POSTAL	233.388-010	MAIL CARRIER
	PUST OFFICE		CLERKS	228.388-014	RURAL MAIL CARRIER
32	MAIL HANDLERS,	14.0403	MAIL AND POSTAL	231.588-014	MAIL CLERK
	EXCEPT POST OFFICE	14.0499	CLERKS INFORMATION COMMUNICATION	239.587-010	MAILER
33	MESSFNGERS AND OFFICE HELPERS	14.0405	OCCUPATIONS, OTHER MESSENGERS AND OFFICE BOYS AND	230.878-022	MESSENGER
			GIRLS	230.878-026	OFFICE HELPER
		14.0499	INFORMATION COMMUNICATION	249.388-038	MESSENGER, BANK
		(1)	OCCUPATIONS, OTHER (1)	299.478-014	DELIVERER,
34	METER READERS, UTILITY	14.0499	INFORMATION COMMUNICATION	239.588-018	MERCHANDISE METER READER
60	PAYROLL AND TIMEKEEPING CLERKS	14.0104	OCCUPATIONS, OTHER MACHINE OPERATORS (BILLING, BOOKKEEPING, AND	215.488-010	PAYROLL CLERK
		14.0303	COMPUTING) GENERAL OFFICE	219.388-274	TIMEKEEPER
61	PUSTAL CLERKS	14.0403	CLERKS MAIL AND POSTAL	232.368-010	POST OFFICE CLERK
			CLERKS	231.588-014	MAIL CLERK
				231.688-010	DISTRIBUTION CLERA
62	PRODEREADERS	14.0399	FILING, DFFICE MACHINES, AND GENERAL DFFICE CLERICAL OCCUPATIONS,	209-688-034	PROOFREADER T

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	NATIONAL ACTATE	VOCATION	NAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLE
NSUS ODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
62	-CONTINUED	14.0102	BOOKKEEPERS	209.688-014	INSURANCE CLERK
53	REAL ESTATE APPRAISERS	04.17	REAL ESTATE	191.287-014	APPRAISER, REAL ESTATE
,4	RECEPTIONISTS	14.0406	RECEPTIONISTS AND INFORMATION CLERKS	237.368-038	RECEPTIONIST
4	SHIPPING AND RECEIVING CLERKS	14.0503	SHIPPING AND RECEIVING CLERKS	222.587-042	SHIPPING CLERK
į	RECEIVING CEERRS		RECEIVING CEERRS	222.387-026	SHIPPING AND RECEIVING CLERK
			ļ	222.387-018	RECEIVING CLERK
5	STATISTICAL CLERKS	14.03,03	GENERAL OFFICE CLERKS	219.388-258	STATISTICAL CLERK
			CLERKS	219.388-074	CODING CLERK
				219.488-034	COST CLERK
		14.99	OFFICE	249.368-026	COURT CLERK
1	STOCK CLERKS OR STOREKFEPERS	04.20	OCCUPATIONS, OTHER RETAIL TRADE,	922.887-070	LABORER, STORES
	210KEKEELEK2	14.0504	OTHER STOCK AND	223.388-014	INVENTORY CLERK
		(1)	INVENTORY CLERKS	223.387-094	STOCK CLERK
2	TEACHERS' AIDES, EXCEPT SCHOOL MONITORS	(1)	(1)	099.368-010	STUDY SUPERVISOR
3	TELEGRAPH Messengers	14.0405	MESSENGERS AND OFFICE BOYS AND	230.868-010	TELEGRAPH MESSENGER I
4	TELEGRAPH UPERATORS	14.0401	GIRLS COMMUNICATIONS SYSTEMS CLERKS AND OPERATORS	236.588-014	TELEGRAPHER
			O' ENATORS	235.862-018	INFORMATION OPERATOR
		14.0902	TYPISTS	203.588-014	TELEGRAPHIC- TYPEWRITER OPERATOR
5	TELEPHONE OPERATORS	14.0401	COMMUNICATIONS SYSTEMS CLERKS AND OPERATORS	235.862-026	TELEPHONE OPERATO
				235.862-010	CENTRAL-OFFICE OPERATOR
				235.138-010	CENTRAL-OFFICE OPERATOR
				235.138-014	SUPERVISOR TELEPHONE OPERATO CHIEF
o	TICKET STATION AND EXPRESS AGENTS	04.19	TRANSPORTATION	919.368-014	TICKET AGENT
	AND EXPRESS AGENTS			912.368-022	RESERVATION AGENT
				912.368-026	TRANSPORTATION AGENT
				255.258-010	TRAFFIC AGENT
2	WEIGHERS	(1)	(1)	224.487-026	WETGHER
		(1)	(1)	920.887-110	PACKAGER, HAND
4	MISCELLANEOUS	14.0303	GENERAL DEFICE	219.388-066	CLERK, GENERAL
ļ	CLERICAL WORKERS	14.0399	CLERKS FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	209.588-018	CLERK, GENERAL

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	NATIONAL ASTRO	VOCATIONA	L EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
ENSUS CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
394	-CONTINUED	14.0499	INFORMATION COMMUNICATIONS OCCUPATIONS, OTHER	249.368-030	CREDIT CLERK I
395	NOT SPECIFIED CLERICAL WORKERS	14.0399	FILING, OFFICE MA- CHINES, AND GENER- AL OFFICE CLERICAL OCCUPATIONS, OTHER	209.588-018	CLERK, GENERAL
		14.0303	GENERAL OFFICE CLERKS	219.388-066	CLERK, GENERAL OFFICE
	CRAFT AND KINDRED WORKERS				
415 (R)	CARPENTERS	17.1001	CARPENTRY	860.381-026	CARPENTER
416	CARPENTER APPRENTICES	17.1001	CARPENTRY	860.381-030	CARPENTER APPRENTICE
410	BRICKMASONS AND STONEMASONS	17.1004	MASONRY	861.381-010	BRICKLAYER
				861.781-022	STONEMASON
411	BRICKMASON AND STUNEMASON APPRENTICES	(1)	(1)	861.381-018	BRICKLAYER APPRENTICE
412	BULLDOZFR	17.100302	OPERATION, HEAVY EQUIPMENT	850.883-010	BULLDOZER OPERATOR
	OPERATORS		EQUIPMENT	859.883-030	OPERATING ENGINEER
		(1)	(1)	929.883-038	TRACTOR OPERATOR
421	CEMENT AND CONCRETE FINISHERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	844.844-014	CEMENT MASON
430	FLECTRICIANS	17.1002	ELECTRICTY	824.281-014	ELECTRICIAN
		17.14	ELECTRICAL OCCUPATIONS	829.281-022	ELECTRICAL REPAIRER
431	ELECTRICIAN APPRENTICES	(1)	(1)	824.281-018	ELECTRICIAN APPRENTICE
436	EXCAVATING, GRADING, AND ROAD MACHINE OPERATORS;	17.100302	OPERATION, HEAVY EQUIPMENT	859.883-030	OPERATING ENGINEER
	EXCEPT BULLDOZER			850.883-030	POWER SHOVEL OPERATOR
			į	851.883-018	MOTOR GRADER OPERATOR
440	FLOOR LAYERS, EXCEPT TILE SETTERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	864.781-010	FLOOR LAYER
		(1)	(1)	864.884-010	FLOOR FINISHER
510	PAINTERS, CÓNSTRUC- TION AND MAINTEN- ANCE	17.1005	PAINTING AND DECORATING	840.781-010	PAINTER
				841.781-010	PAINTER AND DECORATOR APPRENTICE
511	2444750	17 1000	OATHTING (***	840.884-018	PAINTER, ROUGH
511	PAINTER APPRENTICES	17.1005	PAINTING AND DECORATING	841.781-010	PAINTER AND DECO- RATOR APPRENTICE
512	PAPER HANGERS	17.1005	PAINTING AND DECORATING	841.781-014	PAPER HANGER.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 ENSUS	NATIONAL/STATE	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
ODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
20	PLASTERERS	17.1006	PLASTERING	842.781-018	PLASTERER
21	PLASTERER APPRENTICES	(1)	(1)	842.781-022	PLASTERER APPRENTICE
22	PLUMBERS AND PIPE FITTERS	17.1007	PLUMBING AND PIPE FITTING	862.381-074	PLUMBER
				862.381-042	PIPE FITTER I
23	PLUMBER AND PIPE FITTER APPRENTICES	(1)	(1)	862.381-078	PLUMBER APPRENTICE
		(1)	(1)	862.381-062	PIPE FITTER APPRENTICE
34	ROOFERS AND SLATERS	17.1010	ROOFING	866.381-010	ROOFER
		(1)	(1)	866.381-010	ROOFER
50	STRUCTURAL METAL WORKERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES.	801.781-010	STRUCTURAL STEEL WORKER
	·	17.2304	OTHER METAL TRADES,	619.380-022	METAL FABRICATOR I
50	TILE SETTERS	17.1004	COMBINED MASONRY	861.781-038	TILE SETTER
				861.781-030	TERRAZZO WORKER
		17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	864.781-010	FLOOR LAYER
1	BLUE-COLLAR WORKER SUPERVISORS N.E.C.	(2)	(2)	(2)	(2)
03	BLACKSMITHS	17.2399	METALWORK ING	610.381-010	BLACKSMITH
		01.0299	OTHER AGRICULTURAL SUPPLIES/SERVICES,	356.381-010	HORSESHOER
04	BOILERMAKERS	17.1099	OTHER CONSTRUCTION AND MAINTENANCE TRADES,	805.281-010	BOILERMAKER I
			OTHER	805.781-010	BOILERMAKER MECHANIC
16	HEAT TREATERS, ANNEALERS, AND TEMPERERS	17.24	METALLURGY	504.782-030	HEAT TREATER
	TEM ENCKS			504.782-010	ANNEALER
				504.782-042	TEMPERER
		16.0114	METALLURGICAL TECHNOLOGY	011.381-010	TESTER
		(1)	(1)	504.885-018	CHARGER OPERATOR
		(1)	(1)	512.883-014	FURNACE CHARGER
<b>4</b> 2	FORGE AND HAMMER OPERATORS	17.2399	METALWORKING, OTHER	612.381-010	HEAVY FORGER
ļ	OI ENATORS		J. J	610.782-010	DROP-HAMMER
				611.782-010	OPERATOR FORGING-PRESS
		(1)	(1)	619.886-018	OPERATOR I Forge Helper
4	JOB AND DIE SETTERS, METAL	17.2302	MACHINE SHOP	600.380-022	JOB SETTER
	SCIENCY MEINE	17.2304	METAL TRADES, COMBINED	616.380-026	MACHINE SETTER
		(1)	(1)	612.380-010	DIE SETTER
61	MACHINISTS	17.2302	MACHINE SHOP	600.280-030	MACHINIST I
52	MACHINIST APPRENTICES	17.2302	MACHINE SHOP	600.280-034	MACHINIST APPRENTICE

