

DOCUMENT RESUME

ED 060 213

VT 014 874

TITLE 1975 Employment--Minnesota and Minneapolis-St. Paul  
Metropolitan Area and 11 Economic Regions.  
INSTITUTION Minnesota State Dept. of Manpower Services, St.  
Paul.  
PUB DATE Jan 70  
NOTE 47p.  
EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS \*Employment Projections; \*Employment Statistics;  
\*Employment Trends; Manpower Needs; Occupations;  
Statistical Data; Tables (Data)  
IDENTIFIERS \*Minnesota

ABSTRACT

The Bureau of Labor Statistics national industry-occupational matrix was used to project employment for 1975 by occupation and industry for Minnesota and several areas within the state. In addition to the 1975 projections, the report provides statewide and area employment data for 1960 and 1968, by occupation and industry, along with the percentage change between years. The report projects continuing increases in employment in all industries except the agriculture and forestry industry, and in all occupations except farmers and farm workers. (BH)

ED 060213

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Prepared by  
MINNESOTA  
DEPARTMENT OF MANPOWER SERVICES  
Research and Planning  
January 1970

## TABLE OF CONTENTS

	Page
Introduction . . . . .	1
Flow Chart . . . . .	4
Minnesota Industry Employment . . . . .	5
Industry Employment National and State . . . . .	6
Minnesota Employment by Major Occupational Group . . . . .	7
Occupational Employment National and State . . . . .	8
Minnesota Occupational Employment 1960, 1968, 1975 . . . . .	9
Minneapolis-St. Paul Metropolitan Area Industry Employment . . . . .	14
Minneapolis-St. Paul Metropolitan Area Employment by Major Occupational Group . . . . .	15
Minneapolis-St. Paul Metropolitan Area Occupational Employment 1960, 1968, 1975 . . . . .	16
Listing of Counties Comprising Economic Regions . . . . .	21
Map of Economic Regions . . . . .	22
Economic Regions Total Employment . . . . .	23
Economic Regions Industry Employment . . . . .	24
Regions 1-11 Occupational Employment . . . . .	30
Appendix . . . . .	41
A Note on the Use of the BLS National Occupational Matrix . . . . .	42

## INTRODUCTION

The method used in this study to project occupational employment requirements to 1975 for Minnesota, Minneapolis-St. Paul Metropolitan Area, and eleven Economic Regions in the State employs, as a basis, an industry-occupational matrix. The matrix provides coefficients, by type of labor required, to produce a unit of output by the industry in question. The technique makes use of national occupational requirements by industry to develop area projections, with the underlying assumption being that occupational employment within industries in the area will follow the same general pattern of change as is evidenced nationally. Obviously implicit, and perhaps a more important assumption, is that area occupational percentages within each industry will not tend to approach or diverge from national occupational percentages. Using only the nationally determined rate of occupational change for deriving the final projection allows the relative growth rate of the area industries to play the primary role in estimating future occupational requirements while at the same time bringing the national trends in occupational distribution by industry into the model. The national staffing patterns by industry for 1960 and 1975, together with area industry employment data for 1960, 1968, and 1975 plus 1960 occupational employment, are used to derive area occupational employment estimates for 1968 and 1975.

### Industry Employment 1960, 1968, and 1975: State and Metropolitan Area

The 1960 industry employment data was available from the 1960 Minnesota Census. Employment in the "industry-not-reported" category was prorated over the coded industries on the basis of their relative levels of employment to arrive at an adjusted figure (Flow Chart, Step #1). <sup>1/</sup>

Estimates of wage and salary employment for 1968 were supplied by the Current Employment Statistics (C.E.S.) Program (Step A). In order to convert these figures into comparable Census data, each estimate was multiplied by its 1960 Census wage and salary/1960 C.E.S. employment ratio (Step B). Projections of employment of government workers engaged in activities other than public administration (excluding those in education and medical services) were made by applying the 1960-1968 trend for C.E.S. covered government workers (excluding those in education and medical services) to the 1960 Census count of government workers. Estimates for government workers in education and medical services were made separately using C.E.S. trends in these components. In a similar fashion, estimates of all other nonagriculture employment (domestic, self-employed, and unpaid family workers) were made using national and local information. The rate of change between the respective years was applied to the category within each industry. Adding these two categories together supplied the estimated government workers, self-employed, and unpaid family workers employment (Step C). The revised wage and salary employment (Steps AxB) plus the above two categories (C) were summed for each industry resulting in the 1968 industry estimates to make them comparable to the 1960 Census data (Step #2), the basis on which the national industry occupational matrix was developed.

