

# Employment probability analysis project. Selected occupational characteristics data for 1970 census occupational titles: Data, people, things, GED, and SVP occupation level

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EMPLOYMENT PROBABILITY ANALYSIS PROJECT  
SELECTED OCCUPATIONAL CHARACTERISTICS DATA  
FOR 1970 CENSUS OCCUPATIONAL TITLES:  
DATA, PEOPLE, THINGS, GED, AND SVP  
OCCUPATION LEVEL

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This booklet contains selected occupation characteristics data for about 580 Census-coded occupation titles (1970 classification). These data were prepared by Lloyd V. Temme, "Occupation: Meanings and Measures,"<sup>1</sup> Table "DOT and Prestige Scores for All Occupations -- 1970," pp. 293-333. Some of these occupation characteristics are being used in research currently underway at the Social Welfare Regional Research Institute, Boston College.

The occupation data presented in Table 4, below, are based on information contained in the Department of Labor's Dictionary of Occupational Titles (DOT). The DOT presents, in several volumes, job definitions and selected job characteristics for over 22,000 specific job titles. The five DOT characteristics for Census occupational titles presented here: Data (D), People (P), Things (T), General Educational Development (GED), and Specific Vocational Preparation (SVP), are weighted averages of the interval-scale data provided for DOT job titles. A special edition of the Current Population Survey (CPS, April 1971) provided the linkages and weights used in the conversion from DOT to Census occupational titles.

Appendix A (from DOT, Volume II, 1965<sup>2</sup>) explains the first three job characteristics, D, P, and T. Appendix B shows the scale values and definitions of the GED measure. Appendix C details the last measure, SVP.

The aggregation of these job characteristics data from the DOT to Census classifications involved three steps:<sup>3</sup>

(1) The April 1971 CPS coded each respondent's occupation according to the 1970 3-digit Census code for occupation (see Table 1).

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<sup>1</sup>Bureau of Social Sciences Research, Inc., Washington D.C., June 1975

<sup>2</sup>Dictionary of Occupational Titles, Volume II, 1965, Third Edition, U. S. Department of Labor, Manpower Administration, Bureau of Employment Security.

<sup>3</sup>See Temme, op. cit., for a detailed explanation of the aggregation method.

(2) The United States Employment Service coded each individual's occupation according to the 9-digit DOT code for occupation. DOT data for D, P, T, GED, and SVP were then merged onto the CPS file based on the DOT occupation code.

(3) The data for specific DOT job titles were aggregated to the level of precision in the 1970 Census classifications, using the "person weight" provided in the CPS sample.

Data shown in Table 4, then, should be interpreted as suggesting a "direction" or "degree" of correspondence with one of the interval scales for each of the five DOT measures; these data do not represent a metric scale.

Table 4 also includes a classification variable, the Occupation Level, O\_L, of each Census occupation. This variable is based on specific intervals of the GED and SVP scores. Roughly, the lowest occupation level corresponds to low GED and low SVP and the highest occupation level corresponds to high GED and high SVP. Table 3 presents the seventeen (17) occupation levels appearing in Table 4. These occupation levels are used to aggregate different 3-digit occupation subsets which have similar job training requirements. They are not constrained to follow major occupation divisions in the 1970 Census classification system. Table 2 provides a list of industries appearing in Table 4.

The Social Welfare Regional Research Institute takes no responsibility for errors in the original research paper by Temme nor for errors in transcription.<sup>4</sup> Caveat utendus. For further information, contact Dr. Lynn B. Ware, Senior Research Associate, Social Welfare Regional Research Institute, Boston College, Chestnut Hill, Massachusetts, 02167.

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<sup>4</sup>Temme's table was a Xerox of computer output and some entries were virtually unreadable. Most attention was paid to GED and SVP scores, least attention to his derived measures of "self-direction" and "prestige." Unreadable entries were checked against similar data for 1960 Census occupation titles also provided by Temme. The DOT supplement was consulted directly to provide guidance in at least three instances.

Table 1: 1970 Census of Population -- Occupation Classification System

Occupation Code	PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS	Occupation Code	PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS--Continued
001	Accountants	074	Nurses, dietitians, and therapists
002	Architects	075	Dietitians
	Computer specialists	076	Registered nurses
003	Computer programmers	076	Therapists
004	Computer systems analysts	080	Health technologists and technicians
005	Computer specialists, n.e.c.	081	Clinical laboratory technologists and dental hygienists
	Engineers	082	Health record technologists and technicians
006	Aeronautical and astronautical engineers	083	Radiologic technologists and technicians
010	Chemical engineers	084	Therapy assistants
011	Civil engineers	085	Health-technologists and technicians, n.e.c.
012	Electrical and electronic engineers	086	Religious workers
013	Industrial engineers	090	Clergymen
014	Mechanical engineers	091	Religious workers, n.e.c.
015	Metallurgical and materials engineers	092	Social scientists
020	Mining engineers	093	Economists
021	Petroleum engineers	094	Political scientists
022	Sales engineers	095	Psychologists
023	Engineers, n.e.c.	096	Sociologists
024	Farm management advisors	100	Urban and regional planners
025	Foresters and conservationists	101	Social scientists, n.e.c.
026	Home management advisors	102	Social and recreation workers
	Lawyers and judges	103	Social workers
030	Judges	104	Recreation workers
031	Lawyers	105	Teachers, college and university
	Librarians, archivists, and curators	110	Agriculture teachers
032	Librarians	111	Atmospheric, earth, marine, and space
033	Archivists and curators	112	Biology teachers
	Mathematical specialists	113	Chemistry teachers
034	Actuaries	114	Physics teachers
035	Mathematicians	115	Engineering teachers
036	Statisticians	116	Mathematics teachers
	Life and physical scientists	120	Health specialties teachers
042	Agricultural scientists	121	Psychology teachers
043	Atmospheric and space scientists	122	Business and commerce teachers
044	Biological scientists	123	Economics teachers
045	Chemists	124	History teachers
051	Geologists	125	Sociology teachers
052	Marine scientists	126	Social science teachers, n.e.c.
053	Physicists and astronomers	130	Art, drama, and music teachers
054	Life and physical scientists, n.e.c.	131	Coaches and physical education teachers
055	Operations and systems researchers and analysts	132	Education teachers
056	Personnel and labor relations workers	133	English teachers
	Physicians, dentists, and related practitioners	134	Foreign language teachers
061	Chiropractors	135	Home economics teachers
062	Dentists	136	Law teachers
063	Optometrists	137	Theology teachers
064	Pharmacists	138	Trade, industrial, and technical
065	Physicians, medical and osteopathic	139	Miscellaneous teachers, college and
071	Podiatrists	140	Teachers, college and university
072	Veterinarians		specified
*073	Health practitioners, n.e.c.		

Occupation Code	PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS—Continued	Occupation Code	MANAGERS AND ADMINISTRATORS, FARM—Continued
141	Teachers, except college and university Adult education teachers	225	Purchasing agents and buyers, n.e.c.
142	Elementary school teachers	226	Railroad conductors
143	Prekindergarten and kindergarten teachers	230	Restaurant, cafeteria, and bar managers
144	Secondary school teachers	231	Sales managers and department heads, retail trade
145	Teachers, except college and university, n.e.c.	233	Sales managers, except retail trade
150	Engineering and science technicians	235	School administrators, college
151	Agriculture and biological technicians, except health	240	School administrators, elementary and secondary
152	Chemical technicians	245	Managers and administrators, n.e.c.
153	Draftsmen		
154	Electrical and electronic engineering technicians		
155	Industrial engineering technicians		
156	Mechanical engineering technicians		
161	Mathematical technicians		
162	Surveyors		
	Engineering and science technicians, n.e.c.		
163	Technicians, except health, and engineering and science	260	Advertising agents and salesmen
164	Airplane pilots	261	Auctioneers
165	Air traffic controllers	262	Demonstrators
170	Embalmers	264	Hucksters and peddlers
171	Flight engineers	265	Insurance agents, brokers, and underwriters
172	Radio operators	266	Newsboys
173	Tool programmers, numerical control	270	Real estate agents and brokers
174	Technicians, n.e.c.	271	Stock and bond salesmen
	Vocational and educational counselors	281	Sales representatives, manufacturing industries 107-399)
	Writers, artists, and entertainers	282	Sales representatives, wholesale trade (Ind. 01 507-599)
175	Actors	283	Sales clerks, retail trade (Ind. 608-699 except 639, 649, 667, 668, 688)
180	Athletes and kindred workers	284	Salesmen, retail trade (Ind. 607, 618, 639, 649, 668, 688)
181	Authors	285	Salesmen of services and construction (Ind. 407-499, 707-947)
182	Dancers		
183	Designers		
184	Editors and reporters		
185	Musicians and composers		
190	Painters and sculptors		
191	Photographers		
192	Public relations men and publicity writers		
193	Radio and television announcers		
194	Writers, artists, and entertainers, n.e.c.		
195	Research workers, not specified		
	MANAGERS AND ADMINISTRATORS, EXCEPT FARM		
201	Assessors, controllers, and treasurers; local public administration	301	Bank tellers
202	Bank officers and financial managers	303	Billing clerks
203	Buyers and shippers, farm products	305	Bookkeepers
205	Buyers, wholesale and retail trade	310	Cashiers
210	Credit men	311	Clerical assistants, social welfare
211	Funeral directors	312	Clerical supervisors, n.e.c.
212	Health administrators	313	Collectors, bill and account
213	Construction inspectors, public administration	314	Counter clerks, except food
215	Inspectors, except construction, public administration	315	Dispatchers and starters, vehicle
216	Managers and superintendents, building	320	Enumerators and interviewers
220	Office managers, n.e.c.	321	Estimators and investigators, n.e.c.
221	Officers, pilots, and pursers; ship	323	Expeditors and production controllers
222	Officials and administrators; public administration, n.e.c.	325	File clerks
223	Officials of lodges, societies, and unions	326	Insurance adjusters, examiners, and investigators
224	Postmasters and mail superintendents	330	Library attendants and assistants
		331	Mail carriers, post office
		332	Mail handlers, except post office
		333	Messengers and office boys
		334	Meter readers, utilities
		341	Office machine operators
		342	Bookkeeping and billing machine operators
		343	Calculating machine operators
		344	Computer and peripheral equipment operators
			Duplicating machine operators