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	NATTONA: 407.475	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
502	MILLWRIGHTS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	638.281-034	MILLWRIGHT
503	MOLDERS, METAL	17.2301	FOUNDRY	518.381-022	MOLDER
		(1)	(1)	518.782-010	MACHINE MOLDER
504	MOLDER APPRENTICES	17.2301	FOUNDRY	518.381-026	MOLDER APPRENTICE
14	PATTERN AND MODEL MAKERS, EXCEPT PAPER	17.2302	MACHINE SHOP	600.280-066	PATTERNMAKER, METAL
				809.781-010	LAY-OUT PLANNER II
533	ROLLERS AND FINISHERS, METAL	17.2399	METALWORKING, OTHER	613.782-050	ROLLER, PRIMARY MILL
	·			705.887-014	LABORER, GRINDING AND POLISHING
		(1)	(1)	705.887-014	LABORER, GRINDING AND POLISHING
535	SHEET METAL WORKERS AND TINSMITHS	17.2305	SHEET METAL	804.281-010	SHEET METAL WORKER
36	SHEETMETAL APPRENTICES	17.2305	SHEET METAL	804.281-014	SHEET METAL WORKER APPRENTICE
661	TOOL AND DIE	17.2307	TOOL AND DIE	601-280-062	TOOL AND DIE MAKER
	MAKERS		MAKING	601.280-058	TOOL MAKER
				601.281-010	DIE MAKER, BENCH, STAMPING
562	TOOL AND DIE MAKER APPRENTICES	17.2307	TOOL AND DIE	601.280-066	TOOL AND DIE MAKEF APPRENTICE
÷70	AIR CONDITIONING, HEATING, AND REFRIGERATION MECHANICS AND REPAIRERS	17.0101	COOLING	637.281-034	REFRIGERATION MECHANIC. COMMERCIAL
	REPAIRERS	17.01	AIR CONDITIONING	637.281-010	AIR CONDITIONING MECHANIC, COMMERCIAL
				637.281-014	AIR CONDITIONING MECHANIC, DOMESTIC
		17.0102	HEATING	869.281-010	FURNACE INSTALLER AND REPAIRER, HOT AIR
471	AIRCRAFT MECHANICS AND REPAIRERS	17.0401	AIRCRAFT MAINTENANCE	621.281-010	AIRCRAFT-AND- ENGINE MECHANIC
401	AUTOMOBILE ACCES- SORY INSTALLER	17.35	UPHOLSTERING	780.381-010	AUTOMOBILE UPHOLSTERER
	July Market	17.0303	SPECIALIZATION, OTHER	807.884-050	MUFFLER INSTALLER
÷72	AUTOMOBILE BODY REPAIRERS	17.0301	BODY AND FENDER	807.381-010	AUTOMOBILE BODY REPAIRER
	ner mineng	17.0302	MECHANICS	620.281-014	AUTOMOBILE MECHANIC
73 S1	AUTOMOBILE MECHANICS	17.0302	MECHANICS	620.281-014	AUTOMOBILE MECHANIC
			,	620.281-014	AUTOMOBILE SERVICE MECHANIC I
74	AUTOMOBILE MECHANIC APPRENTICES	(1)	(1)	620-281-030	AUTOMOBILE MECHANIC APPRENTICE
75	DATA PROCESSING	16.0108	ELECTRONIC	828.281-022	ELECTRONICS
	MACHINE REPAIRERS	17.06	TECHNOLOGY BUSINESS MACHINE MAINTENANCE	633.281-030	MECHANIC OFFICE MACHINE SERVICER

 $\textbf{Table 1.} \quad \textbf{Conversion of National/State Matrix titles to vocational education classification system-Continued}$ 

1970	WATTONIA (CTATE	VOCATIONA	L EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
ENSUS	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
475	-CONTINUED	(1)	(1)	633.281-042	STATISTICAL
•80	FARM IMPLEMENT MECHANICS AND	01.0301	AGRICULTURAL POWER AND MACHINERY	624.281-010	MACHINE SERVICER FARM EQUIPMENT MECHANIC I
ļ	REPAIRERS			620.281-094	TRACTOR MECHANIC
		17.0302	MECHANICS	620.281-014	AUTOMOBILE MECHANIC
81	HEAVY EQUIPMENT MECHANICS INCLUDING DIESEL	17.0302	MECHANICS	620.281-014	AUTOMOBILE MECHANIC
!	INCCOURNS DIESEE	17.100301	MAINTENANCE, EQUIPMENT	620.281-058	ENGINEERING EQUIP-
		(1)	(1)	638.281-022	MAINTENANCE SPECIALIST, GAS PLANT
		(1)	(1)	899.281-018	MAINTENANCE SPECIALIST, FACTORY OR MILL
82	HOUSEHOLD APPLIANCE AND ACCESSORY INSTALLERS AND MECHANICS	17.0201	ELECTRICAL APPLIANCES	723.884-010	APPLIANCE REPAIRER
	MECHANICS			827.281-014	ELECTRIC APPLIANCE SERVICER
		17.0202	GAS APPLIANCES	637.281-022	GAS APPLIANCE SERVICER
		17.02	APPLIANCE REPAIR	827.281-022	HOUSEHOLD APPLI-
83	LOOM FIXERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	638.280-018	LOOM FIXER
			OTHER	638.280-014	LOOM FIXER OVERSEER
84	OFFICE MACHINE REPAIRERS	17.06	BUSINESS MACHINE MAINTENANCE	633.281-030	OFFICE MACHINE SERVICER
	Net AINTRO	04.12	INDUSTRIAL MARKETING	289.158-010	MANUFACTURERS' REPRESENTATIVE
85	RADIO AND TELEVIS- ION REPAIRERS	17.1503	RADIO/ TELFVISION	720.281-018	TELEVISION SER- VICER AND REPAIRER
	•	16.0108	FLECTRONIC TECHNOLOGY	828.281-022	ELECTRONICS MECHANIC
		(1)	(1)	823.281-030	RADIO MECHANIC
86	RAILROAD AND CAR SHOP REPAIRERS	17.12	DIESEL MECHANIC	625.281-010	DIESEL MECHANIC
	-	(1)	(1)	622.381-014	CAR REPAIRER
91	MECHANICS, EXCEPT AUTO REPAIRERS	17.22	MARITIME OCCUPATIONS	623.884-010	MOTORBOAT Mechanic Helper
		(1)	(1)	638.281-022	MAINTENANCE Mechanic
		(1)	(1)	638.884-010	MAINTENANCE Mechanic Helper
92	MISCELLANEOUS MECHANICS AND REPAIRERS	17.2101	INSTRUMENTS (OTHER THAN WATCHES AND CLOCKS)	710.281 058	INSTRUMENT REPAIRER I
		17.31	SMALL ENGINE REPAIR, INTERNAL COMBUSTION	620.281-086	MOTORCYCLE REPAIRER
		(1)	(1)	639.381-014	VENDING MACHINE REPAIRER
		(1)	(1)	639.884-014	LAWN MOWER Repairer
95	NOT SPECIFIED MECHANICS AND REPAIRERS	(1)	(1)	638.281-022	MAINTENANCE MECHANIC
	NOT MINUNG	(1)	(1)	899.281-018	MAINTENANCE SPECIALIST, FACTORY OR MILL

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS	NATIONAL/STATE -	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
495	-CONT INUFD	(1)	(1)	629.281-022	DAIRY EQUIPMENT REPAIRER
+05	BOOKBINDERS	(1)	(1)	643.885-010	BINDERY WORKER
		(1)	(1)	977.781-010	BOOKBINDER, HAND
		(1)	(1)	977.884-014	BOOKBINDER
22	CUMPOSITORS AND Typesetters	17.1901	COMPOSITION, MAKEUP, AND TYPESETTING	973.381-010	COMPOSITOR I
				973.381-026	JOB PRINTER
34	ELECTROTYPERS AND STEREOTYPERS	17.0901	COMPOSITION, MAKEUP, AND TYPESETTING	974.381-010	ELECTROTYPER
		(1)	(1)	975.782-014	STEREOTYPER
35	ENGRAVERS, EXCEPT PHOTOFNGRAVERS	17.2399	METALWORKING, OTHER	704.381-026 704.884-018	ENGRAVER, DECORATIVE ENGRAVER,
					PANTOGRAPH I
		(1)	(1)	704.381-022	ENGRAVER APPRENT- ICE, DECORATIVE
15	PHOTOENGRAVERS AND LITHOGRAPHERS	17.1904	PHOTOENGRAVING	971.381-018	PHOTOENGRAVER
				971.281-014	LITHOGRAPHER
		17.1903	LITHOGRAPHY, PHOTOGRAPHY, AND PLATEMAKING	972.382-010	PHOTOENGRAVER, LITHOGRAPHIC
		17.2399	METALWORKING, OTHER	704.884-030	ETCHER
30	PRINTING PRESS OPERATORS	17.1902	PRINTING PRESS OCCUPATIONS	651.782-042 651.782-010	OFFSET-PRESS OPERATOR CYLINDER-PRESS
				651.782-094	OPERATOR WEB-PRESS OPERATOR
31	PRINTING PRESS	17.1902	PRINTING PRESS	651.782-014	CYLINDER-PRESS OP- ERATOR APPRENTICE
23	APPRENTICES PRINTING TRADES APPRENTICES, EXCEPT PRINTING PRESS	17.1902	OCCUPATIONS PRINTING PRESS OCCUPATIONS	651.782-046	OFFSET-PRESS APPRENTICE
	PRINTING PRESS	17.1901	COMPOSITION, MAKEUP, AND TYPESETTING	973.381-030	JOB PRINTER APPRENTICE
33	ELECTRIC POWER LINE AND CABLE INSTALLERS AND REPAIKERS	17.1402	LINEMAN	821.281-010	LINE MAINTAINER
	KEI ATKEKS			821.381-034	LINE ERECTOR
				821.381-042	LINE REPAIRER
				829.381-010	CABLE SPLICER
				822.281-026	MAINTENANCE MECHANIC, TELEPHONE
		(1)	(1)	821.381-026	ELECTRIC-METER
55	LOCOMOTIVE ENGINEERS	(1)	(1)	910.383-014	TESTER LOCOMOTIVE ENGINEER
56	LOCOMOTIVE ENGINEER HELPER	(1)	(1)	910.383-010	FIRER, LOCOMOTIVE
25	POWER STATION UPERATORS	17.32	STATIONARY ENERGY SOURCES	950.782-054	STATIONARY ENGINEER
		(1)	OCCUPATIONS (1)	952.782-046	SUBSTATION OPERATOR APPRENTICE

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS	NATIONAL/STATE	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
552	TELEPHONE INSTAL- LERS AND REPAIRERS	17.1501	COMMUNICATIONS	822.381-050	STATION INSTALLER
				822.281-014	CENTRAL OFFICE REPAIRER
				822.281-050 822.381-034	PRIVATE-BRANCH- EXCHANGE REPAIRER PRIVATE-BRANCH-
		.,,	(1)		EXCHANGE INSTALLER
		(1)	(1)	822.884-014	FRAME WIRER
		(1)	(1)	822.884-010	CABLE INSTALLER
554	TELEPHUNE LINE INSTALLERS AND REPAIRERS	17.1402	LINEMAN	829.381-010	CABLE SPLICER
				822.381-026	MAINTENANCE MECHANIC, TELEPHONE
				821-281-010	LINE MAINTAINER
		17.1401	INDUSTRIAL Electricity	821.281-022	ELECTRIC METER
		(1)	(1)	829.131-010	CABLE SUPERVISOR
402	BAKERS	17.2901	BAKER	526.781-010	BAKER
				313.781-010	BAKER
				313.381-034	COOK, PASTRY
413	CABINETMAKERS	17.3601	MILLWORK AND	660.280-010	CABINETMAKER
420	CARPET INSTALLERS	(1)	CABINFTMAKING (1)	299.381-014	CARPET LAYER
424	CRANE, DERRICK, AND HOIST OPERATORS	17.100302	OPERATION, HEAVY EQUIPMENT	921.883-110	TRUCK-CRANE OPERATOR
				859.883-030	OPERATING ENGINEER
		(1)	(1)	921.883-050	ELECTRIC BRIDGE OR GANTRY CRANE OPERATOR
425	DECORATORS AND WINDOW DRESSERS	04.05	FLORISTRY	142.081-050	FLORAL DESIGNER
		04.01	ADVERTISING SERVICES	298.081-010 142.031-010	MERCHANDISE DISPLAYER MANAGER, DISPLAY
		17.0701	INTERIOR	142.051-014	INTERIOR DESIGNER
426	DENTAL LABORATORY	07.0103	DECORATING DENTAL LABORATORY	712.381-014	AND DECORATOR DENTAL LABORATORY
720	TECHINICIAN	07.0101	TECHNICIAN DENTAL ASSISTING	079.378-010	TECHNICIAN DENTAL ASSISTANT
443	FURNITURE AND WOOD	(1)	(1)	763.381-010	FURNITURE FINISHER
****	FINISHERS	(1)	(1)	741.887-026	PAINTER HELPER,
		(1)	(1)	742.884-010	SPRAY RUBBER
444	FURRIERS	(1)	(1)	142.081-058	FURRIER
445	GLAZIERS	17.1009	GLAZING	865.781-010	GLAZIER
777	GENEIENS	17.1009	CEMETIAG	865.884-014	
450	TAISBEC TODS	(1)	(1)		GLASS INSTALLER
450	INSPECTORS, SCALERS, AND GRADERS; LOG AND	(1)	(1)	669.587-010	GRADER
	LUMBER	(1)	(1)	669.587-014	VENEER GRADER
452	INSPECTORS, N.E.C.	17.24	METALLURGY	619.381-014	INSPECTOR