<sup>1/</sup> All numbered and lettered steps to which referrals are made in the narrative appear in the Flow Chart, at page 4.

Industry estimates of wage and salary employment from a previous study (Minnesota and Minneapolis-St. Paul Metropolitan Area Employment - 1975) were reviewed and revised when necessary (Step D). Metropolitan Area and "Out-state" (remainder of the State) estimates were made separately. As in the 1968 estimates, this data was converted to comparable census data (Step B). Estimates for government, self-employed and unpaid family workers were arrived at in the same manner as the 1968 estimates using appropriate trend values (Step E). Again all categories of workers were summed (Steps DxB+E) resulting in 1975 industry estimates (Step #3).

#### Industry Employment 1960, 1968, and 1975: Economic Regions

The 1960 industry employment data was available from the 1960 Census for each county. Employment in the "industry-not-reported" category was prorated over the coded industries on the basis of their relative levels of employment, as was done for the State and Metropolitan Area, to obtain the adjusted figure. Economic Region totals were arrived at by merely summing the appropriate county data.

Covered employment data by industry for March 1960 and March 1968 were available for each county. Regional totals were again derived by summing the appropriate data. The rate of change in covered employment between these two time periods was applied to the adjusted 1960 Census employment. Since the "Outstate" estimates for 1968 and 1975 formed the "control" totals for Economic Region Estimates, the 1968 industry employment by region was wedged to this total.

"First" estimates of employment for 1975 in all industries except government and agriculture were made using 1960-1968 trends. These estimates were then adjusted using covered employment data for March, 1969, information on construction plans, and a judgmental interpretation of all available data. These adjusted estimates were then forced to conform to given "Outstate" estimates. Trends between the 1959 and 1964 Census of Agriculture were used to estimate 1968 and 1975 agricultural employment. Because of the lack of any county data since 1964, the agricultural figures should be viewed with more skepticism than other industry estimates. Employment trends in all industries, with the exception of government, were then used to estimate government employment.

#### Occupational Employment 1960

The 1960 occupational employment, for the State and Metropolitan Area was obtained from the 1960 Minnesota Census. Regional occupational employment was available for each county from unpublished 1960 Census data. Employment for the occupation-not-reported category was prorated in a manner similar to that for 1960 industry employment (Step #4). Also, several conversions were made for Bureau of Labor Statistics (BLS) occupations not directly comparable to Census occupations. For example, the BLS classification of Other Medical Health Workers corresponds to Chiropractors, Student Nurses, and Therapists and Healers, in the Census. The above two operations provided the distribution of 1960 occupation employment that forms the base period estimate for deriving the 1968 and 1975 occupational projections.

#### National Matrix 1960, 1968, and 1975

The Bureau of Labor Statistics, U. S. Department of Labor, developed national industry staffing patterns for 1960 and 1975 (Steps # 5 & 6). It was necessary to develop 1968 patterns in order to derive expected area growth in employment, by occupation, between a recent period (1968) and 1975. It would be of little value merely to report 1960 and 1975 figures for occupations with no way of showing how much change had already taken place. In order to

develop the 1968 staffing patterns, (Step #7) a linear interpolation (.5333 or 8/15) between the 1960 and 1975 patterns was used (Steps F & G). No better method of establishing a 1968 staffing pattern was available at the time, and while granting that this straight-line method has its flaws, the results should generally be valid. The actual manipulation of matrix data is relatively simple. Area employment in each local industry (51 industry groups for the State and Metropolitan Area and 11 for the regions) is multiplied by the specific occupational staffing coefficients (160 occupations for the State and Metropolitan Area and 40 for the regions) for each of the three periods and then summed, by occupation, to get total occupational requirements. The result is an estimate of area occupational employment as it would be if the industries were staffed identical to the national pattern for 1960 (Step #8), 1968 (Step #9) and 1975 (Step #10).