Occupation Code	CLERICAL AND KINDRED WORKERS—Continued	Occupation Code	CRAFTSMEN AND KINDRED WORKERS—Continued
	Office machine operators—Continued		
345	Key punch operators	453	Jewelers and watchmakers
350	Tabulating machine operators	454	Job and die setters, metal
355	Office machine operators, n.e.c.	455	Locomotive engineers
360	Payroll and timekeeping clerks	456	Locomotive firemen
361	Postal clerks	461	Machinists
362	Proofreaders	462	Machinist apprentices
363	Real estate appraisers	470	Mechanics and repairmen
364	Receptionists	471	Air conditioning, heating, and refrigeration
	Secretaries	472	Aircraft
370	Secretaries, legal	473	Automobile body repairmen
371	Secretaries, medical	474	Automobile mechanics
372	Secretaries, n.e.c.	475	Automobile mechanic apprentices
374	Shipping and receiving clerks	480	Data processing machine repairmen
375	Statistical clerks	481	Farm implement
376	Stenographers	482	Heavy equipment mechanics, incl. diesel
381	Stock clerks and storekeepers	483	Household appliance and accessory installers
382	Teacher aides, exc. school monitors	484	mechanics
383	Telegraph messengers	485	Loom fixers
384	Telegraph operators	486	Office machine
385	Telephone operators	487	Radio and television
390	Ticket, station, and express agents	488	Railroad and car shop
391	Typists	489	Mechanic, exc. auto, apprentices
392	Weighers	490	Miscellaneous mechanics and repairmen
394	Miscellaneous clerical workers	491	Not specified mechanics and repairmen
395	Not specified clerical workers	501	Millers; grain, flour, and feed
	CRAFTSMEN AND KINDRED WORKERS	502	Millwrights
401	Automobile accessories installers	503	Molders, metal
402	Bakers	504	Molder apprentices
403	Blacksmiths	505	Motion picture projectionists
404	Boilermakers	506	Opticians, and lens grinders and polishers
405	Bookbinders	510	Painters, construction and maintenance
410	Brickmasons and stonemasons	511	Painter apprentices
411	Brickmasons and stonemasons, apprentices	512	Paperhangars
412	Bulldozer operators	514	Pattern and model makers, exc. paper
413	Cabinetmakers	515	Photoengravers and lithographers
415	Carpenters	516	Piano and organ tuners and repairmen
416	Carpenter apprentices	520	Plasterers
420	Carpet installers	521	Plasterer apprentices
421	Cement and concrete finishers	522	Plumbers and pipe fitters
422	Compositors and typesetters	523	Plumber and pipe fitter apprentices
423	Printing trades apprentices, exc. pressmen	525	Power station operators
424	Cranemen, derrickmen, and hoistmen	530	Pressmen and plate printers, printing
425	Decorators and window dressers	531	Pressman apprentices
426	Dental laboratory technicians	533	Rollers and finishers, metal
430	Electricians	534	Roofers and slaters
431	Electrician apprentices	535	Sheetmetal workers and tinsmiths
433	Electric power linemen and cablemen	536	Sheetmetal apprentices
434	Electrotypes and stereotypers	540	Shipfitters
435	Engravers, exc. photoengravers	542	Shoe repairmen
436	Excavating, grading, and road machine operators; exc. bulldozer	543	Sign painters and letterers
440	Floor layers, exc. tile setters	545	Stationary engineers
441	Foremen, n.e.c.	546	Stone cutters and stone carvers
442	Forgemen and hammermen	550	Structural metal craftsmen
443	Furniture and wood finishers	551	Tailors
444	Furriers	552	Telephone installers and repairmen
445	Glaziers	554	Telephone linemen and splicers
446	Heat treaters, annealers, and temperers	560	Tile setters
450	Inspectors, scalers, and graders; log and lumber	561	Tool and die makers
452	Inspectors, n.e.c.	562	Tool and die maker apprentices
		563	Upholsterers
		571	Specified craft apprentices, n.e.c.
		572	Not specified apprentices

**Occu-  
pation  
Code**

**CRAFTSMEN AND KINDRED WORKERS—  
Continued**

575	Craftsmen and kindred workers, n.e.c.	701	Boatmen and canalmen
580	Former members of the Armed Forces	703	Bus drivers
<b>OPERATIVES, EXCEPT TRANSPORT</b>			
601	Asbestos and insulation workers	704	Conductors and motormen, urban rail transit
602	Assemblers	705	Deliverymen and routemen
603	Blasters and powdermen	706	Fork lift and tow motor operatives
604	Bottling and canning operatives	710	Motormen; mine, factory, logging camp, etc.
605	Chainmen, rodmen, and axmen; surveying	711	Parking attendants
610	Checkers, examiners, and inspectors; manufacturing	712	Railroad brakemen
611	Clothing ironers and pressers	713	Railroad switchmen
612	Cutting operatives, n.e.c.	714	Taxicab drivers and chauffeurs
613	Dressmakers and seamstresses, except factory	715	Truck drivers
614	Drillers, earth		
615	Dry wall installers and lathers		
620	Dyers		
621	Fillers, polishers, sanders, and buffers		
622	Furnacemen, smeltermen, and pourers		
623	Garage workers and gas station attendants		
624	Graders and sorters, manufacturing		
625	Produce graders and packers, except factory and farm		
626	Heaters, metal		
630	Laundry and dry cleaning operatives, n.e.c.		
631	Meat cutters and butchers, exc. manufacturing		
633	Meat cutters and butchers, manufacturing		
634	Meat wrappers, retail trade		
635	Metal platers		
636	Milliners		
640	Mine operatives, n.e.c.		
641	Mixing operatives		
642	Oilers and greasers, exc. auto	801	Farmers (owners and tenants)
643	Packers and wrappers, except meat and produce	802	Farm managers
644	Painters, manufactured articles		
645	Photographic process workers		
650	Precision machine operatives		
651	Drill press operatives		
652	Grinding machine operatives	821	Farm foremen
653	Lathe and milling machine operatives	822	Farm laborers, wage workers
655	Precision machine operatives, n.e.c.	823	Farm laborers, unpaid family workers
660	Punch and stamping press operatives	824	Farm service laborers, self-employed
661	Riveters and fasteners		
662	Sailors and deckhands		
663	Sawyers		
664	Sewers and stitchers		
665	Shoemaking machine operatives		
666	Solderers		
670	Stationary firemen	901	Cleaning service workers
671	Textile operatives	902	Chambermaids and maids, except private
672	Carding, lapping, and combing operatives	903	Cleaners and charwomen
673	Knitters, loopers, and topers		Janitors and sextons
674	Spinners, twisters, and winders		
680	Weavers	910	Food service workers
681	Textile operatives, n.e.c.	911	Bartenders
682	Welders and flame-cutters	912	Busboys
683	Winding operatives, n.e.c.	913	Cooks, except private household
690	Machine operatives, miscellaneous specified	914	Dishwashers
692	Machine operatives, not specified	915	Food counter and fountain workers
694	Miscellaneous operatives	916	Waiters
695	Not specified operatives		Food service workers, n.e.c., except
			household

**RT EQUIPMENT OPERATIVES**

**Code**

701	Boatmen and canalmen
703	Bus drivers
704	Conductors and motormen, urban rail transit
705	Deliverymen and routemen
706	Fork lift and tow motor operatives
710	Motormen; mine, factory, logging camp, etc.
711	Parking attendants
712	Railroad brakemen
713	Railroad switchmen
714	Taxicab drivers and chauffeurs
715	Truck drivers

**LABORERS, EXCEPT FARM**

740	Animal caretakers, exc. farm
750	Carpenters' helpers
751	Construction laborers, exc. carpenters' helpers
752	Fishermen and oystermen
753	Freight and material handlers
754	Garbage collectors
755	Gardeners and groundskeepers, exc. farm
760	Longshoremen and stevedores
761	Lumbermen, raftsmen, and woodchoppers
762	Stock handlers
763	Teamsters
764	Vehicle washers and equipment cleaners
770	Warehousemen, n.e.c.
780	Miscellaneous laborers
785	Not specified laborers

**FARMERS AND FARM MANAGERS**

Farmers (owners and tenants)
Farm managers

**FARM LABORERS AND FARM FOREMEN**

Farm foremen
Farm laborers, wage workers
Farm laborers, unpaid family workers
Farm service laborers, self-employed

**SERVICE WORKERS, EXC. PRIVATE  
HOUSEHOLD**

Cleaning service workers
Chambermaids and maids, except private
Cleaners and charwomen
Janitors and sextons
Food service workers
Bartenders
Busboys
Cooks, except private household
Dishwashers
Food counter and fountain workers
Waiters
Food service workers, n.e.c., except
household

**Occu-  
pation  
Code**

**SERVICE WORKERS, EXC. PRIVATE  
HOUSEHOLD—Continued**

921      Health service workers  
921      Dental assistants  
922      Health aides, exc. nursing  
923      Health trainees  
924      Lay midwives  
925      Nursing aides, orderlies, and attendants  
926      Practical nurses

**Personal service workers**

931      Airline stewardesses  
932      Attendants, recreation and amusement  
933      Attendants, personal service, n.e.c.  
934      Baggage porters and bellhops  
935      Barbers  
940      Boarding and lodging house keepers  
941      Bootblacks  
942      Child care workers, exc. private household  
943      Elevator operators  
944      Hairdressers and cosmetologists  
945      Personal service apprentices  
950      Housekeepers, exc. private household  
952      School monitors  
953      Ushers, recreation and amusement  
954      Welfare service aides

**Protective service workers**

960      Crossing guards and bridge tenders  
961      Firemen, fire protection  
962      Guards and watchmen  
963      Marshals and constables  
964      Policemen and detectives  
965      Sheriffs and bailiffs

**Occu-  
pation  
Code**

**PRIVATE HOUSEHOLD WORK**

980      Child care workers, private household  
981      Cooks, private household  
982      Housekeepers, private household  
983      Laundresses, private household  
984      Maids and servants, private household

Table 2: 1970 Census of Population -- Industrial Classification System

Industry Code	AGRICULTURE, FORESTRY, AND FISHERIES	Industry Code	MANUFACTURING--Continued
017	Agricultural production (01)	168	Miscellaneous fabricated metal products (341, 343, 347, 348, 349)
018	Agricultural services, except horticultural (07 except 0713 and 073)	169	Not specified metal industries
019	Horticultural services (073)	177	Machinery, except electrical
027	Forestry (08)	178	Engines and turbines (351)
028	Fisheries (09)	179	Farm machinery and equipment (352)
	<b>MINING</b>	187	Construction and material handling machines (353)
047	Metal mining (10)	188	Metalworking machinery (354)
048	Coal mining (11, 12)	197	Office and accounting machines (357 except 3573)
049	Crude petroleum and natural gas extractions (13)	198	Electronic computing equipment (3573)
057	Nonmetallic mining and quarrying, except fuel (14)		Machinery, except electrical, n.e.c. (355, 356, 358, 359)
	<b>CONSTRUCTION</b>		Not specified machinery
067	General building contractors (15)	199	Electrical machinery, equipment, and supplies
068	General contractors, except building (16)	207	Household appliances (363)
069	Special trade contractors (17)	208	Radio, T.V., and communication equipment (365, 366)
077	Not specified construction	209	Electrical machinery, equipment, and supplies, n.e.c. (361, 362, 364, 367, 369)
	<b>MANUFACTURING</b>		Not specified electrical machinery, equipment, and supplies
	<b>Durable goods</b>		Transportation equipment
107	Lumber and wood products, except furniture	219	Motor vehicles and motor vehicle equipment (371)
108	Logging (241)	227	Aircraft and parts (372)
109	Sawmills, planing mills, and mill work (242, 243)	228	Ship and boat building and repairing (373)
118	Miscellaneous wood products (244, 249)	229	Railroad locomotives and equipment (374)
119	Furniture and fixtures (25)	237	Mobile dwellings and campers (3791)
127	Stone, clay, and glass products	238	Cycles and miscellaneous transportation equipment (375, 3799)
128	Glass and glass products (321-323)	239	Professional and photographic equipment, and watches
137	Cement, concrete, gypsum, and plaster products (324, 327)	247	Scientific and controlling instruments (381, 382)
138	Structural clay products (325)	248	Optical and health services supplies (383, 384, 385)
139	Pottery and related products (326)	249	Photographic equipment and supplies (386)
147	Miscellaneous nonmetallic mineral and stone products (328, 329)	257	Watches, clocks, and clockwork-operated devices (387)
148	Metal industries	258	Not specified professional equipment
149	Blast furnaces, steel works, rolling and finishing mills (3312, 3313)	259	Ordnance (19)
157	Other primary iron and steel industries (3315-3317, 332, 3391, part 3399)		Miscellaneous manufacturing industries (39)
158	Primary aluminum industries (3334, part 334, 3352, 3361, part 3392, part 3399)		<b>Nondurable goods</b>
159	Other primary nonferrous industries (3331-3333, 3339, part 334, 3351, 3356, 3357, 3362, 3369, part 3392, part 3399)	268	Food and kindred products
167	Cutlery, hand tools, and other hardware (342)	269	Meat products (201)
	Fabricated structural metal products (344)	278	Dairy products (202)
	Screw machine products (345)	279	Canning and preserving fruits, vegetables, and sea foods (203)
	Metal stamping (346)	287	Grain-mill products (204, 0713)
		288	Bakery products (205)
			Confectionery and related products (207)