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

System	i-Continued				
1970 CENSUS	NATIONAL/STATE	VOCATIO	NAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
452	-CONTINUED	(1)	(1)	910.287-014	RAILROAD CAR INSPECTOR
		(1)	(1)	182.287-022	HIGHWAY INSPECTOR
453	JEWELERS AND WATCHMAKERS	17.2102	WATCHMAKING AND REPAIR	715.281-030	WATCHMAKER
	AAT GITTANCES	(1)	(1)	700.281-010	JEWELER
501	MILLERS; GRAIN, FLOUR, SEED	04.06	FOOD DISTRIBUTION	262.358-010	SALES AGENT, FOOD PRODUCTS
		(1)	(1)	521.782-042	GRINDER OPERATOR
505	MUTIGN PICTURE PROJECTIONISTS	(1)	(1)	960.382-010	MOTION PICTURE PROJECTIONISTS
506	OPTICIANS, AND LENS GRINDERS AND POLISHERS	17.2101	INSTRUMENTS (OTHER THAN WATCHES AND CLOCKS)	713.381-014	OPTICIAN
				711.781-018	LENS GRINDER
		07.0601	OPHTHALMIC DISPENSING	713.251-010	OPTICIAN, DISPENSING
516	PIANO AND ORGAN TUNERS AND REPAIRERS	(1)	(1)	730.381-050	PIANO TUNER
540	SHIPFITTERS	(1)	(1)	806.381-042	SHIPFITTER
		(1)	(1)	806.887-026	SHIPFITTER HELPER
542	SHOE REPAIRERS	17.3402	SHOE REPAIR	365.381-014	SHOE REPAIRER
		17.3401	SHOE MANUFACTURING	788.381-010	COBBLER
543	SIGN PAINTERS AND LETTERERS	(1)	(1)	970.381-046	PAINTER, SIGN
545	STATIONARY Engineers	17.32	STATIONARY ENERGY Sources	950.782-054	STATIONARY ENGINEER
546	STONE CUTTERS AND STONE CARVERS	(1)	OCCUPATIONS (1)	771.381-014	STONE CUTTER, HAND
551	TAILORS	17.3302	TAILORING	785.281-010	ALTERATION TAILOR
		17.16	FABRIC MAINTENANCE SERVICES	782.884-078	MENDER
		(1)	(1)	785.261-014	TAILOR APPRENTICE,
563	UPHOL STERERS	17.34	LEATHERWORKING	780.884-138	UPHOLSTERER II
		17.35	UPHOLSTERING	780.381-018	FURNITURE UPHOLSTERER
575	CRAFT AND KINDRED WORKERS, N.E.C.	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	781.884-026	CUTTER, HAND
		(1)	(1)	699.782-022	DIE CUTTER
		(1)	(1)	892.883-014	LABORER, HOISTING
571	SPECIFIED CRAFT APPRENTICES, N.E.C.	17.3601	MILLWORK AND CABINET MAKING	660.280-014	CABINET MAKER APPRENTICE
		(1)	(1)	821.381-038	LINE ERECTOR APPRENTICE
		(1)	(1)	801.781-014	STRUCTURAL STEEL WORKER APPRENTICE
		(1)	(1)	693.281-018	PATTERNMAKER, METAL, BENCH
		(1)	(1)	806.281-038	RIGGER APPRENTICE
		(1)	(1)	950.782-058	STATIONARY ENGI- NEER APPRENTICE

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970		VOCATIONA	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
ENSUS CUDE	NATIONAL/STATE - MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
572	NOT SPECIFIED APPRENTICES	14.0401	COMMUNICATIONS SYSTEMS CLERKS AND	235.862-026	TELEPHONE OPERATOR
80	FORMER MEMBERS OF THE ARMED FORCES	(3)	OPERATORS (3)	(3)	(3)
	OPERATIVES				
50	DKILL PRESS OPERATORS	17.2303	MACHINE) TOOL OPERATION	606.782-018	DRILL PRESS OPERA-
	or exarging		or enation	606.782-026	DRILL PRESS SET-UP OPERATOR, SINGLE SPINDLE
				606.380-014	DRILL PRESS SET-UP OPERATOR, RADIAL
22	FURNACE TENDERS, SMELTERS, AND POURERS, METAL	17.2301	FOUNDRY	512.782-026	FURNACE OPERATOR
	POURTS, METAL			514.884-030	POURER, METAL
				502.782-018	CASTER
				514.884-034	TAPPER
51	GRINDING MACHINE	17.2303	MACHINE TOOL	603.280-038	TOOL GRINDER
	OPERATIVES	17.2399	OPERATION METALWORKING,	705.884-046	OPERATOR GRINDER I
		17.2303	OTHER MACHINE TOOL	603.885-078	GRINDER OPERATOR,
26	HEATERS, METAL	(1)	OPERATION (1)	613.782-026	PRODUCTION HEATER
52	LATHE AND MILLING MACHINE OPERATIVES	17.2303	MACHINE TOOL OPERATION	604.885-034 604.380-042	LATHE OPERATOR, PRODUCTION TURRET-LATHE SET-
35	METAL PLATERS	17.2399	METALWORKING,	500.380-010	UP OPERATOR PLATER
, ,	HETAL TEATERS	1.163//	OTHER	609.380-014	METAL SPRAYER,
:		(1)	(1)	500.884-030	MACHINED PARTS PLATER
		(1)	(1)	500.885-014	PLATER, PRODUCTION
53	OTHER PRECISION MACHINE OPERATIVES	17.2303	MACHINE TOOL OPERATION	604.885-042	SCREW MACHINE OPE- RATOR, PRODUCTION
				606.280-010	BORING-MACHINE SET -UP OPERATOR, JIG
				606.280-014	BORING-MILL SET-UP OPERATOR, HORIZONTAL
				600.280-030	MACHINIST I
		(1)	(1)	606.885-018	BORING MACHINE OP- ERATOR, PRODUCTION
6	PUNCH AND STAMPING PRESS OPERATIVES	17.2303	MACHINE TOOL OPERATION	615.782-034	PUNCH PRESS OPERATOR I
		17.2304	METAL TRADES, COMBINED	617.280-018	PRESS OPERATOR, HEAVY DUTY
				619.885-070	MACHINE OPERATOR
				619.885-026	BRAKE OPERATOR II
.5	SOLDERERS	17.230604	BRAZING AND SOLDERING	814.884-026	SOLDERER, PRODUCTION LINE
		(1)	(1)	706.884-098	SOLDERER ASSEMBLER
		(1)	(1)	700.781-018	SOLDERER
0	WELDERS AND FLAME CUTTERS	17.230603	COMBINATION WELDING	812.884-014	WELDER. COMBINATION

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	NATIONAL (61 ATE	VUCATIONA	L EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
80	-CUNTINUED	17.230602	ELECTRIC WELDING	810.884-018	WELDER, ARC
				810.782-022	WELDER, SPOT I
70	CARDING, LAPPING, AND COMBING OPERATIVES	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	680.885-014	CARD TENDER
	OPERATIVES		OTHER	683.280-018	LOOM FIXER
				683.885-018	DRAWER-IN, HAND
				683.887-010	DRAWER-IN, HELPER, HAND
		(1)	(1)	680.885-090	SLUBBER TENDER
		(1)	(1)	683.782-022	DRAWING-IN MACHINE
71	KNITTERS, LOOPERS, AND TOPPERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	685.885-026	KNITTING MACHINE OPERATOR
		(1)	(1)	685.885-030	KNITTING MACHINE OPERATOR
72	SPINNERS, TWISTERS, AND WINDERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	682.885-018	SPINNER, FRAME
			OTHER	681.885-138	YARN WINDER
		(1)	(1)	689.885-162	WINDER OPERATOR
		(1)	(1)	689.886-030	DOFFER
		(1)	(1)	557.885-030	SPINNER
73	WEAVERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	683.782-042	WEAVER
			·	683.885-046	WEAVER, NEEDLE
		(1)	(1)	683.885-034	SMASH, HAND
74	OTHER TEXTILE OPERATIVES	(1)	(1)	589.885-014	BOARDING MACHINE OPERATORS
LO	CHECKERS, EXAMIN- ERS, AND INSPECT- DRS, MANUFACTURING	09.0202	CLOTHING MANAGE- MENT, PRODUCTION, AND SERVICES	789.687-034	GARMENT INSPECTOR
	DRS, MANOTACTORING	(1)	(1)	609.684-010	INSPECTOR, GENERAL
24	GRADERS AND SORT-	14.0503	SHIPPING AND	222.687-034	SORTER
	ERS, MANUFACTURING	17.08	RECEIVING CLERKS COMMERCIAL FISHERY OCCUPATIONS	589.687-014	GRADER
		(1)	(1)	529.687-054	SORTER, AGRICULTU- RAL PRODUCE
		(1)	(1)	223.687-022	SCALER
34	MEAT WRAPPERS.	(1)	(1)	920.887-110	PACKAGER, HAND
		(1)	(1)	920.885-110	PACKAGER, MACHINE
		(1)	(1)	223.684-010	MEAT CLERK
¥3	PACKERS AND WRAP- PERS, EXCEPT MEAT AND PRODUCE	(1)	(1)	920.887-110	PACKAGER, HAND
		(1)	(1)	920.885-110	PACKAGER, MACHINE
25	PRODUCE GRADERS AND PACKERS, EXCEPT FACTORY AND FARM	(1)	(1)	920.887-118	PACKER, AGRICULTU- RAL PRODUCE

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970		VUCATIONA	AL EDUCATION SYSTEM	DICTIONARY OF OCCUPATIONAL TITLES	
CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
01	ASBESTOS AND INSULATION WORKERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	863.884-026	INSULATION WORKER
			o.n.e.r	863.884-022	INSULATION Installer
				863.781-014	INSULATION BLANKET Maker
02 T)	ASSEMBLERS	(1)	(1)	706.887-010	ASSEMBLER. PRODUCTION
		(1)	(1)	706.884-022	ASSEMBLER, SMALL PARTS
		(1)	(1)	723.884-014	ASSEMBLER
03	BLASTERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	859.281-010	BLASTER
		(1)	(1)	931.281-110	BLASTER
04	BUTTLING AND CANNING OPERATIVES	(1)	(1)	920.885-110	PACKAGER, MACHINE
05	SURVEYOR HELPERS	(1)	(1)	018.587-010	SURVEYOR HELPER.
		(1)	(1)	018.687-010	ROD SURVEYOR HELPER,
11	CLOTHING IRONERS AND PRESSERS	17.16	FABRIC MAINTENANCE SERVICES	363.782-018	CHAIN PRESSER, MACHINE
			•	363.884-022	PRESSER, HAND
		17.1602	LAUNDERING	363.885-026	SHIRT PRESSER
12	CUTTING OPERATIVES, N.E.C.	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	781.887-078	TRIMMER, HAND
			Office	781.884-030	CUTTER, MACHINE !
		17.2303	MACHINE TOOL	615.782-050	SHEAR OPERATOR, I
13	DRESSMAKERS	09.0202	OPERATION CLOTHING MANAGE— MENT, PRODUCTION, AND SERVICES	785.381-018	SEAMSTRESS
			AND SERVICES	785.361-010	DRESSMAKER
		17.3302	TAILORING	785.281-010	ALTERATION TAILOR
		17.3301	DRESSMAKING	785.381-026	WOMEN'S GARMENT
14	DRILLERS, EARTH	17.100302	OPERATION, HEAVY	859.782-034	ALTERER (M/F) WELL-DRILL OPERA-
		(1)	EQUIPMENT (1)	930.782-038	TOR, ROTARY DRILL DRILLING MACHINE
		(1)	(1)	930.886-018	OPERATOR Driller Helper
15	DRYWALL INSTALLERS	17.1008	DRY WALL	842.884-010	DRY-WALL
	AND LATHERS		INSTALLATION	842.884-022	APPLICATOR DRY-WALL
		17.1006	PLASTERING	842.781-010	TAPER Lather
20	DYERS	17.3399	TEXTILE PRODUCTION AND FABRICTION,	582.782-018	DYE-RANGE OPERATOR
			OTHER	580.885-062	SKEIN-YARN DYER
		17.1699	FABRIC MAINTENANCE	364.887-010	DYER HELPER
			SERVICES, OTHER	364.887-018	RUG-DYER HELPER
		(1)	(1)	582.885-110	DYE-TUB OPERATOR