#### Actual Employment Compared to Matrix Results

In actuality, the area's 1960 Census occupational employment may not be the same as that based on national staffing patterns for 1960. Thus, only the rate of change in occupational distribution is used from the matrix results. The area's 1968 occupational employment (Step #11) is a product of the rate of growth in industry employment and change in occupational distribution from the 1960 matrix result (Step #8) to the 1968 total (Step #9) applied to the 1960 Census occupational employment. 1975 area employment (Step #12) is derived in a similar manner utilizing the rate of growth and change from 1960 to 1975 and applying it to Census employment.

#### Industry and Occupational Totals

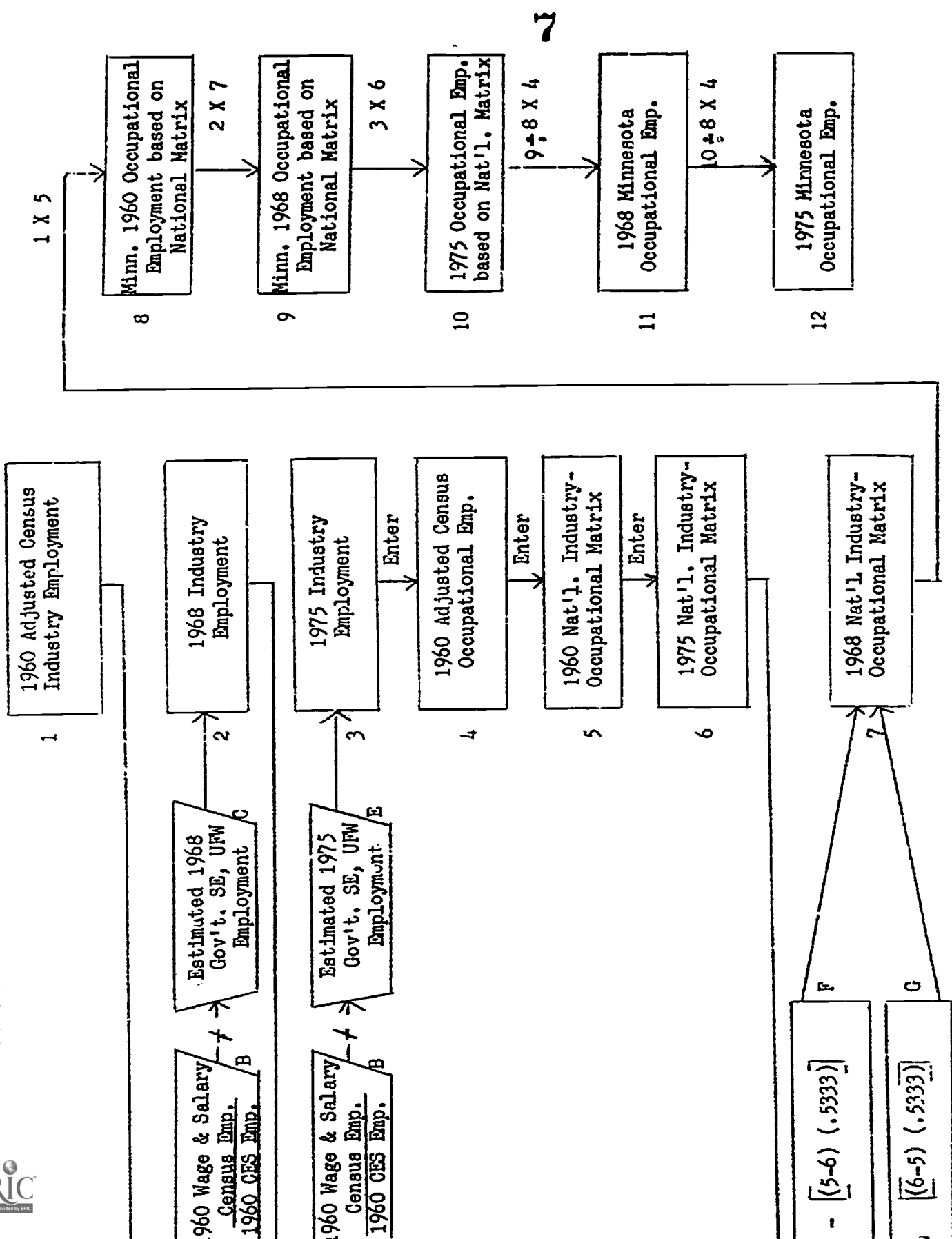
Industry and occupational totals are not identical (except in 1960 since all figures are Census data) because the Minnesota occupational distributions will differ from those based on the national pattern. If, initially, the faster growing occupations are relatively larger in the State or area, i.e., the 1960 Census employment figure is larger than the 1960 figure based on the national staffing pattern, then the State occupational figures will exceed the industry totals. Conversely if those occupations with the slower growth rates are relatively larger then the occupation totals will be less. An example of the former situation, with the number of occupations confined to four for ease of presentation, follows:

(1) Occ.	Based on National Pattern			State Data	
	(2) 1960	(3) 1975	(4) (3) + (2)	(5) 1960	(6) (4) x (5)
A	50	50	1.00	50	50
B	100	125	1.25	75	94
C	150	210	1.40	125	175
D	200	300	1.50	250	375
Total	500	685		500	694

Industry Total 1960 = 500      1975 = 685

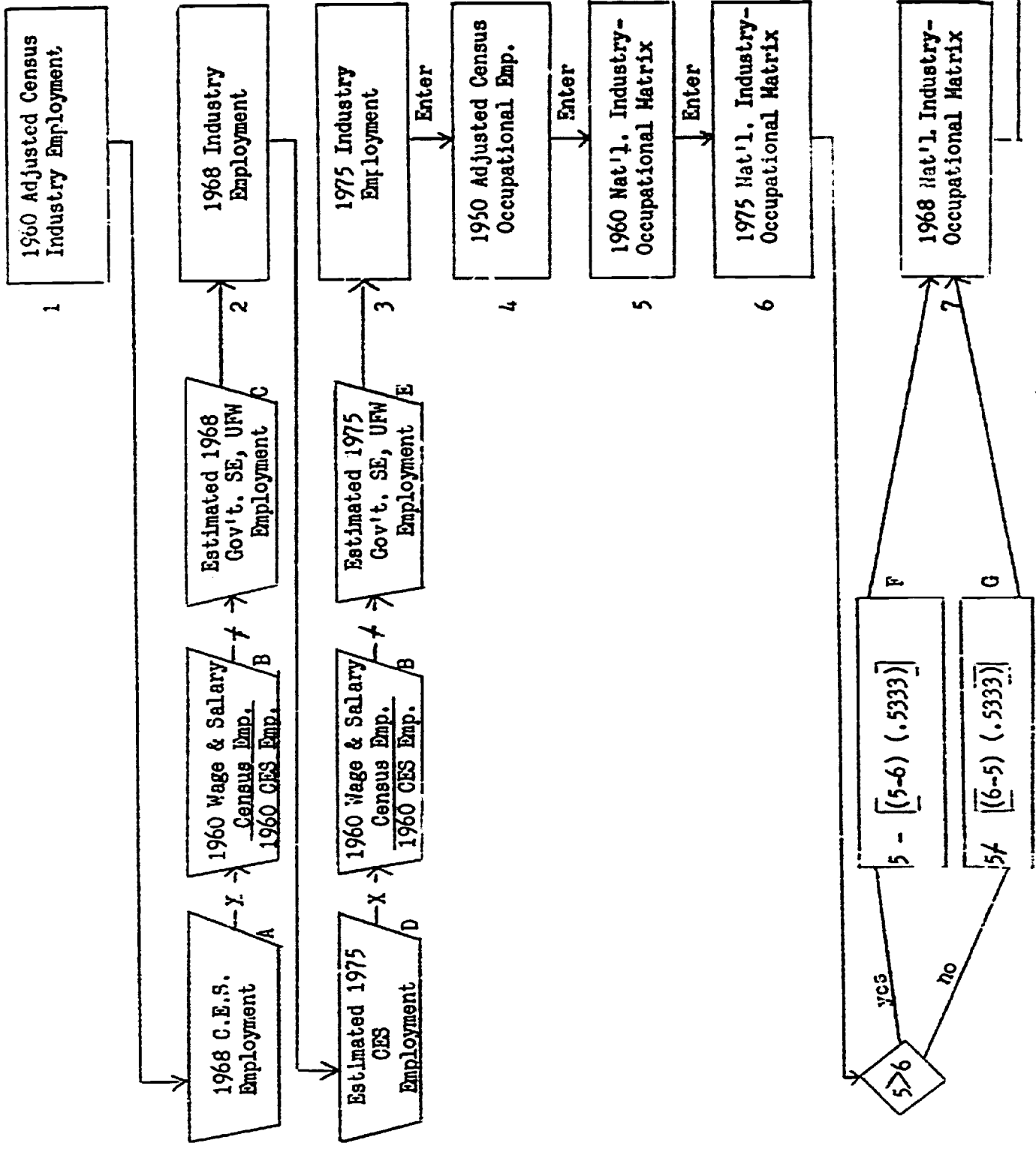
The projected occupational data were not "forced" to conform to projected State industry totals since each initial occupational estimate was considered to be a "best" estimate taken by itself. No valid reason existed to raise or lower the estimates by a certain percentage in order that occupation and industry totals be the same. (The greatest percentage difference occurs in Region I's 1975 employment where the industry employment exceeds occupational employment by 3.5 percentage points.)