<u>Industry Code</u>	<u>MANUFACTURING—Continued</u>	<u>Industry Code</u>	<u>TRANSPORTATION, COMMUNICATIONS, OTHER PUBLIC UTILITIES—Continued</u>
289	Beverage industries (208)		
297	Miscellaneous food preparation and kindred products (206, 209)	447	
298	Not specified food industries	448	Radio broadcasting and television (483)
299	Tobacco manufactures (21)	449	Telephone (wire and radio) (481)
	Textile mill products		Telegraph and miscellaneous services (482, 489)
307	Knitting mills (225)		
308	Dyeing and finishing textiles, except wool and knit goods (226)		<u>Communications</u>
309	Floor coverings, except hard surface (227)	467	Radio broadcasting and television (483)
317	Yarn, thread, and fabric mills (221-224, 228)	468	Telephone (wire and radio) (481)
318	Miscellaneous textile mill products (229)	469	Telegraph and miscellaneous services (482, 489)
	Apparel and other fabricated textile products		
319	Apparel and accessories (231-238)	477	<u>Utilities and sanitary services</u>
327	Miscellaneous fabricated textile products (239)	478	Electric light and power (491)
	Paper and allied products	479	Electric-gas utilities (493)
328	Pulp, paper, and paperboard mills (261-263, 266)	507	Gas and steam supply systems (492, 496)
329	Miscellaneous paper and pulp products (264)	508	Water supply (494)
337	Paperboard containers and boxes (265)	509	Sanitary services (495)
	Printing, publishing, and allied industries	527	Other and not specified utilities (497)
338	Newspaper publishing and printing (271)		
339	Printing, publishing, and allied industries, except newspapers (272-279)	528	<u>WHOLESALE AND RETAIL TRADE</u>
	Chemicals and allied products	529	
347	Industrial chemicals (281)	537	<u>Wholesale trade</u>
348	Plastics, synthetics and resins, except fibers (282, except 2823 and 2824)	538	Motor vehicles and equipment (501)
349	Synthetic fibers (2823, 2824)	539	Drugs, chemicals, and allied products (502)
357	Drugs and medicines (283)	557	Dry goods and apparel (503)
358	Soaps and cosmetics (284)	558	Food and related products (504)
359	Paints, varnishes, and related products (285)	559	Farm products—raw materials (505)
367	Agricultural chemicals (287)	567	Electrical goods (506)
368	Miscellaneous chemicals (286, 289)	568	Hardware, plumbing, and heating supplies (507)
369	Not specified chemicals and allied products	569	Not specified electrical and hardware products
	Petroleum and coal products	587	Machinery equipment and supplies (508)
377	Petroleum refining (291)	588	Metals and minerals, n.e.c. (5091)
378	Miscellaneous petroleum and coal products (295, 299)		Petroleum products (5092)
	Rubber and miscellaneous plastic products		Scrap and waste materials (5093)
379	Rubber products (301-303, 306)	607	Alcoholic beverages (5095)
387	Miscellaneous plastic products (307)	608	Paper and its products (5096)
	Leather and leather products	609	Lumber and construction materials (5098)
388	Tanned, curried, and finished leather (311)	617	Wholesalers, n.e.c. (5094, 5097, 5099)
389	Footwear, except rubber (313, 314)	618	Not specified wholesale trade
397	Leather products, except footwear (312, 315-317, 319)	619	
398	Not specified manufacturing industries	627	<u>Retail trade</u>
		628	Lumber and building material retailing
		629	Hardware and farm equipment stores (525)
		637	Department and mail order establishments
		638	Limited price variety stores (533)
		639	Vending machine operators (534)
		647	Direct selling establishments (535)
		648	Miscellaneous general merchandise stores (539)
		649	Grocery stores (541)
		657	Dairy products stores (545)
		658	Retail bakeries (546)
		667	Food stores, n.e.c. (542-544, 549)
		668	Motor vehicle dealers (551, 552)
		669	Tire, battery, and accessory dealers (553)
		677	Gasoline service stations (554)
			Miscellaneous vehicle dealers (559)
			Apparel and accessories stores, except shoe except 566)
			Shoe stores (566)
			Furniture and home furnishings stores (571)
			Household appliances, TV, and radio 573)
			Eating and drinking places (58)
			Drug stores (591)

**Industry  
Code WHOLESALE AND RETAIL TRADE—Continued**

**Retail trade—Continued**

- 678 Liquor stores (592)
- 679 Farm and garden supply stores (596)
- 687 Jewelry stores (597)
- 688 Fuel and ice dealers (598)
- 689 Retail florists (5992)
- 697 Miscellaneous retail stores (593-595, 599 exc. 5992)
- 698 Not specified retail trade

**FINANCE, INSURANCE, AND REAL ESTATE**

- 707 Banking (60)
- 708 Credit agencies (61)
- 709 Security, commodity brokerage, and investment companies (62, 67)
- 717 Insurance (63, 64)
- 718 Real estate, incl. real estate-insurance-law offices (65, 66)

**BUSINESS AND REPAIR SERVICES**

- 727 Advertising (731)
- 728 Services to dwellings and other buildings (734)
- 729 Commercial research, development, and testing labs (7391, 7397)
- 737 Employment and temporary help agencies (736, 7398)
- 738 Business management and consulting services (part 7392)
- 739 Computer programing services (part 7392)
- 747 Detective and protective services (7393)
- 748 Business services, n.e.c. (732, 733, 735, 7394, 7395, 7396, 7399)
- 749 Automobile services, except repair (751, 752, 754)
- 757 Automobile repair and related services (753)
- 758 Electrical repair shops (762, 7694)
- 759 Miscellaneous repair services (763, 764, 769, except 7694)

**PERSONAL SERVICES**

- 769 Private households (88)
- 777 Hotels and motels (701)
- 778 Lodging places, except hotels and motels (702, 703, 704)
- 779 Laundering, cleaning, and other garment services (721, 727)
- 787 Beauty shops (723)
- 788 Barber shops (724)
- 789 Shoe repair shops (725)
- 797 Dressmaking shops (part 729)
- 798 Miscellaneous personal services (722, 726, part 729)

**ENTERTAINMENT AND RECREATION SERVICES**

- 807 Theaters and motion pictures (78, 792)
- 808 Bowling alleys, billiard and pool parlors (793)
- 809 Miscellaneous entertainment and recreation services (791, 794)

**Industry  
Code PROFESSIONAL AND RELATED SERVICES**

- 828 Offices of physicians (801, 803)
- 829 Offices of dentists (802)
- 837 Offices of chiropractors (804)
- 838 Hospitals (806)
- 839 Convalescent institutions (8092)
- 847 Offices of health practitioners, n.e.c. (part 8099)
- 848 Health services, n.e.c. (807, part 8099)
- 849 Legal services (81)
- 857 Elementary and secondary schools (821)
- 858 Colleges and universities (822)
- 859 Libraries (823)
- 867 Educational services, n.e.c. (824, 829)
- 868 Not specified educational services
- 869 Museums, art galleries, and zoos (84)
- 877 Religious organizations (866)
- 878 Welfare services (part 867)
- 879 Residential welfare facilities (part 867)
- 887 Nonprofit membership organizations (861-865, 869)
- 888 Engineering and architectural services (891)
- 889 Accounting, auditing, and bookkeeping services (893)
- 897 Miscellaneous professional and related services (892, 899)

**PUBLIC ADMINISTRATION**

- 907 Postal service (part 9190)
- 917 Federal public administration (part 9190, 9490)
- 927 State public administration (9290)
- 937 Local public administration (9390)

Table 3: "Occupation Levels" Based on GED and SVP Scores

Occupation Level	GED Range	SVP Range
1	1.5-2.4	1.8-2.4
2	1.5-2.4	2.5-3.4
3	1.5-2.4	3.5-4.8
4	2.5-3.4	2.0-2.4
5	2.5-3.4	2.5-3.4
6	2.5-3.4	3.5-4.4
7	2.5-3.4	4.5-5.4
8	2.5-3.4	5.5-6.4
9	2.5-3.4	6.5-8.0
10	3.5-4.4	3.0-4.4
11	3.5-4.4	4.5-5.4
12	3.5-4.4	5.5-6.4
13	3.5-4.4	6.5-7.4
14	3.5-4.4	7.5-8.0
15	4.5-5.4	6.0-7.4
16	4.5-5.4	7.5-8.0
17	5.5-6.0	7.0-8.2

See Barry Bluestone, "The Personal Earnings Distribution: Individual and Institutional Determinants," SWRRI Publication # 20, November 1974.

Table 4: Selected Occupational Characteristics -- By 1970 Census  
Occupational Codes

<u>Major Occupational Class</u>	<u>Census Codes</u>
(01) Professional, Technical, and Kindred Workers	001 - 195
(02) Managers and Administrators, Except Farm	201 - 245
(03) Sales Workers	260 - 285
(04) Clerical and Kindred Workers	301 - 395
(05) Craftsmen and Kindred Workers	401 - 575
(06) Operatives, Except Transport	601 - 695
(07) Transport Equipment Operatives	701 - 715
(08) Laborers, Except Farm	740 - 785
(09) Private Household Workers	980 - 984
(10) Service Workers, Excluding Private Household	901 - 965
(11) Farmers and Farm Managers	801 - 802
(12) Farm Laborers and Farm Foremen	821 - 824

NOTATION USED IN TABLE 4.

OCC: 3-digit Census code for occupation (1970 classification)

O\_L: Occupation level (Table 3)

D: Data hierarchy

P: People hierarchy

T: Things hierarchy

GED: General Educational Development

SVP: Specific Vocational Preparation

S-DIR: "Self-direction measure" (See Temme)\*

PREST: "Prestige measure" (See Temme)\*

IN IND: For occupations listed as "not elsewhere classified," not specified," etc., occupation characteristics are also given depending on industry association in the April 1971 CPS. (see Table 2 for 1970 Census industry classification)

S/S: For managers n.e.c., occupation characteristics are given depending on whether an individual was salaried (1) or self-employed (2) in the April 1971 CPS.

INA: When occupation characteristics data were not available in Temme for a given Census occupation code, INA is entered under the IN IND column and all data are coded zero.

Major occupation headings are given in the 1973-75 Current Population Survey, Annual Demographic File Codebook, variable PP185-186.

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\*These data are included only to complete Temme's Table, pp. 293-333.