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	_continued	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
621	FILERS, POLISHERS, SANDERS, AND BUFFERS	17.2399	METALWORKING, OTHER	705.884-070	POL I SHER
623	GARAGE WORKERS AND GAS STATION ATTENDANTS	04.16	PETROLEUM	915.867-010	AUTOMOBILE SERVICE STATION ATTENDANT
	ATTENUANTS	(1)	(1)	915.884-014	TIRE REPAIRER
630	LAUNDRY AND DRY CLEANING OPERATIVES N.E.C.	17.1602	LAUNDERING	361.887-010	LAUNDRY LABORER
				369.887-010	FOLDER
				361.885-034	WASHER, MACHINE
				361.885-022	LAUNDRY WORKER II
				369.884-022	LAUNDRY OPERATOR
	n.	17.16	FABRIC MAINTENANCE	369.687-010	ASSEMBLER
			SERVICES	369.687-018	INSPECTOR
		17.1601	DRY CLEANING	369.884-026	RUG CLEANER. HAND
631	MEAT CUTTERS AND BUTCHERS, EXCEPT MANUFACTURING	17.2903	MEAT CUTTER	316.884-018	MEAT CUTTER
633	MEAT CUTTERS AND BUTCHERS, MANUFACTURING	01.0401	FOOD PRODUCTS	525.381-010	BUTCHER, ALL-ROUND
	MANOPACTORING	17.08	COMMERCIAL FISHERY	525.884-030	FISH CLEANER
		17.2903	OCCUPATIONS MEAT CUTTER	316.884-018	MEAT CUTTER
		(1)	(1)	525.884-010	BONER, MEAT
		(1)	(1)	525.887-134	TRIMMER, MEAT
636	MILLINERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	784.281-010	MILLINER
640	MINE OPERATIVES,	(1)	(1)	939.281-010	MINER
	N.E.C.	(1)	(1)	932.883-026	SHUTTLE-CAR
	*	(1)	(1)	939.887-018	OPERATOR COMPANY LABORER
		(1)	(1)	869.884-066	ROUSTABOUT
641	MIXING OPERATIVES	01.0202	FEEDS	520.885-122	FEED MIXER
		(1)	(1)	550.782-042	MIXER
		(1)	(1)	550.885-162	MIXER OPERATOR
		(1)	(1)	550.885-186	PAINT MIXER,
642	OILERS AND GREASERS, EXCEPT AUTO	(1)	(1)	699.887-018	MACHINE OILER
644	PAINTERS, MANUFAC-	17.0301	BODY AND FENDER	845.781-018	PAINTER,
	TURED ARTICLES	17.1005	PAINTING AND DECORATING	840.781-010	AUTOMOBILE PAINTER AND DECO- RATOR APPRENTICE
		(1)	(1)	741.884-026	PAINTER, SPRAY
1		(1)	(1)	741.887-030	PAINTER, SPRAY

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS	NATIONAL/STATE -	VOCATION	IAL FDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CUDE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
645	PHOTOGRAPHIC PROCESS WORKERS	17.0901	PHOTOGRAPHIC LABO- RATORY AND DARKROOM GCCUPATIONS	976.381-010	DEVELOPER
1				970.281-026	PHOTOGRAPH RETOUCHER
				976.886-010	PHOTOGRAPH
660	RIVETERS AND FASTENERS	(1)	(1)	692.885-250	FINISHER I STAPLING-MACHINE OPERATOR
	TASTENERS	(1)	(1)	699.782-026	RIVETING-MACHINE OPERATOR
		(1)	(1)	709.884-070	RIVETER, HAND
		(1)	(1)	669.885-042	CORRUGATED FASTENER DRIVE
		(1)	(7)	669.885-066	NAILING-MACHINE OPERATOR, AUTO
		(1)	(1)	800.884-018	RIVETER, PNEUMATIC
661	SAILORS AND DECKHANDS	17.0801	SEAMANSHIP	911.887-022	DECKHAND
	DECKHANDS			911.884-010	ABLE SEAMAN
				911.887-034	ORDINARY SEAMAN
662	SAWYERS	17.3601	MILLWORK AND	667.782-038	CUT-OFF-SAW
		17.3699	CABINET MAKING WOODWORKING,	667.782-114	OPERATOR SAWMILL WORKER
		17.2303	OTHER MACHINE TOOL	607.782-014	DO-ALL-SAW
		(1)	OPERATION (1)	940.884-010	OPERATOR BUCKER
563	SEWERS AND STITCHERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	786.782-090	SEWING MACHINE OP- ERATOR, REGULAR EQUIPMENT
	:		OTHER	787.782-294	SEWING MACHINE OP- ERATOR, REGULAR
664	SHOEMAKING MACHINE OPERATIVES	17.3401	SHOE MANUFACTURING	690.885-370	SKIVER, MACHINE
		Ť		788.887-026	CEMENTER, HAND
566	FURNACE TENDERS AND STOKERS, EXCEPT METAL	17.32	STATIONARY ENERGY SOURCES OCCUPATIONS	951.885-014	FIRER, HIGH PRESSURE
				951.885-018	FIRER, LOW PRESSURE
581	WINDING OPERATIVES,	17.1403	MOTOR REPAIRMEN	721.884-034	ELECTRIC MOTOR
	N.E.C.	(1)	(1)	724.884-058	WINDER COILWINDER, HAND
		(1)	(1)	640.885-062	REWINDER OPERATOR
59U	MACHINE OPERATIVES, MISCELLANEOUS SPECIFIED	(2)	(2)	(2)	(2)
92	MACHINE OPERATIVES, NOT SPECIFIED	(2)	(2)	(2)	(2)
594	MISCELLANEOUS OPERATIVES	(2)	(2)	(2)	(2)
95	NUT SPECIFIED OPERATIVES	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	787.782-290	SEWING MACHINE OPERATOR, ALL-
701	BOAT OPERATORS	17.0802	SHIP AND BOAT OPERATION AND MAINTENANCE	911.883-026	AROUND MOTORBOAT OPERATOR
703	BUS DRIVERS	04.19	TRANSPORTATION	913.463-010	BUS DRIVER

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	NATIONAL (STATE	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
703	-CONTINUED	(1)	(1)	913.463-014	BUS DRIVER, SCHOOL
704	CONDUCTORS AND OPERATORS, URBAN	(1)	(1)	910.868-014	CONDUCTOR
	RAIL TRANSIT	(1)	(1)	910.863-026	CAR-RETARDER OPERATOR
705	DELIVERY AND ROUTE WORKERS	04.06	FOOD DISTRIBUTION	292.358-010	DRIVER, SALES
		(1)	(1)	906.883-026	TRUCK DRIVER,
706	FORK LIFT AND TOW MOTOR OPERATORS	(1)	(1)	922.883-018	INDUSTRIAL TRUCK OPERATOR
710	RAIL VEHICLE OPERATORS N.E.C.	17.3202	PUMPING PLANTS	914.782-014	OIL PUMPER
	UPERATURS WAEACA	(1)	(1)	919.883-030	DINKEY OPERATOR
		(1)	(1)	922.885-030	DUMP OPERATOR
711	PARKING ATTENDANTS	04.03	AUTOMOTIVE	915.878-014	PARKING LOT ATTENDANT
712	RAILROAD BRAKE UPERATORS AND COUPLERS	(1)	(1)	910.884-010	BRAKE COUPLER, ROAD FREIGHT
	COUPLERS	(1)	(1)	910.884-014	YARD COUPLER
		(1)	(1)	932.884-010	BRAKE HOLDER
		(1)	(1)	910.364-010	BRAKER, PASSENGER TRAIN
713	RAILROAD SWITCH OPERATORS	(1)	(1)	910.887-038	SWITCH TENDER
714	TAXICAB DRIVERS AND CHAUFFEURS	04.19	TRANSPORTATION	913.463-018	TAXI DRIVER
	AND CHAUFFEURS	(1)	(1)	913.883-014	CHAUFFEUR
		(1)	(1)	913.883-010	AMBULANCE DRIVER
715 (U)	TRUCK DRIVERS	(1)	(1)	905.883-022	TRUCK DRIVER, HEAVY
(0)		(1)	(1)	906.883-026	TRUCK DRIVER.
		(1)	(1)	904.883-024	TRACTOR-TRAILER- TRUCK DRIVER
	SERVICE WORKERS				
901	LODGING QUARTERS CLEANERS, EXCEPT PRIVATE HOUSEHOLD	09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	323.887-014	MAID II
				306.878-010	HOMEMAKER
İ		17.11	CUSTODIAL SERVICES	381.887-014	CHARWORKER
902	BUILDING INTERIOR CLEANERS, NEC	17.11	CUSTODIAL SERVICES	381.887-014	CHARWORKER
				381.887-026	PORTER I
				381.887-030	PORTER II
į		09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING	323.887-018	MAID, HOSPITAL
			SERVICES	306.878-010	HOMEMAKER
903 (X)	JANITORS AND SEXTONS	17+11	CUSTODIAL SERVICES	381.887-026	PORTER

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970		VOCATION	NAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
ENSUS	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
903	-CONT INUED	17.11	-CONT INUED	382.884-010	JANITOR
		17.10	CONSTRUCTION AND	899.381-010	MAINTENANCE RE-
		(1)	MAINTENANCE TRADES	899.281-018	PAIRER, BUILDING MAINTENANCE REPAIRER,
10	BARTENDERS	(1)	(1)	312.878-014	FACTORY OR MILL BARTENDER
11	WAITER * S ASSISTANTS	17.2904	WAITER/WAITRESS	311.878-010	DINING ROOM ATTENDANT
912	COOKS, EXCEPT PRIVATE HOUSEHOLD	17.2902	COOK/CHEF	313.381-018	соок
	TRIVATE MODSEMBLE			314.381-010	COOK, SHORT ORDER
				315.381-010	соок
		(1)	(1)	313.381-038	COOK, SCHOOL CAFETERIA
13	DI SHWA SHER S	(1)	(1)	318.887-010	KITCHEN HELPER
		(1)	(1)	318.887-014	FORMULA-ROOM WORKER
914	FOOD COUNTER AND FOUNTAIN WORKERS	17.2904	WAITER/WAITRESS	311.878-026	COUNTER ATTENDANT, LUNCHROOM OR COFFEE SHOP
				319.878-010	FOUNTAIN SERVER
				311.878-058	WAITER/WAITRESS,
		(1)	(1)	311.878-022	INFORMAL COUNTER ATTENDANT
15	WAITERS	17.2904	WAITER/WAITRESS	311.878-058	WAITER/WAITRESS, INFORMAL
Υ)				311.878-054	WAITER/WAITRESS,
16	FOOD SERVICE WORKERS, N.E.C., EXCEPT PRIVATE HOUSEHOLD	17.2902	COOK/CHEF	317.887-010	FORMAL COOK HELPER I
				317.884-018	PANTRY
		(1)	(1)	318.887-010	KITCHEN HELPER
		(1)	(1)	311.878-022	COUNTER ATTENDANT,
		(1)	(1)	317.884-014	DELI-CUTTER SLICES
121	DENTAL ASSISTANTS	07.0101	DENTAL ASSISTING	079.378-010	DENTAL ASSISTANT
22	HEALTH AIDES, EXCEPT NURSING	07.0904	MEDICAL ASSISTANT (PHYSICIAN'S	079.368-022	MEDICAL ASSISTANT
		07.0402	OFFICE) PHYSICAL THERAPY	355.878-014	ATTENDANT,
ĺ		(1)	(1)	355.878-046	PHYSICAL THERAPY TRAY-LINE WORKER
	-	(1)	(1)	079.588-010	DIET CLERK
}		(1)	(1)	074.387-010	PHARMACY HELPER
		(1)	(1)	079.378-038	PODIATRIST'S
23	HEALTH TRAINEES	07.0301	NURSING (ASSOCIATE DEGREE)	075.378-014	ASSISTANT NURSE, GENERAL DUTY
		07.0302	PRACTICAL (VOCA- TIONAL) NURSING	354.878-022	NURSE, PRACTICAL
		07.0305	SURGICAL TECHNICIAN (OPERATING ROOM	079.378-042	SURGICAL TECHNICIAN
24	LAY MIDWIVES	07.0302	TECHNICIAN) PRACTICAL (VOCA- TIONAL) NURSING	354.878-018	BIRTH ATTENDANT