FLOW CHART





FLOW CHART



Count on  
0 pages



**MINNESOTA  
INDUSTRY EMPLOYMENT  
(In Thousands)**

<u>Industry</u>	<u>Employment</u>			<u>Per Cent Change</u>	
	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	1233.4	1461.4	1615.9	18.5	10.6
Ag., For., Fish.	184.1	140.5	112.0	-23.7	-20.3
Mining	18.0	15.2	16.7	18.6	9.8
Construction	70.0	79.4	88.3	13.4	11.2
Durable Mfg.	117.2	184.0	218.3	56.3	18.6
Non-Durable Mfg.	129.7	148.8	163.8	14.7	10.1
Trans., Comm., P.U.	92.4	94.4	101.7	2.2	7.7
Wholesale Trade	53.9	59.8	64.6	10.9	8.0
Retail Trade	195.0	240.2	268.8	23.2	11.9
Finance, Ins., R.E.	52.0	62.4	71.1	20.0	13.9
Services	272.2	374.1	434.6	37.4	16.2
Public Administration	48.3	62.6	75.9	29.6	21.2

INDUSTRY EMPLOYMENT - NATIONAL AND STATE

<u>Industry</u>	1960		1975		Per Cent Change 1960-1975	
	<u>Per Cent of Total National</u>	<u>State</u>	<u>Per Cent of Total National</u>	<u>State</u>	<u>National</u>	<u>State</u>
TOTAL	100.0	100.0	100.0	100.0	33.0	31.0
Ag., For., Fish.	8.7	14.9	4.4	6.9	-33.4	-39.2
Mining	1.1	1.5	.7	1.1	-11.5	- 7.5
Construction	6.1	5.7	6.4	5.5	39.5	26.1
Durable Mfg.	14.6	9.5	13.5	13.5	23.0	85.5
Non-Durable Mfg.	11.3	10.5	9.7	10.1	14.2	26.3
Trans., Comm., P.U.	6.8	7.5	6.1	6.3	18.8	10.1
Trade	20.0	20.2	20.8	20.6	38.1	33.9
Finance, Ins., R.E.	4.3	4.2	4.5	4.4	39.6	36.7
Services	22.2	22.1	28.1	26.9	68.2	59.7
Public Administration <sup>1/</sup>	4.8	3.9	5.8	4.7	59.7	57.1

<sup>1/</sup> Includes public administration only. Government agencies engaged in education and medical services and in activities commonly carried on by private enterprises, such as transportation and manufacturing, are classified in the appropriate industrial category.