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 1

OCC O\_L D' P T GED SVP S-DIR PREST IN IND S/S

## (01) PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS

001	15	1.42	7.69	7.98	4.76	7.29	17.49	60.60
002	17	0.25	7.96	1.40	5.79	7.88	15.33	70.90
003	15	1.16	7.80	7.70	5.10	7.04	17.73	62.50
004	15	0.96	6.80	7.74	5.29	7.10	18.99	66.00
005	17	0.75	4.23	8.00	5.48	7.23	22.19	65.30
006	17	0.35	7.72	1.88	5.56	7.84	15.21	69.00
010	17	0.65	7.69	1.96	5.70	7.77	15.19	69.70
011	16	0.23	7.89	1.36	4.97	7.85	13.53	62.60
012	17	0.41	7.78	2.00	5.67	7.82	15.06	67.90
013	15	0.89	7.64	6.82	5.21	7.34	17.62	64.10
014	17	0.30	7.67	1.42	5.64	7.79	15.07	67.10
015	17	0.22	7.78	2.52	5.67	7.67	16.07	68.40
020	16	0.00	8.00	1.00	5.33	8.00	14.22	64.50
021	16	0.12	7.75	2.74	5.38	7.88	15.80	67.00
022	15	1.40	5.06	5.20	4.94	7.02	17.56	62.00
023	16	0.46	7.68	2.65	5.47	7.64	15.45	66.00
024	15	1.12	1.68	8.00	5.00	6.88	22.66	60.80
025	12	2.75	7.64	4.53	4.03	5.50	9.62	45.30
026	15	1.61	2.82	8.00	4.60	6.18	20.27	61.90
030	17	1.00	0.00	8.00	6.00	8.20	26.62	78.00
031	17	1.05	0.54	8.00	5.92	7.92	25.97	76.40
032	15	1.46	5.94	7.99	4.88	6.39	18.62	63.70
033	15	1.79	5.29	6.20	4.73	6.98	17.42	36.40
034	15	1.14	8.00	8.00	5.00	7.14	17.96	68.90
035	17	0.34	8.00	8.00	5.83	7.68	20.58	74.70
036	15	0.83	8.00	8.00	5.07	6.86	18.16	64.10
042	15	1.67	6.44	3.65	4.91	6.72	14.38	58.50
043	15	0.63	8.00	8.00	5.00	6.69	18.18	65.20
044	17	0.38	8.00	1.00	5.67	7.62	14.53	68.00
045	17	0.38	7.92	1.24	5.75	7.79	14.98	68.10
051	17	0.00	8.00	1.00	6.00	8.00	15.67	71.80
052	17	0.00	8.00	1.00	6.00	8.00	15.67	71.30
053	17	0.00	7.67	2.01	6.00	8.00	16.74	73.60
054	17	0.00	8.00	8.00	6.00	7.00	20.94	74.20
055	15	1.30	6.66	7.55	4.96	6.84	18.13	59.50
056	15	1.42	3.83	8.00	4.86	6.61	20.40	58.30
061	15	1.00	0.00	8.00	5.00	7.00	24.07	61.80
062	17	1.03	0.42	7.62	5.93	7.93	25.80	76.70
063	15	1.00	0.00	8.00	5.00	7.00	24.07	67.00
064	15	0.99	7.80	1.71	4.93	7.03	12.95	61.40
065	17	1.03	0.62	6.85	5.92	7.93	24.99	88.40
071	15	1.00	0.73	8.00	4.88	7.00	23.25	64.70
072	16	1.11	2.75	5.93	5.13	7.67	28.65	68.80
073	15	1.00	0.00	8.00	5.00	7.00	18.82	61.40
074	13	1.04	6.08	7.70	4.00	6.85	17.00	47.20
075	13	2.88	6.44	7.99	4.19	6.91	15.95	53.80
076	13	2.50	4.35	8.00	4.28	6.56	17.90	56.00
080	12	2.63	7.85	1.57	4.47	5.63	9.95	52.40
081	12	3.00	6.25	7.41	4.00	6.17	14.84	53.30

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 2

OCC	O/L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
082	12	2.36	7.36	8.00	4.41	6.32	15.92	55.50			
083	12	2.95	6.32	6.51	4.03	5.71	13.99	47.10			
084	7	3.00	6.00	8.00	3.00	5.00	16.82	37.20			
085	12	3.01	6.32	6.66	4.04	5.79	13.81	46.70			
086	17	1.05	0.06	7.97	5.97	7.96	26.41	59.60			
090	16	1.68	1.44	8.00	5.39	7.67	23.48	53.90			
091	15	0.90	6.46	7.47	5.25	6.88	19.23	68.20			
092	15	1.00	4.40	8.00	5.06	6.43	20.64	66.80			
093	17	1.07	1.89	7.80	5.88	7.85	24.65	73.00			
094	17	2.00	2.00	8.00	6.00	8.00	24.34	71.10			
095	16	1.03	6.80	6.69	5.19	7.79	18.55	67.60			
096	17	0.43	7.15	8.00	5.57	7.14	20.37	69.00			
100	15	1.13	0.73	7.98	5.04	6.96	23.45	60.70			
101	15	1.35	2.62	8.00	5.25	7.28	22.46	51.90			
102	17	2.00	2.00	8.00	6.00	8.00	24.34	72.10			
103	17	1.34	3.99	5.68	6.00	8.00	21.47	71.40			
104	17	2.00	2.00	8.00	6.00	8.00	20.34	72.80			
105	17	1.84	2.47	7.45	6.00	8.00	23.66	72.80			
110	17	2.00	2.00	8.00	6.00	8.00	24.34	72.00			
111	17	1.85	2.51	7.63	5.95	8.00	23.65	73.20			
112	17	2.00	2.00	8.00	5.95	7.95	24.21	71.00			
113	17	1.97	2.49	8.00	5.66	7.62	23.10	75.30			
114	17	2.00	2.00	8.00	6.00	8.00	24.34	75.30			
115	17	2.00	2.00	8.00	6.00	8.00	24.34	73.30			
116	17	2.00	2.00	8.00	6.00	8.00	24.34	73.20			
120	17	1.90	2.30	8.00	5.84	7.84	23.78	70.40			
121	17	2.00	2.00	8.00	6.00	8.00	24.34	72.00			
122	17	1.87	2.39	8.00	6.00	8.00	24.14	73.70			
123	16	1.17	2.29	8.00	5.48	7.92	23.61	68.10			
124	17	2.00	2.00	8.00	5.53	7.86	23.32	68.80			
125	17	2.00	2.00	8.00	5.91	7.91	24.11	74.90			
126	17	2.00	2.29	7.71	5.67	7.72	23.03	70.30			
130	17	2.00	2.00	8.00	5.64	7.64	23.42	69.30			
131	17	1.65	2.00	8.00	5.65	7.65	23.71	73.40			
132	17	2.00	2.00	8.00	6.00	8.00	24.34	77.10			
133	17	2.00	2.00	8.00	6.00	8.00	24.34	69.20			
134	13	2.00	2.00	8.00	4.43	7.22	20.65	58.00			
135	17	2.00	2.00	8.00	5.95	7.95	24.22	71.90			
140	17	1.95	2.35	7.79	5.59	7.62	22.91	67.40			
141	15	2.00	2.00	8.00	4.85	6.97	21.37	58.00			
142	15	1.97	2.03	8.00	4.99	6.14	21.43	63.60			
143	12	3.39	3.51	8.00	4.40	5.85	17.84	50.90			
144	15	1.90	2.02	8.00	4.99	6.96	21.31	62.70			
145	15	0.89	2.20	7.91	4.93	7.28	22.37	49.10			
150	11	3.30	7.88	2.22	3.99	4.97	7.87	42.10			
151	12	2.77	7.92	1.90	4.15	5.88	9.08	45.50			
152	15	1.83	7.97	1.15	4.83	7.06	11.47	50.40			
153	13	1.51	7.67	1.65	4.46	6.79	11.23	47.90			
154	12	2.83	7.73	5.59	4.01	5.61	10.41	46.00			
155	12	2.00	8.00	2.79	4.39	5.99	9.88	47.70			
156	15	1.00	8.00	8.00	5.00	7.00	18.02	56.50			

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 3

OCC	O_L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
161	15	1.45	7.79	7.69	4.80	6.64	16.80	49.40			
162	12	2.17	7.76	2.43	4.33	5.93	12.22	46.40			
163	15	2.15	7.74	3.41	4.91	6.17	11.56	62.90			
164	14	1.12	6.16	7.76	4.01	7.59	17.17	52.20			
165	15	1.63	6.63	5.76	4.68	7.00	16.10	50.30			
170	13	2.00	8.00	1.00	4.00	7.00	9.43	51.20			
171	7	2.43	6.62	6.83	3.47	4.93	10.10	39.00			
172	15	2.11	7.63	6.26	4.63	6.63	11.90	55.50			
173	11	2.16	7.04	4.03	4.00	5.27	11.81	44.50			
174	15	1.22	0.92	8.00	5.12	7.06	23.47	64.60			
175	15	1.23	4.31	7.52	4.62	6.42	19.04	51.80			
180	12	2.52	3.00	7.53	3.74	6.20	16.99	38.90			
181	17	0.58	7.84	8.00	5.63	7.63	20.07	68.50			
182	13	0.82	4.00	8.00	3.77	6.53	18.35	42.40			
183	15	0.93	7.27	1.97	4.81	7.07	13.09	55.50			
184	15	0.61	5.48	7.85	5.39	7.37	21.09	65.30			
185	16	0.02	4.04	8.00	4.91	7.86	21.91	45.00			
190	15	0.56	7.27	1.45	4.70	7.21	13.02	52.50			
191	13	0.63	6.28	2.21	3.93	6.74	11.67	42.90			
192	15	0.16	5.95	7.81	5.00	6.98	20.05	62.00			
193	15	0.93	4.33	8.00	4.98	5.58	20.27	48.80			
194	15	1.69	5.45	7.06	4.69	6.61	17.76	53.70			
195	15	1.69	5.42	5.87	5.11	7.01	17.77	62.70			

## (02) MANAGERS AND ADMINISTRATORS, EXCEPT FARM

201	15	1.09	5.63	8.00	4.93	6.97	19.58	51.90			
202	16	1.29	3.33	7.99	5.06	7.81	21.73	60.10			
203	15	1.26	5.01	8.00	4.80	7.02	19.65	49.00			
205	13	1.20	5.09	7.93	4.43	6.61	18.62	50.70			
210	16	1.19	5.94	8.00	4.93	7.78	19.59	56.40			
211	15	1.27	6.05	8.00	4.86	6.82	18.92	54.20			
212	16	1.11	2.59	7.66	4.96	7.58	21.89	60.90			
213	15	1.24	6.49	7.40	4.76	6.25	16.77	49.60			
215	12	2.42	7.12	6.55	4.00	5.67	11.39	45.80			
215	12	2.61	7.16	5.95	4.12	6.00	10.96	48.10	917		
215	11	2.25	7.02	7.28	3.92	5.38	12.06	43.10	927		
215	11	2.22	7.47	5.80	3.78	5.27	10.01	41.40	937		
216	12	1.44	5.43	7.51	3.82	6.39	15.84	41.50			
220	16	1.06	5.84	7.96	4.89	7.78	19.62	57.30			
221	13	1.54	3.97	3.91	3.95	6.77	13.61	43.20			
222	15	1.55	4.84	7.81	4.75	6.92	19.05	53.80			
223	16	1.13	2.44	8.00	5.07	7.70	22.54	56.00			
224	13	1.00	5.69	8.00	4.04	6.94	17.67	49.00			
225	13	1.09	4.72	7.95	4.08	6.74	10.30	49.50			
226	13	1.98	5.90	7.87	3.81	6.56	15.93	45.90			
230	12	1.44	5.95	7.74	3.97	5.99	16.39	43.70			
231	13	1.20	3.68	7.93	4.26	6.95	19.39	48.00			