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	NATIONAL/STATE -	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLE
CODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
925	NURSING AIDES, OKDERLIES, AND ATTENDANTS	07.0303	NURSING ASSISTANCE (AIDE)	355.878-034	NURSE AIDE
	ATTENDANTS	07.0302	NURSING ASSISTANCE	355.878-038	ORDERLY
		07.0304	(AIDE) PSYCHIATRIC AIDE	355.878-042	PSYCHIATRIC AIDE
926	PRACTICAL NURSES	U <b>7.</b> 0302	PRACTICAL (VOCATI- ONAL) NURSING	079.378-026 354.878-022	NURSE, LICENSED PRACTICAL NURSE, PRACTICAL
		07.0303	NURSING ASSISTANCE	355.878-034	NURSE AIDE
931	FLIGHT ATTENDANTS	04.19	(AIDE) TRANSPORTATION	352.878-010	AIRPLANE FLIGHT ATTENDANT
932	ATTENDANTS, RECREATION AND	(1)	(1)	341.878-010	CADDIE
	AMUSEMENT	(1)	(1)	379.868-014	SHERIFF, DEPUTY
933	ATTENDANTS, PERSO-	04.11	HOTEL AND LODGING	358.878-014	CHECKROOM
	NAL SERVICE N.E.C.	17.11	CUSTODIAL SERVICES	381.887-014	ATTENDANT CHARWORKER
		09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	323.887-014	MAID II
Ì		(1)	(1)	359.878-018	FUNERAL ATTENDANT
		(1)	(1)	297.868-010	MODEL
·		(1)	(1)	353.368-018	GUIDE, ESTABLISHMENT
934	BAGGAGE PORTERS AND BELLHOPS	04.11	HOTEL AND LODGING	324.878-014	BELLHOP
	AND BEELING S			324.138-014	BELL CAPTAIN
				357.878-014	PORTER
935	BARBERS	17.2601	BARBERING	330.371-010	BARBER
		04.15	PERSONAL SERVICES	187.168-058	MANAGER, BARBER SHOP
940	BOARDING AND LOD- GING HOUSEKEEPERS	04.11	HOTEL AND LODGING	320.138-010	MANAGER, BOARDING HOUSE
941	BOOTELACKS	(1)	(1)	366.878-010	BOOTBLACK
942	CHILD CARE WORKERS, EXCEPT PRIVATE HOUSEHOLD	09.0201	CARE AND GUIDANCE OF CHILDREN	307.878-010	CHILD MONITOR
	NOOST NOED			359.878-026	CHILD CARE ASSISTANT
943	ELEVATOR OPERATORS	(1)	(1)	388.868-010	ELEVATOR OPERATOR
Ì		(1)	(1)	388.138-010	ELEVATOR STARTER
944	HAIRDRESSERS AND COSMETOLOGISTS	17.2602	COSMETOLOGY	332.271-010	COSMETOLOGIST
		04.15	PERSONAL SERVICES	187.168-062	MANAGER, BEAUTY SHOP
		(1)	(1)	332.271-018	HAIR STYLIST
945	PERSONAL SERVICE APPRENTICES	17.2602	COSMETOLOGY	332.271-014	COSMETOLOGIST APPRENTICE
950	HOUSEKFEPERS, EXCEPT PRIVATE HOUSEHOLD	09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	321.138-010	HOUSEKEEPER

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970		VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CODE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
950	-CONT I NUED	09.0205	-CONTINUED	306.878-010	HOMEMAKER
				187.168-050	EXECUTIVE HOUSEKEEPER
		17.11	CUSTODIAL SERVICES	381.887-014	CHARWORKER
		04.07	FOOD SERVICES	310.138-014	STEWARD/STEWARDESS
952	SCHOOL MONITORS	09.0201	CARE AND GUIDANCE OF CHILDREN	307.878-010	CHILD MONITOR
		(1)	(1)	195.228-014	RECREATION LEADER
İ		(1)	(1)	381.887-034	PORTER
53	USHERS, RECREATION AND AMUSEMENT	(1)	(1)	344.878-022	USHER
54	WELFARE SERVICE	(1)	(1)	195.168-014	COMMUNITY ORGANI-
	AIDES	(1)	(1)	195.108-010	ZATION WORKER Caseworker
		(1)	(1)	195.208-010	CASE AID
60	CROSSING GUARDS	17.2802	LAW ENFORCEMENT	375.268-030	POLICE OFFICER
	AND BRIDGE TENDERS	(1)	TRAINING (1)	371.868-010	SCHOOL-CROSSING
61	FIRE FIGHTERS	17.2801	FIREMAN TRAINING	373.884-014	GUARD FIRE FIGHTER
				373.168-018	FIRE CAPTAIN
				373.118-010	FIRE CHIEF
062	GUARDS	(1)	(1)	372.868-030	GUARD
	·	(1)	(1)	372.868-054	CAMP GUARD
		(1)	(1)	372.868-018	CORRECTION OFFICER
963	MARSHALS AND CUNSTABLES	17.2802	LAW ENFORCEMENT Training	377.868-014	SHERIFF, DEPUTY
164	POLICE AND	17.2802	LAW ENFORCEMENT	375.268-030	POLICE OFFICER
	DETECTIVES		TRAINING	375.268-014	DETECTIVE
				375268-046	STATE HIGHWAY
		(1)	(1)	375.168-054	PATROL OFFICER POLICE SERGEANT,
65	SHERIFFS AND BAILIFFS	17.2802	LAW ENFORCEMENT Training	377.868-014	PRECINCT SHERIFF, DEPUTY
080	CHILD CARE WORKERS, PRIVATE HOUSEHOLD	09.0201	CARE AND GUIDANCE OF CHILDREN	307.878-010	CHILD MONITOR
81	COUKS, PRIVATE HOUSEHOLD	09.0203	FOOD MANAGEMENT, PRODUCTION, AND	305.281-010	соок
		09.0205	SERVICES INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	306.878-010	HOMEMAKER
				303.138-010	HOUSEKEEPER. HOME
982	HOUSEKEEPERS; PRIVATE HOUSEHOLD	09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	303.138-010	HOUSEKEEPER, HOME
	}	(1)	(1)	301.887-010	DAY WORKER

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 ENSUS	NATIONAL/STATE	VOCATION	IAL EDUCATION SYSTEM	DICTIONARY OF OCCUPATIONAL TITLES	
CODE	MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
83	LAUNDERERS, PRIVATE HOUSEHOLD	09.0202	CLOTHING MANAGE- MENT, PRODUCTION, AND SERVICES	302.887-014	LAUNDRESS
		(1)	(1)	302.887-010	IRONER
		(1)	(1)	301.887-010	DAY WORKER
84 Z)	CLEANERS AND SERVANTS, PRIVATE HOUSEHOLD	09.0201	CARE AND GUIDANCE OF CHILDREN	306.878-010	CHILD MONITOR
	Hoosenge	(1)	(1)	301.887-010	DAY WORKER
	LABORERS, EXCEPT FARM	!			
40	ANIMAL CARETAKERS,	01.99	AGRICULTURE, OTHER	365.874-014	ANIMAL KEEPER
	EXCEPT FARM			365.874-038	KENNEL ATTENDANT
		01.0299	AGRICULTURAL SUPPLIES/SERVICES OTHER	365.874-046	VETERINARY-HOSPI- TAL ATTENDANT
			OTHER -	413.884-018	FARM HAND, LIVESTOCK
				413.884-030	RANCH HAND
		(1)	(1)	356.874-022	DOG GROOMER
		(1)	(1)	356.874-042	STABLE ATTENDANT
50	CARPENTER'S HELPERS	17.1001	CARPENTRY	860.887-018	LABORER, CARPENTRY
51	CONSTRUCTION	17 1000	CONSTRUCTION AND	860.887-010	CARPENTER HELPER, MAINTENANCE
۸)	CUNSTRUCTION LABORERS, EXCEPT CARPENTER'S HELPERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	869.887-030	FENCE ERECTOR
	SANTENTEN S TREETENS	(1)	(1)	869.884-026	CONSTRUCTION WORKER
52	FISHERS, HUNTERS,	17.08	COMMERICAL FISHERY OCCUPATIONS	432.884-010	FISHER, LINE
	AND TRAFFERS		60007 AT 10113	431.884-026	FISHER, NET
				439.687-010	CLAM DREDGER
				439.884-014	NET WORKER
		(1)	(1)	436.884-026	SHELLFISH-BED WORKER
53	FREIGHT AND MATERIAL HANDLERS	04.19	TRANSPORTATION	929.887-050	MATERIAL HANDLER
	MATERIAL MANUETRS	04.20	RETAIL TRADE,	922.887-070	LABORER, STORES
		(1)	OTHER (1)	905.887-010	TRUCK DRIVER
54	GARBAGE COLLECTORS	(1)	(1)	909.887-014	HELPER Garbage Collector
		(1)	(1)	909.883-010	GARBAGE COLLECTOR
55	GARDENERS AND GROUNDSKEFPERS, EXCEPT FARM	01.0504	LANDSCAPING	407.884-010	GROUNDS KEEPER
				407.181-010	LANDSCAPE GARDENE
		(1)	(1)	304.887-014	YARD WORKER
		(1)	(1)	407.887-018	LABORER, LANDSCAP
160	LONGSHORE WORKERS AND STEVEDORES	(1)	(1)	922.887-090	STEVEDORE I

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970	NATIONAL (STATE	VOCATION	NAL EDUCATION SYSTEM	DICTIONARY OF	OCCUPATIONAL TITLES
CUDE	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
760	-CONTINUED	(1)	(1)	911.883-022	STEVEDORE I
761	TIMBERCUTTING AND	(1)	(1)	940.884-026	LOGGER, ALL-ROUND
	LOGGING WORKERS	(1)	(1)	940.884-018	FALLER
		(1)	(1)	940.884-010	BUCKER
		(1)	(1)	940.884-014	CORDWOOD CUTTER
		(1)	(1)	942.887-018	CHOKE SETTER
762	STOCK HANDLERS	04.20	RETAIL TRADE,	922.887-070	LABORER, STORES
		04.06	OTHER FOOD DISTRIBUTION	920.887-022	BAGGER
				290.887-010	SALESPERSON, FOOD
				299.468-010	CASHIER-CHECKER
		(1)	(1)	223.387-094	STOCK CLERK
763	TEAMSTERS	(1)	(1)	904.883-010	LOG-TRUCK DRIVER
		(1)	(1)	940.884-026	LOGGER, ALL-ROUND
764	VEHICLE WASHERS AND EQUIPMENT	17.11	CUSTODIAL SERVICES	381.887-030	PORTER II
	CLEANFRS	(1)	(1)	919.887-010	CLEANER
		(1)	(1)	915.887-018	PORTER, USED-CAR
770	WAREHOUSE LABORERS, N.E.C.	04.20	RETAIL TRADE, OTHER	922.887-070	LOT LABORER, STORES
780	OTHER LABORERS	01.0505	NURSERY OPERATION AND MANAGEMENT	406.887-030	NURSERY WORKER
		(1)	(1)	910.782-018	TRACK REPAIRER
		(1)	(1)	869.887-098	TRACK LAYER
		(1)	(1)	892.883-014	LABORER, HOISTING
785	NOT SPECIFIED	04.19	TRANSPORTATION	929.887-050	MATERIAL HANDLER
	LABORERS	04.20	RETAIL TRADE,	922.887-070	LABORER, STORE
		(1)	OTHER (1)	509.886-010	LABORER, GENERAL
	FARMERS AND FARM WORKERS				
301 (W)	FARMERS (OWNERS AND TENANTS)	01.01	AGRICULTURAL PRODUCTION	421.181-010	FARMER, GENERAL
302	FARM MANAGERS	01.0104	FARM BUSINESS	409.168-010	MANAGER, FARM
		01.01	MANAGEMENT AGRICULTURAL	421.181-010	FARMER, GENERAL
		01.0101	PRODUCTION ANIMAL SCIENCE	411.181-010	FARMER, DAIRY
				411.884-010	FARM HAND, DAIRY I
				419.181-010	ANIMAL BREEDER
		01.0505	NURSERY OPERATION	406.168-010	MANAGER, NURSERY
		01.0401	AND MANAGEMENT FOOD PRODUCTS	412.168-010	MANAGER, HATCHERY