MINNESOTA  
EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP  
(In Thousands)

<u>Occupation</u>	1960		1968		1975	
	<u>Employment</u>	<u>% of Total</u>	<u>Employment</u>	<u>% of Total</u>	<u>Employment</u>	<u>% of Total</u>
TOTAL	1233.4	100.0	1466.6	100.0	1622.4	100.0
Prof., Tech., Kind.	146.8	11.9	213.3	14.5	256.5	15.8
Mgrs., Off., Prop.	106.8	8.7	125.1	8.5	135.6	8.4
Clerical & Kindred	177.4	14.4	231.1	15.8	271.5	16.7
Sales Workers	94.3	7.6	111.4	7.6	122.2	7.5
Craftsman	155.2	12.6	193.1	13.2	218.0	13.4
Operatives	181.6	14.7	228.5	15.6	259.0	16.0
Services	141.5	11.5	180.7	12.3	208.1	12.8
Laborers	49.3	4.0	50.7	3.5	49.2	3.0
Farmers & Farm Wkrs.	180.3	14.6	132.7	9.0	102.2	6.3

OCCUPATIONAL EMPLOYMENT - NATIONAL AND STATE

Occupation	1960		1975		Per Cent Change 1960-1975	
	Per Cent of National	Total State	Per Cent of National	Total State	National	State
TOTAL	100.0	100.0	100.0	100.0	33.0	31.4
Prof., Tech., Kind.	11.2	11.9	14.6	15.8	72.9	74.7
Mgrs., Off., Prop.	10.6	8.7	10.2	8.4	27.9	27.0
Clerical	14.7	14.4	16.7	16.7	50.9	53.0
Sales Workers	6.6	7.6	6.6	7.5	34.2	29.6
Craftsmen	12.8	12.6	12.8	13.4	32.7	40.5
Operatives	18.0	14.7	16.7	16.0	23.5	42.6
Services	12.5	11.5	14.3	12.9	52.6	47.1
Laborers	5.5	4.0	4.3	3.0	- 3.1	—
Farmers & Farm Workers	8.1	14.6	3.8	6.3	-37.9	-43.3

## MINNESOTA OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
TOTAL	1233408	1466616	1622388	18.9	10.6
<u>Professional, Technical, Kindred</u>	146827	213304	256469	45.2	20.3
<u>Engineers, Technical</u>	13134	21832	28791	66.2	31.9
Engineers, Aeronautical	186	345	452	85.5	31.0
Engineers, Chemical	467	700	865	49.9	23.6
Engineers, Civil	2599	3394	4145	30.6	22.1
Engineers, Electrical	2728	4812	6411	76.4	33.2
Engineers, Industrial	1716	3314	4671	93.1	40.9
Engineers, Mechanical	2479	4323	5600	74.4	29.5
Engineers, Metallurgical	158	274	354	73.4	29.2
Engineers, Mining	346	337	403	- 2.6	19.6
Engineers, Other	2455	4333	5890	76.5	35.9
Natural Scientists	2309	3612	4612	56.4	27.7
Chemists	1507	2271	2835	50.7	24.8
Agricultural Scientists	148	217	262	46.6	20.7
Biological Scientists	227	344	444	51.5	29.1
Geologists, Geophysicists	60	74	93	23.3	25.7
Mathematicians	152	310	431	3.9	39.0
Physicists	145	302	441	108.3	46.0
Other Natural Scientists	70	94	106	34.3	12.8
Technicians, exc. Medical & Dental	11040	18421	24566	66.9	33.4
Draftsmen	3734	5959	7468	59.6	25.3
Surveyors	907	1306	1689	44.0	29.3
Radio Operators	512	624	727	21.9	16.5
Technicians, Other	5887	10532	14682	78.9	39.4
Medical, Other Health Workers	30648	39679	46951	29.5	18.3
Dentists	1933	2250	2389	16.4	6.2
Dieticians, Nutritionists	452	546	569	20.8	4.2
Nurses, Professional	13640	17555	20637	28.7	17.6
Optometrists	322	346	337	7.5	- 2.6
Osteopaths	52	57	57	9.6	0.0
Pharmacists	1837	1927	1854	4.9	- 3.8
Physicians & Surgeons	4876	6158	7134	26.3	15.8
Psychologists	273	463	619	69.6	33.7
Technicians, Medical & Dental	3878	6550	9470	68.9	44.6
Veterinarians	521	616	657	18.2	6.7
Other Health Workers	2864	3211	3228	12.1	0.5
Teachers	38858	53974	58589	38.9	8.6
Elementary	20465	25827	24967	26.2	- 3.3
Secondary	11927	17938	21051	50.4	17.4
College	3966	6611	8456	66.7	27.9
Other	2500	3598	4115	43.9	14.4