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 4

OCC	O_L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
233	16	1.11	1.97	7.97	5.00	7.70	22.75	60.80			
235	16	1.36	3.24	8.00	5.28	7.67	22.21	68.80			
240	17	1.19	1.43	7.88	5.75	7.93	24.70	71.20			
245	15	1.24	4.36	7.54	4.67	7.27	19.46	54.10			1
245	13	1.82	5.72	7.08	4.06	6.62	15.89	44.90			2
245	16	1.10	4.93	6.90	4.69	7.62	18.92	54.60	067-077		1
245	13	2.06	6.37	6.13	3.91	6.91	14.36	45.40	067-077		2
245	16	1.10	3.06	7.21	5.14	7.74	21.52	61.80	107-259		1
245	15	1.65	3.66	6.17	4.69	7.28	18.61	49.10	107-259		2
245	16	1.06	2.64	7.58	5.23	7.83	22.44	61.30	268-398		1
245	13	2.09	4.86	6.17	4.36	6.87	16.39	49.30	268-398		2
245	15	1.32	4.73	7.82	4.62	7.16	18.31	52.80	407-429		1
245	12	3.03	6.03	6.23	4.00	6.01	13.19	44.90	407-429		2
245	16	1.87	4.54	7.50	4.85	7.54	20.05	56.30	447-449		1
245	10	4.22	7.07	5.32	3.46	4.39	8.87	42.70	447-449		2
245	16	1.17	4.17	7.82	4.86	7.86	20.50	55.70	507-588		1
245	13	1.36	5.38	7.77	4.37	6.63	18.00	49.70	507-588		2
245	13	1.24	3.27	7.97	4.25	6.86	18.07	43.00	607+608		1
245	13	1.16	5.88	7.85	4.05	6.86	17.26	40.90	607+608		2
245	13	1.13	5.28	7.92	4.21	6.81	18.14	48.40	609-627		1
245	13	1.05	5.50	8.00	4.16	7.05	18.08	45.60	609-627		2
245	13	1.15	5.80	7.91	4.06	6.83	17.37	46.20	628-638		1
245	13	1.53	6.09	7.83	3.86	6.47	16.15	39.60	628-638		2
245	13	1.41	5.37	7.44	4.22	6.84	17.30	47.90	639+647		1
245	13	1.44	5.26	8.00	4.13	6.64	17.74	46.50	639+647		2
245	12	2.84	6.07	7.12	3.69	5.74	12.77	38.50			648
245	12	2.95	6.15	7.22	3.68	5.62	12.44	38.60			648
245	13	1.17	5.48	7.88	4.09	6.91	17.69	49.10			657
245	13	1.44	5.97	7.19	3.93	6.64	16.09	47.60			657
245	13	1.07	5.23	8.00	4.24	7.12	18.46	50.40			667
245	13	1.53	5.58	7.16	4.08	6.82	16.68	46.30			667
245	13	1.15	5.75	7.78	4.10	6.90	17.44	47.70	OTHER		1
245	13	1.21	5.95	7.74	4.02	6.75	16.95	44.50	OTHER		2
245	15	1.38	4.40	8.00	4.95	7.24	20.43	61.70	707-718		1
245	15	1.79	5.17	7.40	4.51	6.69	17.79	57.30	707-718		2
245	15	1.29	4.10	7.19	4.82	7.10	19.45	56.10	727-759		1
245	13	1.64	5.57	5.67	4.19	6.93	15.48	46.40	727-759		2
245	13	1.52	3.48	7.44	4.22	6.90	17.22	46.10	769-798		1
245	13	2.08	4.70	7.23	3.94	6.48	14.85	42.70	769-798		2
245	15	1.21	3.95	7.41	4.94	7.32	20.36	60.10	ALL ELSE		1
245	13	1.97	5.59	7.18	4.37	6.61	16.84	48.30	ALL ELSE		2

## (03) SALES WORKERS

260	12	2.57	5.01	8.00	4.42	6.19	17.52	53.50		
261	8	2.00	5.00	8.00	3.00	6.00	14.61	38.40		
262	6	3.39	5.18	7.48	3.28	3.71	12.90	27.50		
264	5	3.10	5.07	7.96	3.21	3.43	13.25	23.20		
265	12	1.86	5.65	8.00	4.21	6.18	17.09	49.70		

OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 5

OCC	O_L	D	I	P	T	GED	SVR	S-DIR	PREST	IN	IND	S/S
266	4	6.83	6.02	7.81	2.99	2.09		8.54	5.30			
270	12	2.99	5.02	8.00	3.95	5.82		16.00	47.80			
271	15	1.74	5.43	8.00	5.26	6.81		19.89	65.50			
281	11	2.62	5.13	7.89	3.84	5.05		15.56	47.10			
282	11	2.84	5.14	7.96	3.81	4.97		15.29	43.40			
283	6	3.95	5.88	7.85	3.14	3.59		11.53	30.70			
284	11	3.11	5.33	7.79	3.74	4.67		14.37	39.70			
285	11	3.14	5.49	7.65	3.63	4.51		13.92	41.00			

**(04) CLERICAL AND KINDRED WORKERS**

INA

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 6

OCC	O_L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
384	10	4.75	7.03	6.38	3.50	4.17	9.85	40.50			
385	5	6.37	5.88	2.72	3.12	3.31	4.97	35.70			
390	11	2.83	5.74	7.93	3.79	4.94	14.82	44.20			
391	6	3.72	7.90	7.85	3.05	3.78	10.39	37.60			
392	1	5.40	7.97	6.68	2.00	2.44	1.04	25.60			
394	6	3.80	7.57	7.82	3.44	3.59	11.14	39.60			
395	6	3.80	7.57	7.82	3.44	3.59	11.14	39.60			
	5	3.93	7.86	7.67	3.41	3.46	10.54	40.80	107-398		
	6	3.52	7.22	7.72	3.48	3.73	11.82	41.50	407-429		
	5	4.19	7.65	7.84	3.26	3.27	18.19	35.20	507-698		
	10	3.55	7.60	7.94	3.59	3.91	12.05	41.00	707-718		
	10	3.62	7.43	7.89	3.53	3.72	11.75	37.60	828-897		
	10	3.64	7.63	7.97	3.46	3.63	11.49	41.60	907-937		
	5	4.10	7.49	7.52	3.30	3.43	10.17	35.60	ALL ELSE		

## (05) CRAFTSMEN AND KINDRED WORKERS

401	8	3.40	5.66	4.14	3.40	6.40	10.49	34.80			
402	9	6.26	7.80	1.81	3.12	6.50	4.41	33.90			
403	13	3.00	8.00	1.00	3.76	6.76	8.03	35.70			
404	13	2.57	7.75	2.95	3.85	6.86	8.80	40.40			
405	8	7.00	8.00	3.65	2.78	5.48	2.36	36.20			
410	9	3.48	7.89	1.43	3.08	7.67	6.82	35.50			
411	9	3.00	8.00	1.00	3.00	8.00	6.89	35.80			
412	7	7.00	8.00	3.02	2.95	4.79	2.46	29.60			
413	12	2.70	7.96	0.85	3.81	5.89	8.18	34.40			
415	14	3.27	7.84	1.26	3.87	7.61	8.59	38.70			
416	13	3.13	8.00	1.84	3.87	6.61	8.49	36.70			
420	9	3.43	7.93	1.59	2.98	6.60	6.16	33.70			
421	8	6.50	8.00	3.83	2.95	5.84	3.02	30.90			
422	13	4.63	7.84	1.98	3.84	6.79	7.30	43.60			
423	12	5.71	8.00	2.37	3.65	5.94	5.41	35.90			
424	7	6.89	8.00	2.91	2.84	4.56	2.01	31.80			
425	15	0.37	6.94	1.39	4.63	6.54	12.80	43.50			
426	14	2.86	7.66	2.67	4.05	7.57	10.71	44.90			
430	13	2.12	7.77	1.25	3.96	6.95	9.49	43.80			
431	13	2.03	8.00	1.00	4.00	7.03	9.41	40.50			
433	13	2.88	7.69	1.33	3.84	6.86	8.59	43.60			
434	9	4.53	8.00	4.04	3.38	6.86	8.24	42.60			
435	8	4.71	8.00	2.09	3.00	6.38	4.94	36.30			
436	7	6.89	7.94	3.05	2.96	4.88	2.68	31.20			
440	8	7.00	8.00	2.19	3.00	6.00	3.03	34.10			
441	13	1.27	3.94	4.85	4.14	7.16	16.06	44.90			
441	13	1.15	4.00	4.18	4.10	7.45	15.14	43.40	067-077		
441	14	1.12	4.00	3.81	4.27	7.51	16.04	46.40	139-169		
441	14	1.05	3.75	4.00	4.28	7.52	16.51	46.90	177-198		
441	13	1.39	3.85	3.72	4.12	7.08	15.64	45.70	199-209		

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 7

OCC	O_L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
441	13	1.30	4.36	4.32	4.28	7.31	15.95	48.60	219	-238	
441	13	1.21	3.55	3.59	4.17	7.39	15.85	43.70	239	-259	
441	13	1.17	3.33	4.70	4.04	6.87	16.42	41.70	268	-298	
441	13	2.29	4.15	5.00	4.04	6.64	13.91	41.20	307	-318	
441	13	1.30	3.77	4.50	4.14	7.12	16.31	45.20	319	-397	
441	13	1.35	4.28	6.09	3.89	6.86	15.60	42.80	407	-429	
441	13	1.17	4.08	5.47	4.17	7.14	16.80	47.10	447	-449	
441	13	1.22	3.94	6.34	4.13	6.95	17.17	44.10	507	-698	
441	13	1.17	3.96	5.58	4.15	7.16	16.33	44.60	ALL	ELSE	
442	8	5.83	8.00	2.55	3.14	5.59	4.78	35.00			
443	12	4.17	8.00	2.27	3.58	5.70	6.34	30.70			
444	14	0.00	8.00	1.00	4.00	8.00	11.05	39.30			
445	8	6.26	7.62	2.16	3.06	6.33	4.45	36.70			
446	7	6.61	8.00	2.57	2.99	4.45	5.45	33.20			
450	6	4.77	8.00	7.00	2.88	3.76	3.62	25.70			
452	12	3.24	7.58	5.83	3.63	5.70	8.06	40.70			
452	13	1.87	7.55	5.84	4.19	6.95	10.61	44.70	067	-077	
452	11	3.70	8.00	6.75	3.60	4.96	6.45	37.70	407		
452	7	3.31	7.45	5.53	3.41	5.42	8.21	38.90	ALL	ELSE	
453	14	2.00	8.00	1.00	4.00	7.65	9.64	41.20			
454	12	3.39	8.00	0.26	3.89	6.26	8.83	39.40			
455	13	3.03	8.00	2.85	4.03	6.95	8.47	47.50			
456	13	2.95	8.00	2.84	4.00	7.00	8.70	45.70			
461	13	2.22	7.97	0.21	3.95	6.97	9.17	41.50			
462	13	3.15	7.80	0.56	3.90	6.61	8.32	38.10			
470	13	2.44	7.98	1.28	3.85	7.27	8.95	41.40			
471	13	2.22	7.71	1.38	3.94	6.92	9.55	43.40			
472	9	2.94	7.91	1.55	3.13	6.81	7.08	33.20			
473	13	2.35	7.86	1.41	3.79	6.66	8.02	36.60			
474	13	2.00	8.00	1.00	4.00	7.00	9.43	31.10			
475	13	1.84	7.40	1.76	4.32	7.05	11.28	47.60			
480	13	2.19	7.80	1.11	3.97	6.91	9.34	36.60			
481	13	2.34	7.94	1.10	3.85	6.61	8.82	39.80			
482	12	3.81	7.91	2.53	3.57	5.66	7.09	37.50			
483	13	2.00	8.00	0.00	4.00	7.40	9.43	32.80			
484	13	1.72	7.51	2.15	4.15	6.82	11.19	42.60			
485	13	2.01	7.92	1.25	3.98	6.83	9.56	41.00			
486	13	2.99	8.00	1.91	3.81	6.62	8.10	38.20			
491	12	3.32	8.00	1.79	3.47	6.19	6.96	37.60			
492	12	3.43	7.89	1.74	3.63	5.95	7.80	38.40			
495	12	2.75	7.84	1.46	3.68	6.44	8.06	35.80			
501	7	6.04	7.28	4.00	2.96	5.13	5.07	26.80			
502	13	2.09	8.00	1.00	3.98	6.98	9.31	43.70			
503	12	4.33	8.00	1.76	3.49	5.75	6.04	34.50			
504	8	4.00	8.00	2.00	3.00	6.48	8.63	32.70			
505	12	3.00	8.00	2.00	3.89	6.11	8.09	37.00			
506	8	3.82	7.57	1.76	3.14	5.54	6.92	35.60			