Table 1. Conversion of National/State Matrix titles to vocational education classification system-Continued

1970	NATIONAL (CTATE	VOCATION	AL EDUCATION SYSTEM	DICTIONARY OF OCCUPATIONAL TITLES	
CENSUS	NATIONAL/STATE MATRIX TITLE	CODE	PROGRAM TITLE	CODE	TITLE
802	-CONTINUED	(1)	(1)	419.181-034	GAME FARMER
821	FARM LABOR SUPERVISORS	01.01	AGRICULTURAL PRODUCTION	429.131-010	FARM SUPERVISOR
		01.0101	ANIMAL SCIENCE	413.131-010	SUPERVISOR, STOCK RANCH
		01.0502	FLORICULTURE	406.181-010	FLOWER GROWER
822	FARM LABORERS, WAGE WORKERS	01.01	AGRICULTURAL PRODUCTION	421.883-010	FARM HAND, GENERAL
		01.0101	ANIMAL SCIENCE	413.884-030	RANCH HAND
				411.884-010	FARM HAND, DAIRY
823	FARM LABORERS; UNPAID FAMILY WORKERS	01.01	AGRICULTURAL PRODUCTION	421.883-010	FARM HAND, GENERAL
		(1)	(1)	421.887-010	FARM HAND, GENERAL
824	FARM SERVICE LABORERS, SELF- EMPLOYED	01.0299	AGRICULTURAL SUPPLIES/SERVICES, OTHER	412.687-014	CHICKEN SEXER
		01.0301	AGRICULTURAL POWER AND MACHINERY	424.883-010	HEAVY EQUIPMENT OPERATOR

The DOT code has more than 5 percent of the total estimated employment in the BLS National/State Matrix occupational title but there is no correspond-(1) ing specifically detailed vocational education instructional program code.

No DOT codes have more than 5 percent of the total

(2)

estimated employment in the BLS National/State Matrix occupational title.

Although a separate category is shown in the 1970 Census for Former Members of the Armed Forces, (3) data for this occupational category are not shown separately in the BLS National/State Matrix System.

Table 2. Vocational education instructional programs and related National/State Matrix titles

	INSTRUCTIONAL PROGRAM	NATIONAL/STATE
CODE	TITLE	MATRIX TITLE
01.	AGRICULTURE	
01.01	AGRICULTURAL PRODUCTION	BUYERS AND SHIPPERS, FARM PRODUCTS FARMERS (OWNERS AND TENANTS) FARM MANAGERS FARM LABOR SUPERVISORS FARM LABORERS, WAGE WORKERS FARM LABORERS, UNPAID FAMILY WORKERS
01.0101	ANIMAL SCIENCE	ATHLETES AND KINDRED WORKERS WRITERS, ARTISTS, AND ENTERTAINERS, N.E.C. ANIMAL CARETAKERS, EXCEPT FARE FARM LABOR SUPERVISORS FARM LABORERS, WAGE WORKERS
01.0134	FARM BUSINESS MANAGEMENT	FARM MANAGERS
01.02	AGRICULTURAL SUPPLIES/SERVICES	FARM MANAGEMENT ADVISORS
01.0202	FFEDS	MIXING OPERATIVES
01.0299	AGRICULTURAL SUPPLIES/SERVICES, OTHER	AGRICULTURAL AND BIOLOGICAL TECHNICIANS, EXCEPT HEALTH BLACKSMITHS ANIMAL CARETAKERS, EXCEPT FARM FARM SERVICE LABORERS, SELF— EMPLOYED
01.0301	AGRICULTURAL POWER AND MACHINERY	FARM IMPLEMENT MECHANICS AND REPAIRERS FARM SERVICE LABORERS, SELF- EMPLOYED
01.0401	FOOD PRODUCTS	BUYERS AND SHIPPERS, FARM PRODUCTS MEAT CUTTERS AND BUTCHERS, MANUFACTURING FARM MANAGERS
01.0502	FLORICULTURE	FARM LABOR SUPERVISORS
01.0504	LANDSCAPING	GARDENERS AND GROUNDSKEEPERS. EXCEPT FARM
01.0505	NURSERY OPERATION AND MANAGEMENT	OTHER LABORERS FARM MANAGERS
01.0601	FORESTS	FORESTERS AND CONSERVATIONIST
01.0603	SCIL	FORESTERS AND CONSERVATIONIST
01.99	AGRICULTURE, OTHER	ANIMAL CARETAKERS, EXCEPT FAR
04.	DISTRIBUTIVE EDUCATION	
04.01	ADVERTISING SERVICES	ECONOMISTS EDITORS AND REPORTERS PUBLIC RELATIONS SPECIALISTS AND PUBLICITY WRITERS ADVERTISING AGENTS AND SALES WORKERS DECORATORS AND WINDOW DRESSER
04.02	APPAREL AND ACCESSORIES	DEMONSTRATORS SALES CLERKS, RETAIL TRADE
04.03	AUTOMOTIVE	SALES REPRESENTATIVES, WHOLESALE TRADE SALES WORKERS, RETAIL TRADE PARKING ATTENDANTS
04.04	FINANCE AND CREDIT	BANK OFFICERS AND FINANCIAL MANAGERS STOCK AND BOND SALES AGENTS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

	INSTRUCTIONAL PROGRAM	NATIONAL/STATE	
CODE	TITLF	MATRIX TITLE	
04.05	FLORISTRY	DECORATORS AND WINDOW DRESSERS	
04.06	FOOD DISTRIBUTION	BUYERS AND SHIPPERS, FARM PRODUCTS SALES MANAGERS AND DEPARTMENT HEADS, RETAIL TRADE SALES REPRESENTATIVES, MHOLESALE TRADE SALES REPRESENTATIVES, MANUFACTURING INDUSTRIES CASHIERS MILLERS; GRAIN, FLOUR, SEED DELIVERY AND ROUTE WORKERS STOCK HANDLERS	
04.07	FOOD SERVICES	RESTAURANT, CAFETERIA, AND BAR MANAGERS HOUSEKEEPERS, EXCEPT PRIVATE HOUSEHOLD	
04.08	GENFRAL MERCHANDISE	PHARMACISTS BUYERS, WHOLESALE AND RETAIL TRADE RESTAURANT, CAFETERIA, AND BAR MANAGERS SALES MANAGERS AND DEPARTMENT HEADS, RETAIL TRADE MANAGERS AND ADMINISTRATORS, N.E.C. DEMONSTRATORS HUCKSTERS AND PEDDLERS SALES CLERKS, RETAIL TRADE SALES WORKERS, RETAIL TRADE, EXCEPT CLERKS SALES PEOPLE OF SERVICES AND CONSTRUCTION CASHIERS COLLECTORS, BILL AND ACCOUNT	
04.09	HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES AND EQUIPMENT	SALES REPRESENTATIVES, MANUFACTURING INDUSTRIES SALES REPRESENTATIVES, WHOLESALE TRADE SALES WORKERS, RETAIL TRADE, EXCEPT CLERKS	
04.10	HOME FURNISHINGS	SALES WORKERS, RETAIL TRADE, EXCEPT CLERKS	
04.11	HOTEL AND LODGING	MANAGERS AND SUPERINTENDENTS, BUILDING COUNTER CLERKS, EXCEPT FOOD ATTENDANTS, RECREATION AND . AMUSEMENT BAGGAGE PORTERS AND BELLHOPS BOARDING AND LODGING HOUSE- KEEPERS	
04.12	INDUSTRIAL MARKETING	SALES MANAGERS, EXCEPT RETAIL TRADE SALES MANAGERS AND DEPARTMENT HEADS, RETAIL TRADE SALES REPRESENTATIVES, MANUFACTURING INDUSTRIES SALES REPRESENTATIVES, HHOLESALE TRADE OFFICE MACHINE REPAIRERS ENGINEERS, SALES	
04.13	INSURANCE	INSURANCE AGENTS, BROKERS, AND UNDERWRITERS INSURANCE ADJUSTORS, EXAMINERS, AND INVESTIGATORS	
04.15	PERSONAL SERVICES	FMBALMERS PHOTOGRAPHERS FUNERAL DIRECTORS	

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

	INSTRUCTIONAL PROGRAM	NATIONAL/STATE
CUDE	TITLE	MATRIX TITLE
04.15	-CONTINUED	BARBERS HAIRDRESSERS AND COSMETOLOGISTS
04.10	PETROL FUM	SALES MANAGERS AND DEPARTMENT HEADS, RETAIL TRADE GARAGE WORKERS AND GAS STATION ATTENDANTS
04.17	RFAL ESTATF	MANAGERS AND SUPERINTENDENTS, BUILDING PURCHASING AGENTS AND BUYERS, N.E.C. REAL ESTATE AGENTS AND BROKERS REAL ESTATE APPRAISERS
)4.18	RECREATION AND TOURISM	RECREATION WORKERS
04.19	TRANSPORTATION	BUS DRIVERS TAXICAB DRIVERS AND CHAUFFEURS FREIGHT AND MATERIAL HANDLERS NOT SPECIFIED LABORERS FLIGHT ATTENDANTS TICKET STATION AND EXPRESS AGENTS
)4 <b>.</b> 20	RETAIL TRADE, OTHER	HUCKSTERS AND PEDDLERS DEMONSTRATORS STOCK CLERKS OR STOREKEEPERS FREIGHT AND MATERIAL HANDLERS STOCK HANDLERS MAREHOUSE LABORERS, N.E.C. NOT SPECIFIED LABORERS
) <b>4.</b> 99	DISTRIBUTIVE EDUCATION, OTHER	BUYERS, WHOLESALE AND RETAIL TRADE PURCHASING AGENTS AND BUYERS, N.E.C. SALES PEOPLE OF SERVICES AND CONSTRUCTION
07.	HEALTH OCCUPATIONS EDUCATION	
07.0101	DENTAL ASSISTING	DENTAL LABORATORY TECHNICIANS DENTAL ASSISTANTS HEALTH AIDES, EXCEPT NURSING
7.0102	DENTAL HYGIFNE (ASSOCIATE DEGREE)	DENTAL HYGIENISTS
7.0103	DENTAL LABURATORY TECHNICIAN	DENTAL LABORATORY TECHNICIAN
7.0201	CYTOLOGY (CYTOTECHNOLOGY)	BIOLOGICAL SCIENTISTS
7.0202	HISTOLOGY	CLINICAL LABORATORY TECHNOLO- GISTS AND TECHNICIANS
7.0203	MEDICAL LABORATORY ASSISTING	CLINICAL LABORATORY TECHNOLO- GISTS AND TECHNICIANS
07.0301	NURSING (ASSOCIATE DEGREE)	REGISTERED NURSES HEALTH TRAINEES
07.0302	PRACTICAL (VOCATIONAL) NURSING	HEALTH TRAINEES LAY MIDWIVES PRACTICAL NURSES
07.0303	NURSING ASSISTANCE (AIDE)	NURSING AIDES, ORDERLIES, AND ATTENDANTS PRACTICAL NURSES
07.0304	PSYCHIATRIC AIDE	THERAPISTS OTHER HEALTH TECHNOLOGISTS AND TECHNICIANS ORDERLIES AND ATTENDANTS
7.0305	SURGICAL TECHNICIAN (OPERATING ROOM TECHNICIANS)	OTHER HEALTH TECHNOLOGISTS AND TECHNICIANS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