MINNESOTA OCCUPATIONAL EMPLOYMENT—continued

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
Social Scientists	672	931	1116	38.5	19.9
Economists	270	397	482	47.0	21.4
Statisticians & Actuaries	365	477	562	30.7	17.8
Other	37	57	72	54.1	26.3
Other Prof., Tech., & Kindred	50166	74855	92844	49.2	24.0
Accountant & Auditors	9949	13879	16724	39.5	20.5
Airplane Pilots & Navigators	730	1076	1452	47.4	34.9
Architects	597	863	996	44.6	15.4
Wkrs. in Arts & Entertainment	9271	12961	15047	39.8	16.1
Clergymen	4780	6338	6549	32.6	3.3
Designers, exc. Design Drafts	785	1263	1583	60.9	25.3
Editors & Reporters	2031	3415	2602	18.9	7.7
Lawyers & Judges	3607	4866	5349	34.9	9.9
Librarians	1972	2812	3124	42.6	11.1
Personnel & Labor Rel. Wkrs.	1772	2695	3431	52.1	27.3
Photographers	919	1071	1146	16.5	7.0
Social & Welfare Wkrs.	2185	3238	4267	48.2	31.8
Prof., Tech., Kind., nec.	11568	21378	30574	84.8	43.0
<u>Managers, Officials, Proprietors</u>	106839	125066	135596	17.1	8.4
Conductors, R.R.	981	783	765	-20.2	- 2.3
Creditmen	1087	1529	1910	40.7	24.9
Officers, Pilots, Eng. Ship	200	177	193	-11.5	9.0
Purchasing Agents	2184	3040	3663	39.2	20.5
Postmasters & Assistants	917	919	807	0.2	-12.2
Other Mgrs., Off., Prop. nec.	101470	118618	128258	16.9	8.1
<u>Clerical &amp; Kindred</u>	177445	231120	271466	30.2	17.5
Stenos, Typists, Secretaries	40701	56819	69110	39.6	21.6
Office Machine Operators	6545	9687	12560	48.0	29.7
Other Clerical & Kindred	130199	164614	189796	26.5	15.3
Accounting Clerks	1594	1836	1948	15.2	6.1
Bookkeepers, Hand	20116	23858	26050	18.6	9.2
Bank Tellers	2364	3499	4657	45.9	33.1
Cashiers	8266	12523	16358	51.5	30.6
Mail Carriers	4469	5671	6328	26.9	11.6
Postal Clerks	4795	6066	6742	26.5	11.1
Shipping, Receiving Clerks	4594	5366	5655	16.8	5.4
Telephone Operators	6214	7239	8022	16.5	10.8
Clerical & Kindred Wkrs. nec.	77787	98556	114036	26.7	15.7
<u>Sales Workers</u>	94292	111359	122202	18.1	9.7