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 8

OCC	D_L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
510	9	6.59	7.87	1.46	3.02	6.72	3.88	31.30			
511	9	7.00	8.00	1.00	3.00	7.00	8.63	32.60			
512	9	6.66	8.00	1.00	3.29	7.09	8.90	34.00			
514	13	3.38	8.00	0.55	3.81	6.76	7.86	44.10			
515	13	3.46	8.00	1.90	3.58	7.28	7.78	44.70			
516	12	3.00	8.00	1.00	4.00	6.00	8.27	37.50			
520	9	6.73	7.91	1.32	3.18	6.74	4.03	35.50			
521	9	7.00	8.00	1.00	3.00	7.00	8.63	33.50			
522	13	3.00	7.81	1.25	3.91	7.28	8.84	43.40			
523	13	3.00	8.00	1.00	4.00	7.33	8.79	40.70			
525	13	5.25	7.71	3.83	3.92	6.91	7.75	46.80			
530	12	6.53	7.81	2.33	3.73	6.38	5.38	43.20			
531	7	7.00	8.00	2.68	3.32	5.30	3.45	37.30			
533	3	7.00	8.00	4.30	2.38	3.91	0.88	30.30			
534	9	2.94	7.96	1.15	3.04	7.00	6.78	29.70			
535	13	2.32	7.84	1.16	3.92	6.85	9.08	42.40			
536	13	2.00	8.00	1.00	4.00	7.00	9.43	39.80			
540	14	3.22	8.00	1.43	3.99	7.73	8.74	43.20			
542	9	2.83	7.83	1.61	3.09	7.00	7.45	26.20			
543	13	2.83	8.00	1.00	4.00	6.88	8.74	39.20			
545	12	5.64	7.80	2.39	3.75	6.27	5.98	42.40			
546	7	5.74	8.00	3.52	2.95	4.53	3.31	28.40			
550	9	5.64	7.66	1.62	3.20	6.53	4.98	39.50			
551	8	4.28	7.69	2.60	3.27	5.62	5.92	31.70			
552	12	2.98	7.86	1.41	3.60	5.95	7.53	41.00			
554	13	2.80	7.51	1.05	3.83	6.80	8.74	41.30			
560	9	5.91	7.78	1.49	3.17	6.87	4.69	35.40			
561	13	2.11	7.96	0.31	3.96	6.95	9.32	44.40			
562	13	2.00	8.00	0.00	4.00	7.00	9.43	40.90			
563	7	5.14	8.00	2.82	2.85	4.67	3.39	28.00			
571	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	INA		
572	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	INA		
575	7	5.39	7.86	2.76	3.10	4.95	4.18	34.10			

## (06) OPERATIVES, EXCEPT TRANSPORT

601	7	6.51	7.91	3.95	3.00	4.96	3.35	37.40			
602	2	6.65	8.00	4.59	2.42	3.24	0.97	30.30			
603	13	1.76	8.00	1.00	3.85	7.12	9.33	35.20			
604	1	7.00	8.00	5.22	1.93	2.00	-0.84	21.00			
605	6	5.67	8.00	6.72	2.93	4.04	3.14	29.20			
610	6	4.62	7.93	4.96	2.87	3.95	3.54	34.40			
611	5	6.98	7.98	3.07	2.62	3.34	1.34	24.20			
612	6	6.63	7.98	4.06	2.58	3.58	1.54	27.40			
613	8	4.18	7.74	1.68	3.12	5.51	5.53	29.30			
614	7	7.00	8.00	3.01	2.89	4.90	2.36	32.00			
615	11	6.64	8.00	3.16	3.63	4.49	4.08	37.70			
620	6	6.36	8.00	3.78	2.57	3.57	1.77	23.60			
621	3	6.43	8.00	4.36	2.28	3.51	0.96	24.20			
622	6	6.75	7.88	3.45	2.49	4.00	1.44	28.30			
623	5	6.80	6.28	6.63	2.92	3.15	3.41	18.30			

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OCC	O_L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
624	2	5.80	8.00	6.72	1.86	2.69	0.21	21.30			
625	1	6.61	7.95	7.02	1.94	2.15	-0.27	13.80			
626	12	5.01	8.00	1.50	3.50	6.00	5.64	37.30			
630	2	6.60	7.90	5.63	1.92	2.55	-0.07	19.20			
631	8	6.18	7.67	4.42	3.27	5.90	4.68	36.20			
633	7	5.56	8.00	3.51	2.54	4.58	2.60	28.00			
634	1	6.93	8.00	6.43	2.04	2.14	-0.52	27.30			
635	7	4.62	8.00	1.87	3.27	5.32	5.20	33.50			
636	8	2.00	8.00	1.00	3.00	6.00	2.02	30.30			
640	6	5.94	8.00	4.01	2.60	3.90	2.13	27.60			
640	6	5.67	8.00	3.69	2.83	4.12	2.94	26.50	048		
640	6	5.99	8.00	3.21	2.60	4.29	2.09	29.80	049		
640	2	6.30	8.00	5.00	2.23	2.95	2.22	24.70	057		
641	6	7.00	8.00	4.07	2.48	3.47	0.92	26.80			
642	2	6.91	8.00	6.52	2.07	3.14	-0.02	25.10			
643	1	6.89	8.00	6.48	2.06	2.19	-0.41	23.40			
644	7	6.53	7.91	3.74	2.78	4.74	2.50	29.60			
645	7	4.52	7.70	2.80	3.13	5.06	5.08	36.00			
650	6	6.55	8.00	2.19	3.03	4.06	2.69	32.30			
651	6	5.44	8.00	2.88	2.81	4.44	3.22	31.80			
652	6	6.39	8.00	3.79	2.60	3.79	1.78	31.70			
653	7	4.85	7.89	2.76	3.20	4.71	5.02	35.60			
656	7	6.22	8.00	2.52	2.87	4.77	2.87	32.20			
660	2	7.00	8.00	4.25	2.35	2.91	0.43	25.90			
661	7	7.00	8.00	6.10	2.55	4.60	1.51	28.80			
662	6	6.91	8.00	2.93	2.69	4.34	1.78	21.60			
663	6	6.69	7.98	2.32	2.68	4.03	2.28	28.90			
664	2	6.64	7.85	5.13	1.91	2.91	-0.02	21.20			
665	8	7.00	8.00	4.00	2.46	6.22	7.79	32.80			
666	7	7.00	8.00	3.52	3.11	5.19	2.96	34.10			
670	6	6.45	8.00	4.33	2.52	3.45	1.42	19.00			
671	3	7.00	8.00	4.43	2.43	3.86	2.97	26.40			
672	2	6.89	7.91	5.14	2.08	2.86	-0.83	21.70			
673	7	7.00	8.00	2.48	2.94	4.71	2.39	29.30			
674	2	6.35	7.92	4.72	2.33	3.28	2.08	22.90			
680	7	6.69	7.97	3.71	2.90	5.19	2.70	33.40			
681	6	6.64	8.00	4.00	2.54	3.69	1.41	32.10			
690	6	6.31	7.91	4.21	2.57	3.86	0.02	29.30			
692	6	6.31	7.91	4.21	2.57	3.86	0.02	29.30			
694	6	6.31	7.91	4.21	2.57	3.86	0.02	29.30			
695	6	6.31	7.91	4.21	2.57	3.86	0.02	29.30			
	6	6.81	0.00	4.74	2.51	3.88	1.26	25.70	067-077		
	6	6.03	7.55	4.55	2.61	3.48	0.60	25.00	107-109		
	6	6.19	8.00	3.99	2.84	3.84	2.46	14.30	118		
	7	6.79	8.00	3.59	2.58	4.72	1.78	31.30	119		
	6	6.67	7.62	4.62	2.58	4.10	2.22	25.30	127		

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 10

OCC	D_L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
7	6.03	7.54	3.47	2.86	4.57	3.65	29.20		128	-138	
6	6.50	7.74	3.80	2.68	3.97	0.34	30.40			139	
6	5.74	8.00	3.69	2.59	3.91	0.30	27.10			147	
6	6.70	8.00	3.78	2.67	3.58	1.73	29.80		148	+149	
6	5.55	8.00	2.97	3.00	4.14	3.43	30.60			157	
7	6.31	8.00	3.54	2.66	4.53	2.25	27.50			158	
6	6.04	8.00	3.83	2.64	4.12	0.06	28.60			159	
3	6.70	8.00	4.34	2.40	3.47	0.98	26.90		167	-169	
7	5.98	8.00	3.37	3.00	4.82	3.79	33.60			178	
7	6.14	8.00	2.76	2.82	4.64	0.77	33.30			179	
5	6.00	8.00	4.75	2.54	3.34	1.62	30.90			187	
7	6.34	8.00	3.08	2.70	4.60	2.33	34.40			188	
6	5.56	7.91	3.35	2.83	4.27	3.29	31.80		189	-198	
2	7.00	8.00	5.39	2.10	2.76	-0.17	26.30			199	
7	5.55	7.69	3.37	3.08	4.84	4.58	37.50			207	
6	6.10	8.00	4.14	2.57	3.58	1.84	31.20			208	
2	7.00	8.00	4.93	2.34	3.35	0.57	30.30			209	
6	5.88	7.94	3.83	2.70	4.16	2.74	32.30			219	
7	5.78	8.00	2.61	2.93	4.76	3.34	35.30			227	
7	5.81	7.73	4.05	2.87	4.45	3.07	29.20		228	-238	
6	5.85	8.00	3.29	2.93	4.36	3.12	34.20		239	-249	
2	7.00	8.00	4.67	2.39	3.18	0.62	29.70			257	
6	6.27	7.76	5.35	2.68	3.80	0.77	31.80			258	
6	6.09	7.75	4.37	2.57	3.88	0.52	26.60			259	
2	6.62	7.91	5.58	2.19	2.77	2.56	23.10			268	
7	6.44	8.00	2.71	2.93	5.16	2.98	32.60			269	
2	6.37	8.00	5.37	2.19	2.90	0.57	19.20			278	
3	7.00	7.93	5.15	2.37	3.95	0.58	26.50			287	
5	6.36	7.79	5.15	2.53	3.40	2.27	29.20			289	
6	6.22	7.78	4.33	2.51	3.88	1.91	26.40		297	+298	
5	6.35	8.00	7.07	2.52	3.32	1.46	25.80			299	
2	6.60	7.95	5.39	1.94	2.93	2.00	22.00			319	
2	6.66	8.00	4.35	2.39	3.24	0.89	23.60			327	
7	6.33	8.00	3.22	2.93	4.64	2.87	34.80			328	
3	6.76	8.00	4.67	2.24	3.70	0.69	28.90			329	
3	7.00	8.00	4.08	2.43	3.50	0.82	26.70			337	
5	6.20	7.75	6.14	2.47	3.03	2.91	30.00			338	
3	6.44	7.98	4.64	2.41	3.87	1.61	31.00			339	
7	5.92	8.00	3.02	2.96	4.93	3.37	36.20			347	
6	7.00	8.00	4.71	2.74	3.77	1.62	32.10			349	
7	7.00	8.00	3.16	2.76	4.59	1.95	34.20			358	
6	6.72	7.95	4.39	2.70	3.84	1.94	33.20		368	+369	
8	5.55	8.00	2.39	3.12	5.67	4.27	38.70		377	+378	
2	6.84	8.00	4.18	2.34	3.43	0.74	29.90			379	
6	6.84	8.00	3.68	2.52	3.76	1.24	28.50			387	
2	6.86	8.00	5.10	1.87	2.57	-0.63	18.70			388	
2	6.51	8.00	4.74	2.18	3.18	0.53	23.50			389	
6	6.35	7.24	5.42	2.57	3.61	2.85	25.50			397	
6	6.32	7.91	4.15	2.58	3.89	2.00	27.20			398	
3	7.00	8.00	3.67	2.16	4.69	0.71	23.20			407	
6	3.12	7.14	5.84	2.64	3.96	5.60	31.20		408	-429	