	INSTRUCTIONAL PROGRAM	NATIONAL/STATE
CODE	TITLE	MATRIX TITLE
07.0305 07.0402	-CONTINUED PHYSICAL THERAPY	HEALTH TRAINEES THERAPISTS THERAPY ASSISTANTS HEALTH AIDES, EXCEPT NURSING
7.0601	OPHTHALMIC DISPENSING	OPTICIANS, AND LENS GRINDERS AND POLISHERS
7.0902	ELECTROCARDIOGRAPH TECHNICIAN	OTHER HEALTH TECHNOLOGISTS AND TECHNICIANS
7.0903	INHALATION THERAPY	THERAPISTS
7.0904	MEDICAL ASSISTANT (PHYSICIAN'S OFFICE)	HEALTH AIDES, EXCEPT NURSING
7.0909	MORTUARY SCIENCE	EMBALMERS
09.	HOME ECONOMICS	
9.0201	CARE AND GUIDANCE OF CHILDREN	CHILD CARE WORKERS, EXCEPT PRIVATE HOUSEHOLD SCHOOL MONITORS CHILD CARE WORKERS, PRIVATE HOUSEHOLD CLEANERS AND SERVANTS, PRIVATE HOUSEHOLD
9.0202	CLOTHING MANAGEMENT, PRODUCTION, AND SERVICES	CHECKERS, EXAMINERS, AND INSPECTORS, MANUFACTURING DRESSMAKERS LAUNDERERS, PRIVATE HOUSEHOLD
9.0203	FUUD MANAGEMENT, PRODUCTION, AND SERVICES	RESTAURANT, CAFETERIA, AND BAR MANAGERS COOKS, PRIVATE HOUSEHOLD
9.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	LODGING QUARTERS CLEANERS, EXCEPT PRIVATE HOUSEHOLD BUILDING INTERIOR CLEANERS, N.E.C. HOUSEKEEPERS, EXCEPT PRIVATE HOUSEHOLD COOKS, PRIVATE HOUSEHOLD HOUSEKEEPERS, PRIVATE HOUSEHOLD ATTENDANTS, PERSONAL SERVICE, N.E.C.
14.	OFFICE OCCUPATIONS	
4.0101	ACCOUNTANTS	ESTIMATORS AND INVESTIGATORS.
4.0102	BOOKKFFPERS	BOOKKEEPERS PROOFREADERS
4.0103	CASHIERS	CASHIERS
4.0104	MACHINE OPERATORS (BILLING, BOOKKEEPING, AND COMPUTING)	BOOKKEEPING AND BILLING MACHINE OPERATORS CALCULATING MACHINE OPERATORS TABULATING MACHINE OPERATORS PAYROLL AND TIMEKEEPING CLERKS
4.0105	TELLERS	BANK TELLERS
4.0201	COMPUTER AND CONSOLE OPERATORS	CLERICAL SUPERVISORS, N.E.C. COMPUTER AND PERIPHERAL EQUIP- MENT OPERATORS KEY PUNCH OPERATORS
	KEN DINCH AND CODING FOUR PHENT	KEY PUNCH OPERATORS
4.020201	KEY PUNCH AND CODING EQUIPMENT OPERATORS	TABULATING MACHINE OPERATORS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

	INSTRUCTIONAL PROGRAM	NATIONAL/STATE
CODE	TITLE	MATRIX TITLE
14.0203	-CONTINUED	COMPUTER AND PERIPHERAL EQUIP- MENT OPERATORS
14.0204	SYSTEMS ANALYSTS	COMPUTER SYSTEMS ANALYSTS COMPUTER SPECIALISTS, N.E.C.
14.0301	DUPLICATING MACHINE OPERATORS	DUPLICATING MACHINE OPERATORS
14.0302	FILE CLERKS	ENUMERATORS AND INTERVIEWERS FILE CLERKS
14.0303	GENERAL OFFICE CLERKS	ACCOUNTANTS BILLING CLERKS BOOKKEEPERS CLERICAL SUPERVISORS, N.E.C. OFFICE MACHINE OPERATORS, N.E.C. PAYROLL AND TIMEKEEPING CLERKS STATISTICAL CLERKS MISCELLANEOUS CLERICAL WORKERS NOT SPECIFIED CLERICAL WORKERS BOOKKEEPING AND BILLING MACHINE OPERATORS
14.0399	FILING, DFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	BILLING CLERKS CLERICAL ASSISTANTS, SOCIAL WELFARE TABULATING MACHINE OPERATORS OFFICE MACHINE OPERATORS, N.E.C. PROOFREADERS MISCELLANEOUS CLERICAL WORKERS NOT SPECIFIED CLERICAL WORKERS
14.0401	CUMMUNICATIONS SYSTEMS CLERKS AND OPERATORS	TELEGRAPH OPERATORS TELEPHONE OPERATORS NOT SPECIFIED APPRENTICES
14.0403	MAIL AND POSTAL CLERKS	POSTMASTERS AND MAIL SUPERIN- TENDENTS MAIL CARRIERS, POST OFFICE MAIL HANDLERS, EXCEPT POST OFFICE POSTAL CLERKS
14.0404	MAIL PREPARING AND MAIL HANDLING MACHINE OPERATORS	OFFICE MACHINE OPERATORS, N.E.C.
14.0405	MFSSENGERS AND OFFICE BOYS AND GIRLS	MESSENGERS AND OFFICE HELPERS TELEGRAPH MESSENGERS
14.0406	RECEPTIONISTS AND INFORMATION CLERKS	RECEPTIONISTS
14.0499	INFORMATION COMMUNICATION OCCUPATIONS, OTHER	LIBRARIANS ENUMERATORS AND INTERVIEWERS LIBRARY ATTENDANTS AND ASSISTANTS MAIL HANDLERS, EXCEPT POST OFFICE MESSENGERS AND OFFICE HELPERS METER READERS, UTILITY MISCELLANEOUS CLERICAL MORKERS
14.0501	PLANNING AND PRODUCTION CLERKS	EXPEDITERS AND PRODUCTION CONTROLLERS
14.0502	QUALITY CONTROL CLERKS	INSURANCE ADJUSTORS, EXAMINERS AND INVESTIGATORS
14.0503	SHIPPING AND RECEIVING CLERKS	EXPEDITORS AND PRODUCTION CONTROLLERS SHIPPING AND RECEIVING CLERKS GRADERS AND SORTERS, MANUFACTURING
14.0504	STUCK AND INVENTORY CLERKS	STOCK CLERKS OR STOREKEEPERS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

	INSTRUCTIONAL PROGRAM	NATIONAL/STATE
CODE	TITLE	MATRIX TITLE
14.0505	TRAFFIC, KATE, AND TRANSPORTATION CLERKS	DISPATCHERS AND STARTERS, VEHICLE
14.0602	INTERVIEWERS AND TEST TECHNICIANS	PERSONNEL AND LABOR RELATIONS WORKERS
14.0603	PERSONNEL ASSISTANTS	PERSONNEL AND LABOR RELATIONS WORKERS FILE CLERKS
14.0702	SECRETARIES	SECRETARIES, LEGAL SECRETARIES, MEDICAL SECRETARIES, N.E.C.
14.0703 14.0801	STENOGRAPHERS ADMINISTRATIVE ASSISTANTS	STENOGRAPHERS OFFICIALS AND ADMINISTRATORS, N.E.C.
14.0802	BUDGET MANAGEMENT ANALYSTS	ASSESSORS, CONTROLLERS, AND TREASURERS; LOCAL PUBLIC ADMINISTRATION
14.0804	DATA METHODS AND SYSTEMS PROCEDURES ANALYSTS	OPERATORS AND SYSTEMS RESEARCHERS AND ANALYSTS
14.0805	OFFICE MANAGERS AND CHIEF CLERKS	OFFICE MANAGERS, N.E.C. CLERICAL SUPERVISORS, N.E.C.
14.0899	SUPERVISORY AND ADMINISTRATIVE OCCUPATIONS, OTHER	CREDIT AND COLLECTION MANAGERS
14.0901	CLERK TYPISTS	TYPISTS
14.0902	TYPISTS	TELEGRAPH OPERATORS TYPISTS
14.99	OFFICE OCCUPATIONS, OTHER	COLLECTORS, BILL AND ACCOUNT ESTIMATORS AND INVESTIGATORS, N.E.C. STATISTICAL CLERKS
16.	TECHNICAL EDUCATION	
16.0105	CHEMICAL TECHNOLOGY	AGRICULTURAL AND BIOLOGICAL TECHNICIANS, EXCEPT HEALTH CHEMICAL TECHNICIANS ENGINEERING AND SCIENCE TECH- NICIANS, N.E.C. OTHER TECHNICIANS, EXCEPT HEALTH
16.0107	FLECTRICAL TECHNOLOGY	FLECTRICAL AND ELECTRONIC ENGINEERING TECHNICIANS
16.0108	ELECTRONIC TECHNOLOGY	ELECTRICAL AND ELECTRONIC ENGINEERING TECHNICIANS OTHER TECHNICIANS, EXCEPT HEALTH DATA PROCESSING MACHINE REPAIRERS RADIO AND TELEVISION REPAIRERS
16.0111	INDUSTRIAL TECHNOLOGY	INDUSTRIAL ENGINEERING TECHNICIANS
16.0113	MECHANICAL TECHNOLOGY	ENGINEERS, OTHER MECHANICAL ENGINEERING TECHNICIANS ENGINEERING AND SCIENCE TECHNICIANS, N.E.C. TOOL PROGRAMMERS, NUMERICAL CONTROL
16.011303	PRODUCTION	INDUSTRIAL ENGINEERING TECHNICIANS
16.0114	METALLURGICAL TECHNOLOGY	HEAT TREATERS, ANNEALERS, AND TEMPERERS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

	INSTRUCTIONAL PROGRAM	NATIONAL/STATE
CODE	TITLE	MATRIX TITLE
.6.0117	SCIENTIFIC DATA PROCESSING	COMPUTER PROGRAMMERS
6.0203	FOOD PROCESSING TECHNOLOGY	AGRICULTURAL AND BIOLOGICAL TECHNICIANS, EXCEPT HEALTH
6.0601	COMMERCIAL PILOT TRAINING	AIRPLANE PILOTS
6.0699	MISCELLANEOUS TECHNICAL EDUCATION, OTHER	ATMOSPHERIC AND SPACE SCIENTISTS
17.	TRADE AND INDUSTRIAL OCCUPATION	s
7.01	AIR CONDITIONING	AIR CONDITIONING, HEATING, AND REFRIGERATION MECHANICS AND REPAIRERS
7.0101	COOLING	AIR CONDITIONING, HEATING, AND REFRIGERATION MECHANICS AND REPAIRERS
7.0102	HEATING	AIR CONDITIONING, HEATING, AND REFRIGERATION MECHANICS AND REPAIRERS
7.02	APPLIANCE REPAIR	HOUSEHOLD APPLIANCE AND ACCES— SORY INSTALLERS AND REPAIRERS
7.0201	FLECTRICAL APPLIANCES	HOUSEHOLD APPLIANCE AND ACCES- SORY INSTALLERS AND REPAIRERS
7.0202	GAS APPLIANCES	HOUSEHOLD APPLIANCE AND ACCES- SORY INSTALLERS AND REPAIRERS
7.03	AUTOMOBILE SERVICES	INSPECTORS, EXCEPT CONSTRUC- TION, PUBLIC ADMINISTRATION
7.0301	BODY AND FENDER	AUTOMOBILE BODY REPAIRERS PAINTERS, MANUFACTURED ARTICLES
7.0302	MECHANICS	AUTOMOBILE BODY REPAIRERS AUTOMOBILE MECHANICS FARM IMPLEMENT MECHANICS AND REPAIRERS HEAVY EQUIPMENT MECHANICS, INCLUDING DIESEL
7.0303	SPECIALIZATION, OTHER	AUTOMOBILE ACCESSORY INSTALLERS
7.0401	AIRCRAFT MAINTENANCE	AIRCRAFT MECHANICS AND REPAIRERS
7.0402	AIRCRAFT OPERATIONS	FLIGHT ENGINEERS RADIO OPERATORS
7.0403	GROUND OPERATIONS	AIR TRAFFIC CONTROLLERS
7.06	BUSINESS MACHINE MAINTENANCE	DATA PROCESSING MACHINE REPAIRERS OFFICE MACHINE REPAIRERS
7.07	COMMERCIAL ART OCCUPATIONS	PAINTERS AND SCULPTORS
7.0701	INTERIOR DECORATING	DESIGNERS DECORATORS AND WINDOW DRESSERS
7.0703	PRODUCT DESIGN	PAINTERS AND SCULPTORS
7.08	COMMERCIAL FISHING OCCUPATIONS	OFFICERS, PILOTS, AND PURSERS; SHIP GRADERS AND SORTERS, MANUFACTURING MEAT CUTTERS AND BUTCHERS, MANUFACTURING