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 11

OCC O_L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
7	5.81	8.00	3.40	2.96	4.74	3.38	33.70	447	-479	
5	6.49	7.92	4.61	2.51	3.29	1.38	24.80	507	-588	
2	6.18	8.00	4.70	2.29	3.37	1.10	21.70	607	-698	
3	6.75	8.00	4.38	2.40	3.78	1.06	25.50	727	-759	
7	6.10	8.00	3.67	2.99	4.67	3.00	34.00	907	-937	
6	5.87	7.79	4.70	2.82	3.73	3.00	26.90	ALL ELSE		

## (07) TRANSPORT EQUIPMENT OPERATIVES

701	7	7.00	8.00	3.00	3.00	5.00	2.64	30.80		
703	7	4.01	6.03	3.03	3.01	4.98	6.48	30.20		
704	7	5.46	6.55	3.93	3.00	4.88	6.06	35.50		
705	6	4.68	6.45	5.84	2.90	4.09	8.20	30.50		
706	2	6.93	7.97	3.13	2.10	3.09	0.10	22.60		
710	7	6.24	7.49	3.26	2.75	4.46	2.88	26.40		
711	1	7.00	7.00	8.00	2.00	2.00	5.73	14.10		
712	6	6.30	7.72	4.28	2.91	3.97	3.29	35.70		
713	5	6.32	7.93	5.09	2.55	3.28	1.58	32.40		
714	5	4.74	6.47	3.20	3.00	3.12	5.04	24.20		
715	6	6.87	7.95	3.13	2.94	3.83	2.09	29.10		

## (08) LABORERS, EXCEPT FARM

740	6	6.74	7.23	4.20	2.70	3.75	2.47	23.30		
750	1	6.89	8.00	6.48	1.40	1.70	-2.02	9.30		
751	2	6.89	7.98	5.30	2.25	3.32	0.53	20.50		
752	3	6.74	7.84	4.12	2.20	3.79	0.75	18.10		
753	2	6.58	7.86	6.72	2.17	2.94	0.99	23.00		
754	1	7.00	8.00	6.00	1.46	1.56	-2.02	11.50		
755	2	6.35	7.89	5.42	2.26	2.99	1.00	15.50		
760	2	6.50	7.75	5.58	2.17	3.38	0.91	24.80		
761	3	6.89	7.96	4.64	2.12	4.24	0.67	14.50		
762	5	5.85	7.65	7.12	2.53	2.74	2.76	15.30		
763	7	7.00	8.00	3.48	2.52	5.00	1.62	22.20		
764	1	6.69	7.82	6.65	1.72	2.03	-0.72	12.80		
770	1	6.81	7.92	6.90	2.07	2.36	-0.09	25.30		
780	2	6.81	7.91	5.99	2.14	2.73	0.38	19.20		
785	2	6.81	7.91	5.99	2.14	2.73	0.38	19.20		
	2	6.95	8.00	5.50	1.96	3.02	-0.63	13.30	107	-109
	2	5.81	7.59	6.30	2.34	3.38	2.07	14.70	118	
	1	7.00	8.00	5.89	1.82	1.85	-1.13	17.20	127	
	1	7.00	8.00	7.00	1.00	1.00	-3.23	7.40	128	
	3	7.00	8.00	5.91	2.36	3.84	0.82	25.00	138	
	1	6.92	8.00	5.88	2.05	2.33	-0.40	23.90	139	
	1	7.00	8.00	6.15	1.85	2.39	-0.05	22.90	147	
	1	7.00	8.00	5.93	1.87	2.20	-0.86	21.40	149	
	2	7.00	8.00	6.18	1.95	2.50	-0.67	19.00	158	
	2	7.00	8.00	5.09	2.25	3.25	0.33	24.40	177	-198
	2	7.00	8.00	7.00	2.00	2.64	-0.43	24.00	199	-208

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 12

OCC O_L	D	P	T	GED	SVP	S-DIR	PREST	IN	IND	S/S
1	7.00	8.00	6.34	2.00	2.00	-0.68	23.60			219
1	7.00	8.00	7.00	1.26	1.00	-0.68	13.50			228
5	5.60	8.00	4.70	2.60	3.37	0.02	24.70		OTHER	
1	7.00	8.00	6.00	1.00	2.00	-0.14	15.70	239	-257	
1	7.00	8.00	7.00	2.00	2.00	-0.48	23.40			258
1	7.00	8.00	6.42	1.71	2.00	-1.31	14.50			259
1	6.39	8.00	6.62	1.70	2.11	-0.89	17.20			268
2	7.00	8.00	5.87	1.84	2.67	-0.87	19.00			269
1	7.00	8.00	6.00	1.00	2.00	-0.64	7.40			278
2	7.00	8.00	5.00	2.00	3.00	-0.09	16.40			279
2	7.00	8.00	5.60	2.28	3.09	0.43	41.30			287
2	7.00	8.00	6.49	1.75	2.50	-1.53	10.50	288	-298	
1	7.00	8.00	5.00	2.00	2.00	-0.18	10.10			299
2	7.00	8.00	7.00	2.00	2.49	-0.49	14.60			317
1	7.00	8.00	7.00	2.00	2.00	0.00	17.60		OTHER	
2	7.00	8.00	7.00	2.00	2.52	-0.45	19.60	319	-327	
2	7.00	8.00	5.76	2.00	2.72	-0.60	15.00			328
2	7.00	8.00	6.43	1.88	2.77	-0.64	19.30	329	+337	
6	5.73	6.47	7.25	3.00	4.03	5.88	20.60			338
1	7.00	8.00	6.83	1.61	2.34	-1.39	19.90	347	-369	
2	7.00	8.00	7.00	2.00	2.74	-0.42	24.00	377	+378	
2	6.35	8.00	6.22	2.26	2.95	0.75	24.90	379	+387	
2	7.00	8.00	6.09	2.16	2.82	-0.03	18.40	388	-397	
2	6.86	7.96	6.08	1.98	2.56	-0.32	17.80			398
5	7.00	8.00	4.36	2.47	3.13	0.77	20.40			407
2	6.76	8.00	5.45	2.22	3.12	0.42	21.70	408	-429	
2	6.70	7.95	5.82	2.18	2.84	0.43	19.20	447	-479	
2	6.40	7.76	6.51	2.17	2.75	1.06	15.50	507	-588	
2	6.32	7.66	6.46	2.33	2.91	2.07	12.60	607	-698	
5	6.70	8.00	5.86	2.45	3.36	1.41	22.50	727	-759	
1	6.78	8.00	6.58	2.07	2.32	-0.23	2.10	769	-798	
2	6.28	8.00	6.34	2.23	2.70	0.65	18.20	907	-937	
2	6.42	7.86	5.21	2.41	3.35	1.56	16.80	ALL ELSE		

## (11) FARMERS AND FARM MANAGERS

801	13	1.68	7.97	1.51	3.84	6.62	9.29	30.90
802	13	1.54	6.49	5.11	3.98	6.83	13.76	39.10

## (12) FARM LABORERS AND FARM FOREMEN

821	13	1.33	4.39	2.55	4.00	6.86	13.03	32.60
822	6	6.61	7.97	4.74	2.53	3.75	1.51	12.80
823	6	6.68	8.00	4.61	2.61	3.79	1.60	8.30
824	6	6.32	7.45	6.49	3.00	3.74	5.83	29.80

## (10) SERVICE WORKERS, EXC. PRIVATE HOUSEHOLD

901	1	6.75	7.78	7.12	2.17	2.27	2.85	16.90
902	2	6.43	7.54	6.93	2.25	2.56	1.59	18.20
903	6	5.79	7.85	4.81	2.83	3.62	3.00	22.70

## OCCUPATION CHARACTERISTICS FOR 1970 CENSUS CLASSIFICATIONS PAGE 13

OCC D_L	D	P	T	GED	SVP	S-DIR	PREST	IN IND S/S
910	6	6.83	6.98	7.95	3.01	3.48	8.44	31.00
911	1	7.00	7.05	7.95	2.02	2.03	5.46	0.00
912	12	3.28	7.68	1.64	3.60	6.42	7.87	38.00
913	1	6.89	7.96	6.96	1.21	2.00	-1.97	10.50
914	1	6.63	7.03	7.81	2.21	2.09	6.31	14.50
915	5	6.95	6.99	7.93	2.88	2.93	7.93	23.40
916	2	6.66	7.64	6.82	1.76	2.95	1.86	13.40
921	12	3.00	7.01	7.91	4.00	6.43	14.61	41.90
922	11	3.88	6.65	7.40	3.63	4.72	12.04	38.30
923	12	4.84	7.00	8.00	3.54	5.46	12.06	27.00
924	6	8.00	7.00	8.00	3.00	4.00	6.98	33.30
925	6	6.81	6.91	7.97	3.06	4.02	8.99	33.00
926	11	4.67	7.00	8.00	3.59	5.17	12.19	43.30
931	5	7.00	7.04	7.96	2.96	2.96	7.93	44.70
932	6	5.42	5.88	7.57	3.01	3.57	9.01	17.20
933	5	6.05	6.79	7.44	2.69	2.92	8.59	26.40
934	5	5.56	6.17	7.61	2.57	3.21	8.52	24.00
935	7	2.90	6.93	1.64	3.09	5.14	7.37	27.90
940	13	1.28	3.42	6.90	3.80	6.54	16.97	33.40
941	1	7.00	7.00	8.00	2.00	2.00	5.73	1.60
942	4	6.75	6.79	7.99	3.06	2.41	5.45	23.00
943	2	6.03	5.67	7.61	2.16	2.72	7.67	18.30
944	12	2.06	6.82	6.87	3.94	5.95	10.45	38.50
945	10	2.00	7.00	1.00	4.00	3.00	8.63	21.10
950	11	3.03	4.99	7.76	3.59	5.05	13.93	36.60
952	10	4.18	4.84	7.68	3.83	4.40	13.93	19.00
953	2	6.58	7.11	7.26	2.30	2.73	6.32	3.70
954	15	2.00	3.39	8.00	4.61	5.89	16.87	43.20
960	2	6.29	6.29	7.43	2.23	2.54	6.71	15.00
961	8	5.85	7.40	4.78	3.21	6.08	5.87	41.20
962	5	6.46	6.02	7.91	2.53	3.19	8.33	26.00
963	6	7.00	6.00	8.00	3.00	3.50	4.23	33.70
964	7	2.37	5.86	7.99	3.16	4.81	13.63	37.30
965	6	7.00	6.00	8.00	3.00	3.96	9.41	35.20

## (09) PRIVATE HOUSEHOLD WORKERS

980	4	6.99	7.00	8.00	3.00	2.01	7.91	18.12
981	6	4.37	7.08	5.07	2.99	4.35	8.11	17.40
982	6	5.55	6.22	7.81	3.05	3.51	9.20	15.80
983	1	7.00	7.95	6.84	2.05	2.05	-0.25	8.40
984	5	6.96	7.21	7.77	2.77	2.76	6.76	11.40

## APPENDIX A

### Explanation of Relationships Within Data, People, Things Hierarchies

Much of the information in this edition of the Dictionary is based on the premise that every job requires a worker to function in relation to Data, People, and Things, in varying degrees. These relationships are identified and explained below. They appear in the form of three hierarchies arranged in each instance from the relatively simple to the complex in such a manner that each successive relationship includes those that are simpler and excludes the more complex.<sup>1</sup> The identifications attached to these relationships are referred to as worker functions, and provide standard terminology for use in summarizing exactly what a worker does on the job by means of one or more meaningful verbs.