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

<del></del>	INSTRUCTIONAL PROGRAM	NATIONAL/STATE	
CODE	TITLE	MATRIX TITLE	
17.08 17.0801	-CONTINUED SFAMANSHIP	FISHERS, HUNTERS, AND TRAPPERS SAILORS AND DECKHANDS	
17.0802	SHIP AND BOAT OPERATION AND MAINTENANCE	BOAT OPERATORS	
17.0901	PHOTOGRAPHIC LABURATURY AND DARKROOM OCCUPATIONS	OFFICE MACHINE OPERATORS, N.E.C. PHOTOGRAPHIC PROCESS WORKERS	
17.10	CONSTRUCTION AND MAINTENANCE TRADES	JANITORS AND SEXTONS	
17.1001	CARPENTRY	CARPENTERS CARPENTER APPRENTICES CARPENTERS HELPERS	
17.1002	ELECTRICITY	ELECTRICIANS	
17.100301	MAINTENANCE, HEAVY EQUIPMENT	HEAVY EQUIPMENT MECHANICS, INCLUDING DIESEL	
17.100302	OPERATION, HEAVY EQUIPMENT	BULLDOZER OPERATORS CRANE, DERRICK, AND HOIST OPERATORS EXCAVATING, GRADING, AND ROAD MACHINE OPERATORS; EXCEPT BULLDOZER DRILLERS, EARTH	
17.1004	MASONRY	BRICKMASONS AND STONEMASONS TILE SETTERS	
17.1005	PAINTING AND DECURATING	PAINTERS, CONSTRUCTION AND MAINTENANCE PAINTER APPRENTICES PAPER HANGERS PAINTERS, MANUFACTURED ARTICLES	
17.1006	PLASTERING	PLASTERERS DRYWALL INSTALLERS AND LATHERS	
17.1007	PLUMBING AND PIPEFITTING	PLUMBERS AND PIPEFITTERS	
17.1008	DRYWALL INSTALLATION	DRYWALL INSTALLERS AND LATHERS	
17.1009	GLAZING	GLAZIERS	
17.1010	ROOFING	ROOFERS AND SLATERS	
17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	BOILERMAKERS CEMENT AND CONCRETE FINISHERS FLOOR LAYERS, EXCEPT TILE SETTERS MILLWRIGHTS STRUCTURAL METAL CRAFT WORKERS TILE SETTERS ASBESTOS AND INSULATION WORKERS BLASTERS CONSTRUCTION LABORERS, EXCEPT CARPENTERS' HELPERS	
17.11	CUSTODIAL SERVICES	VEHICLE WASHERS AND EQUIPMENT CLEANERS NOT SPECIFIED LABORERS LODGING QUARTERS CLEANERS, EXCEPT PRIVATE HOUSEHOLD BUILDING INTERIOR CLEANERS, N.E.C. JANITORS AND SEXTONS ATTENDANTS, PERSONAL SERVICE, N.E.C. HOUSEKEEPERS, EXCEPT PRIVATE HOUSEHOLD	
17.12	DIESEL MECHANIC	RAILROAD AND CAR SHOP REPAIRERS	

Table 2. Vocational education instructional programs and related National/State Matrix  $\underline{titles}$ —Continued

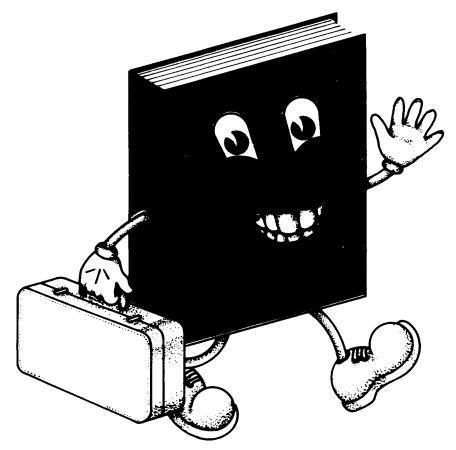
	INSTRUCTIONAL PROGRAM	NATIONAL/STATE	
CODE	TITLE	MATRIX TITLE	
7.13	DRAFTING	DRAFTERS	
7.14	ELECTRICAL OCCUPATIONS	ELECTRICIANS	
7.1401	INDUSTRIAL ELECTRICIAN	TELFPHONE LINE INSTALLERS AND REPAIRERS	
7.1402	LINEMAN	ELECTRIC POWER LINE AND CABLE INSTALLERS AND REPAIRERS TELEPHONE LINE INSTALLERS AND REPAIRERS	
7.1403	MOTOR REPAIRMEN	WINDING OPERATIVES	
7.1501	COMMUNICATIONS	TELEPHONE INSTALLERS AND REPAIRERS	
7.1503	RADIO/TELEVISION	RADIO AND TELEVISION REPAIRERS	
7.16	FABRIC MAINTENANCE SFRVICES	TATLORS CLOTHING IRONERS AND PRESSERS LAUNDRY AND DRY CLEANING OPERATIVES, N.E.C. DYERS COUNTER CLERKS, EXCEPT FOOD	
7.1601	DRY CLEANING	LAUNDRY AND DRY CLEANING OPERATIVES, N.E.C.	
7.1602	LAUNDERING	CLOTHING IRONERS AND PRESSERS LAUNDRY AND DRY CLEANING OPERATIVES, N.E.C.	
7.1901	COMPOSITION, MAKEUP, AND TYPESETTING	COMPOSITORS AND TYPESETTERS PRINTING TRADES APPRENTICES, EXCEPT PRINTING PRESS ELECTROTYPERS AND STEREOTYPERS	
7.1902	PRINTING PRESS OCCUPATIONS	PRINTING TRADES APPRENTICES, EXCEPT PRINTING PRESS PRINTING PRESS OPERATORS PRINTING PRESS APPRENTICES	
7.1903	LITHOGRAPHY, PHOTOGRAPHY, AND PLATE- MAKING	PHOTOENGRAVERS AND LITHOGRAPHERS	
7.1904	PHÚT DE NGRAV I NG	PHOTOENGRAVERS AND LITHOGRAPHERS	
7.2002	RADIOGRAPHER	RADIOLOGIC TECHNOLOGISTS AND TECHNICIANS	
7.2101	INSTRUMENTS (OTHER THAN WATCHES AND CLOCKS)	MISCELLANEOUS MECHANICS AND REPAIRERS OPTICIANS, AND LENS GRINDERS AND POLISHERS	
7.2102	WATCHMAKING AND REPAIR	JEWELERS AND WATCHMAKERS	
7.22	MARITIME OCCUPATIONS	MECHANICS, EXCEPT AUTO REPAIRERS	
7.2301	FOUNDRY	MOLDERS, METAL MOLDER APPRENTICES FURNACE TENDERS, SMELTERERS, AND POURERS, METAL	
7.2302	MACHINE SHOP	JOB AND DIE SETTERS, METAL MACHINISTS MACHINIST APPRENTICES PATTERN AND MODEL MAKERS, EXCEPT PAPER OTHER PRECISION MACHINE OPERATIVES	
7.2303	MACHINE TOOL OPERATION	CUTTING OPERATIVES, N.E.C. DRILL PRESS OPERATORS GRINDING MACHINE OPERATIVES	

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

	INSTRUCTIONAL PROGRAM	NATIONAL/STATE
ÇOĐE	TITLE	MATRIX TITLE
17.2303	-CONTINUEO	LATHE AND MILLING MACHINE OPERATIVES OTHER PRECISION MACHINE OPERATIVES PUNCH AND STAMPING PRESS OPERATIVES SAWYERS
17.2304	MFTAL TRADES, COMBINED	JOB AND DIE SETTERS, METAL STRUCTURAL METAL CRAFT WORKERS PUNCH AND STAMPING PRESS OPERATIVES
17.2305	SHEFT METAL	SHEET METAL WORKERS AND TINSMITHS SHEET METAL APPRENTICES
17.230602	ELECTRIC WELDING	WELDERS AND FLAME CUTTERS
17.230603	COMBINATION WELDING	WELDERS AND FLAME CUTTERS
17.230604	BRAZING AND SOLDERING	SOLDERERS
17.2307	TOOL AND DIE MAKING	TOOL AND DIE MAKERS TOOL AND DIE MAKER APPRENTICES
17.2399	METALWORKING, OTHER	BLACKSMITHS ENGRAVERS, EXCEPT PHOTO- ENGRAVERS FORGE AND HAMMER OPERATORS PHOTOENGRAVERS AND LITHOGRAPHERS ROLLERS AND FINISHERS, METAL FILERS, POLISHERS, SANDERS, AND BUFFERS METAL PLATERS GRINDING MACHINE OPERATIVES
17.24	METALLURGY	HEAT TREATERS, ANNEALERS, AND TEMPERERS INSPECTORS, N.E.C.
17.2601	BARBERING	BARBERS
17.2602	COSMETOLOGY	HAIRDRESSERS AND COSMETOLO- GISTS PERSONAL SERVICE APPRENTICES
17.2801	FIREMAN TRAINING	FIRE FIGHTERS
17.2802	LAW ENFORCEMENT TRAINING	CROSSING GUARDS AND BRIDGE TENDERS WARSHALS AND CONSTABLES POLICE AND DETECTIVES SHERIFFS AND BAILIFFS
17.2899	PUBLIC SERVICE OCCUPATIONS, OTHER	CONSTRUCTION INSPECTORS, PUBLIC ADMINISTRATION
17.2901	BAKER	BAKERS
17.2902	COOK/CHEF	COOKS, EXCEPT PRIVATE HOUSE- HOLD FOOD SERVICE WORKERS, N.E.C., EXCEPT PRIVATE HOUSEHOLD
17.2903	MEAT CUTTFR	MEAT CUTTERS AND BUTCHERS, EXCEPT MANUFACTURING MEAT CUTTERS AND BUTCHERS, MANUFACTURING
17.2904	WAITER/WAITRESS	WAITERS* ASSISTANTS FOOD COUNTER AND FOUNTAIN WORKERS WAITERS
17.31	SMALL ENGINE REPAIR, INTERNAL COMBUSTION	MISCELLANEOUS MECHANICS AND REPAIRERS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued  $\frac{1}{2}$ 

	INSTRUCTIONAL PROGRAM	
CODE	TITLE	NATIONAL/STATE MATRIX TITLE
17.32	STATIONARY ENERGY SOURCES OCCUPATIONS	POWER STATION OPERATORS STATIONARY ENGINEERS FURNACE TENDERS AND STOKERS, EXCEPT METAL
17.3202	PUMPING PLANTS	RAIL VEHICLE OPERATORS, N.E.C.
17.3301	DRESSMAKING	DRESSMAKERS
17.3302	TAILORING	TAILORS DRESSMAKERS
17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	LOOM FIXERS TAILORS CRAFT AND KINDRED WORKERS, N.E.C. CUTTING OPERATIVES, N.E.C. DYERS MILLINERS SEWERS AND STITCHERS CARDING, LAPPING, AND COMBING OPERATIVES KNITTERS, LOOPERS, AND TOPPERS SPINNERS, TWISTERS, AND WINDERS WEAVERS NOT SPECIFIED OPERATIVES
17.34	LEATHERWORKING	UPHOLSTERERS
17.3401	SHUE MANUFACTURING	SHOE REPAIRERS SHOEMAKING MACHINE OPERATIVES
17.3432	SHOE REPAIR	SHOE REPAIRERS
17.35	UPHOLSTERING	AUTOMOBILE ACCESSORY INSTALLERS UPHOLSTERERS
17.3601	MILLWORK AND CABINETMAKING	CABINETMAKERS SPECIFIED CRAFT APPRENTICES, N.E.C. SAWYERS
17.3699	WOODWORKING, OTHER	SAWYERS



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