A job's relationship to Data, People, and Things can be expressed in terms of the highest appropriate function in each hierarchy to which the worker has an occupationally significant relationship, and these functions taken together indicate the total level of complexity at which he must perform. The last three digits of the occupational code numbers in the Dictionary reflect significant relationships to Data, People, and Things, respectively.<sup>2</sup> These last three digits express a job's relationship to Data, People, and Things by identifying the highest appropriate function in each hierarchy to which the job requires the worker to have a significant relationship, as reflected by the following table:

DATA (4th digit)	PEOPLE (5th digit)	THINGS (6th digit)
0 Synthesizing	0 Mentoring	0 Setting-Up
1 Coordinating	1 Negotiating	1 Precision Working
2 Analyzing	2 Instructing	2 Operating-Controlling
3 Compiling	3 Supervising	3 Driving-Operating
4 Computing	4 Diverting	4 Manipulating
5 Copying	5 Persuading	5 Tending
6 Comparing	6 Speaking-Signaling	6 Feeding-Offbearing
7 } No significant relationship	7 Serving	7 Handling
8 }	8 No significant relationship	8 No significant relationship

**DATA:** Information, knowledge, and conceptions, related to data, people, or things, obtained by observation, investigation, interpretation, visualization, mental creation; incapable of being touched; written data take the form of numbers, words, symbols; other data are ideas, concepts, oral verbalization.

- 0 **Synthesizing:** Integrating analyses of data to discover facts and/or develop knowledge concepts or interpretations.
- 1 **Coordinating:** Determining time, place, and sequence of operations or action to be taken on the basis of analysis of data; executing determinations and/or reporting on events.
- 2 **Analyzing:** Examining and evaluating data. Presenting alternative actions in relation to the evaluation is frequently involved.
- 3 **Compiling:** Gathering, collating, or classifying information about data, people, or things. Reporting and/or carrying out a prescribed action in relation to the information is frequently involved.
- 4 **Computing:** Performing arithmetic operations and reporting on and/or carrying out a prescribed action in relation to them. Does not include counting.
- 5 **Copying:** Transcribing, entering, or posting data.
- 6 **Comparing:** Judging the readily observable functional, structural, or compositional characteristics (whether similar to or divergent from obvious standards) of data, people, or things.

**PEOPLE:** Human beings; also animals dealt with on an individual basis as if they were human.

- 0 **Mentoring:** Dealing with individuals in terms of their total personality in order to advise, counsel, and/or guide them with regard to problems that may be resolved by legal, scientific, clinical, spiritual, and/or other professional principles.

<sup>1</sup> As each of the relationships to People represents a wide range of complexity, resulting in considerable overlap among occupations, their arrangement is somewhat arbitrary and can be considered a hierarchy only in the most general sense.

<sup>2</sup> Only those relationships which are occupationally significant in terms of the requirements of the job are reflected in the code numbers. The incidental relationships which every worker has to Data, People, and Things, but which do not seriously affect successful performance of the essential duties of the job, are not reflected.

- 1 **Negotiating:** Exchanging ideas, information, and opinions with others to formulate policies and programs and/or arrive jointly at decisions, conclusions, or solutions.
- 2 **Instructing:** Teaching subject matter to others, or training others (including animals) through explanation, demonstration, and supervised practice; or making recommendations on the basis of technical disciplines.
- 3 **Supervising:** Determining or interpreting work procedures for a group of workers, assigning specific duties to them, maintaining harmonious relations among them, and promoting efficiency.
- 4 **Diverting:** Amusing others.
- 5 **Persuading:** Influencing others in favor of a product, service, or point of view.
- 6 **Speaking-Signaling:** Talking with and/or signaling people to convey or exchange information. Includes giving assignments and/or directions to helpers or assistants.
- 7 **Serving:** Attending to the needs or requests of people or animals or the expressed or implicit wishes of people. Immediate response is involved.

**THINGS:** Inanimate objects as distinguished from human beings; substances or materials; machines, tools, equipment; products. A thing is tangible and has shape, form, and other physical characteristics.

0 **Setting Up:** Adjusting machines or equipment by replacing or altering tools, jigs, fixtures, and attachments to prepare them to perform their functions, change their performance, or restore their proper functioning if they break down. Workers who set up one or a number of machines for other workers or who set up and personally operate a variety of machines are included here.

- 1 **Precision Working:** Using body members and/or tools or work aids to work, move, guide, or place objects or materials in situations where ultimate responsibility for the attainment of standards occurs and selection of appropriate tools, objects, or materials, and the adjustment of the tool to the task require exercise of considerable judgment.
- 2 **Operating-Controlling:** Starting, stopping, controlling, and adjusting the progress of machines or equipment designed to fabricate and/or process objects or materials. Operating machines involves setting up the machine and adjusting the machine or material as the work progresses. Controlling equipment involves observing gages, dials, etc., and turning valves and other devices to control such factors as temperature, pressure, flow of liquids, speed of pumps, and reactions of materials. Setup involves several variables and adjustment is more frequent than in tending.
- 3 **Driving-Operating:** Starting, stopping, and controlling the actions of machines or equipment for which a course must be steered, or which must be guided, in order to fabricate, process, and/or move things or people. Involves such activities as observing gages and dials; estimating distances and determining speed and direction of other objects; turning cranks and wheels; pushing clutches or brakes; and pushing or pulling gear lifts or levers. Includes such machines as cranes, conveyor systems, tractors, furnace charging machines, paving machines and hoisting machines. Excludes manually powered machines, such as handtrucks and dollies, and power assisted machines, such as electric wheelbarrows and handtrucks.
- 4 **Manipulating:** Using body members, tools, or special devices to work, move, guide, or place objects or materials. Involves some latitude for judgment with regard to precision attained and selecting appropriate tool, object, or material, although this is readily manifest.
- 5 **Tending:** Starting, stopping, and observing the functioning of machines and equipment. Involves adjusting materials or controls of the machine, such as changing guides, adjusting timers and temperature gages, turning valves to allow flow of materials, and flipping switches in response to lights. Little judgment is involved in making these adjustments.
- 6 **Feeding-Offbearing:** Inserting, throwing, dumping, or placing materials in or removing them from machines or equipment which are automatic or tended or operated by other workers.
- 7 **Handling:** Using body members, handtools, and/or special devices to work, move, or carry objects or materials. Involves little or no latitude for judgment with regard to attainment of standards or in selecting appropriate tool, object, or material.

**NOTE:** Included in the concept of Feeding-Offbearing, Tending, Operating-Controlling, and Setting Up, is the situation in which the worker is actually part of the setup of the machine, either as the holder and guider of the material or holder and guider of the tool.

## APPENDIX B

The following is a table explaining the various levels of general educational development.

### GENERAL EDUCATIONAL DEVELOPMENT

Level	Reasoning Development	Mathematical Development	Language Development
6	Apply principles of logical or scientific thinking to a wide range of intellectual and practical problems. Deal with non-verbal symbolism (formulas, scientific equations, graphs, musical notes, etc.) in its most difficult phases. Deal with a variety of abstract and concrete variables. Apprehend the most abstruse classes of concepts.	Apply knowledge of advanced mathematical and statistical techniques such as differential and integral calculus, factor analysis, and probability determination, or work with a wide variety of theoretical mathematical concepts and make original applications of mathematical procedures, as in empirical and differential equations.	Comprehension and expression of a level to —Report, write, or edit articles for such publications as newspapers, magazines, and technical or scientific journals. Prepare and draw up deeds, leases, wills, mortgages, and contracts. —Prepare and deliver lectures on politics, economics, education, or science. —Interview, counsel, or advise such people as students, clients, or patients, in such matters as welfare eligibility, vocational rehabilitation, mental hygiene, or marital relations. —Evaluate engineering technical data to design buildings and bridges.
5	Apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions. Interpret an extensive variety of technical instructions, in books, manuals, and mathematical or diagrammatic form. Deal with several abstract and concrete variables.	Perform ordinary arithmetic, algebraic, and geometric procedures in standard, practical applications.	Comprehension and expression of a level to —Transcribe dictation, make appointments for executive and handle his personal mail, interview and screen people wishing to speak to him, and write routine correspondence on own initiative. —Interview job applicants to determine work best suited for their abilities and experience, and contact employers to interest them in services of agency. —Interpret technical manuals as well as drawings, and specifications, such as layouts, blueprints, and schematics.
4	Apply principles of rational systems <sup>1</sup> to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Interpret a variety of instructions furnished in written, oral, diagrammatic, or schedule form.	Make arithmetic calculations involving fractions, decimals and percentages.	Comprehension and expression of a level to —File, post, and mail such material as forms, checks, receipts, and bills. —Copy data from one record to another, fill in report forms, and type all work from rough draft or corrected copy. —Interview members of household to obtain such information as age, occupation, and number of children, to be used as data for surveys, or economic studies. —Guide people on tours through historical or public buildings, describing such features as size, value, and points of interest.
3	Apply common sense understanding to carry out instructions furnished in written, oral, or diagrammatic form. Deal with problems involving several concrete variables in or from standardized situations.	Use arithmetic to add, subtract, multiply, and divide whole numbers.	Comprehension and expression of a level to —Learn job duties from oral instructions or demonstration. —Write identifying information, such as name and address of customer, weight, number, or type of product, on tags, or slips. —Request orally, or in writing, such supplies as linen, soap, or work materials.
2	Apply common sense understanding to carry out detailed but uninvolved written or oral instructions. Deal with problems involving a few concrete variables in or from standardized situations.	Perform simple addition and subtraction, reading and copying of figures, or counting and recording.	
1	Apply common sense understanding to carry out simple one- or two-step instructions. Deal with standardized situations with occasional or no variables in or from these situations encountered on the job.		

<sup>1</sup> Examples of "principles of rational systems" are: Bookkeeping, internal combustion engines, electric wiring systems, house building, nursing, farm management, ship sailing.

## APPENDIX C

Specific Vocational Preparation: The amount of time required to learn the techniques, acquire information, and develop the facility needed for average performance in a specific job-worker situation. This training may be acquired in a school, work, military, institutional, or avocational environment. It does not include orientation training required of even every fully qualified worker to become accustomed to the special conditions of any new job. Specific vocational training includes training given in any of the following circumstances:

- a. Vocational education (such as high school commercial or shop training, technical school, art school, and that part of college training which is organized around a specific vocational objective);
- b. Apprentice training (for apprenticeable jobs only);
- c. In-plant training (given by an employer in the form of organized classroom study);
- d. On-the-job training (serving as learner or trainee on the job under the instruction of a qualified worker);
- e. Essential experience in other jobs (serving in less responsible jobs which lead to the higher grade job or serving in other jobs which qualify).

The following is an explanation of the various levels of specific vocational preparation.

<i>Level</i>	<i>Time</i>
1	Short demonstration only.
2	Anything beyond short demonstration up and including 30 days.
3	Over 30 days up to and including 3 months.
4	Over 3 months up to and including 6 months.
5	Over 6 months up to and including 1 year.
6	Over 1 year up to and including 2 years.
7	Over 2 years up to and including 4 years.
8	Over 4 years up to and including 10 years.
9	Over 10 years.