MINNESOTA OCCUPATIONAL EMPLOYMENT--continued

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<u>Craftsmen</u>	155239	193052	218035	24.4	12.9
Construction Crafts	44245	48276	50941	9.1	5.5
Carpenters	16089	16459	16330	2.3	- 0.8
Brickmasons & Tile Setters	3252	3548	3753	9.2	5.8
Cement, Concrete Finishers	701	867	1035	23.7	19.4
Electricians	5637	6573	7210	16.6	9.7
Excavating, Grading Mach. Op.	4338	4828	5444	11.3	12.8
Painters & Paper Hangers	6430	6687	6571	4.0	- 1.6
Plasterers	958	1031	1075	7.6	4.3
Plumbers & Pipefitters	5518	6622	7565	20.0	14.3
Roofers & Slaters	664	760	847	14.5	11.4
Structural Metal Workers	658	901	1111	36.9	23.3
Foremen, nec.	19211	25858	31333	34.6	21.2
Metal Working Crafts	16494	23285	25479	41.2	9.4
Machinists & Related	8516	11973	12655	40.6	5.7
Blacksmiths, Forgemn, Hammer	709	655	505	- 7.6	-22.9
Boilermakers	250	276	285	10.4	3.3
Heat Treaters, Annealers	145	220	237	51.7	7.7
Millwrights	1002	1354	1588	35.1	17.3
Molders, Metal exc., Coremakers	642	951	1043	48.1	9.7
Patternmakers, Metal & Wood	424	676	792	59.4	17.2
Rollers & Roll Hands	95	128	145	34.7	13.3
Sheet Metal Workers	2599	3501	4013	34.7	14.6
Tool Makers & Diemakers	2110	3551	4216	68.3	18.7
Printing Trade Crafts	6637	7510	7924	13.2	5.5
Compositors, Typesetters	3991	3967	3644	- 0.6	- 8.2
Electrotypers, Stereotypers	195	166	119	-14.9	-28.3
Engravers exc. Photoengraver	162	222	265	37.0	19.4
Photoengraver, Lithographers	586	1040	1464	77.5	40.8
Pressmen & Plate Printers	1703	2115	2432	24.2	15.0
Transportation & Other Pub. Util.	7620	7598	8098	- 0.3	6.6
Linemen & Servicemen	4775	5706	6532	19.5	14.5
Locomotive Engineers	1760	1445	1438	-17.9	- 0.5
Locomotive Fireman	1085	447	128	-58.8	-71.4
Mechanics & Repairmen	40221	55362	65847	37.6	18.9
Airplane	2014	2568	2983	27.5	16.2
Motor Vehicle	13632	17640	19317	29.4	9.5
Office Machine	712	1137	1437	59.7	26.4
Radio & TV Mechanics	1792	2229	2269	24.4	1.8
Railroad & Carshop	909	743	734	-18.3	- 1.2
Other Mechanics	21162	31045	39107	46.7	26.0



MINNESOTA OCCUPATIONAL EMPLOYMENT—continued

	Employment			Per Cent Change	
	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>1960-1968</u>	<u>1968-1975</u>
Other Craftsmen & Kindred	20811	25163	28413	20.9	87.4
Bakers	2372	2275	2175	- 4.1	- 4.4
Cabinetmakers	1389	1704	1929	22.7	13.2
Crane Derrick, Hoistmen	1401	1873	2246	33.7	19.9
Glaziers	284	413	536	45.4	29.8
Jewelers & Watchmakers	614	702	684	14.3	- 2.6
Opticians, Lens Grinders	507	568	585	12.0	3.0
Inspectors, Log & Lumber	146	178	207	21.9	16.3
Inspectors, Other	1653	1792	2056	8.4	14.7
Upholsterers	911	1194	1294	31.1	8.4
Craftsmen & Kindred, nec.	11534	14464	16701	12.5	15.5
<u>Operatives</u>	181644	228543	259004	25.8	13.3
Selected Trans. & Utility Oper.	47541	55236	62092	16.2	12.4
Drivers, Bus, Truck, Tractor	34077	40245	45254	18.1	12.4
Deliverymen & Routemen	9663	11779	13634	21.9	15.7
Brakemen & Switchmen, R.R.	3165	2602	2589	-17.8	- 0.5
Power Station Operators	362	395	396	9.1	0.3
Sailors & Deckhands	274	215	219	-21.5	1.9
Semiskilled Metal Wkrs.	19192	31862	38847	66.0	21.9
Furnacemen, Smelter, Powers	350	476	522	36.0	9.7
Heaters, Metal	65	93	109	43.1	17.2
Welders, & Flamecutters	6297	10377	13268	64.8	27.9
Assemblers	12480	20916	24948	67.6	19.3
Semiskilled Textile Wkrs.	3335	3729	4122	11.8	10.5
Knitters, Loopers, Toppers	67	75	83	11.9	10.7
Spinners	35	32	29	- 8.6	- 9.4
Weavers	136	132	123	- 3.0	- 6.8
Sewers & Stitchers, Mfg.	3097	3490	3887	12.7	11.4
Other Operatives	111576	137716	153943	23.4	11.8
Asbestos, Insulation Wkrs.	261	341	403	30.7	18.2
Attendants, Auto Service	7701	9865	11344	28.1	15.0
Blasterers & Powdermen	131	129	140	- 1.5	8.5
Laundry & Dry Cleaning Op.	6204	6700	6855	8.0	2.3
Meat Cutters exc. Meat Pkg.	3064	3389	3499	10.6	3.2
Mine Operatives & Laborers	5446	4112	4052	-24.5	- 1.5
Other Operatives, nec.	88769	113180	127650	27.5	12.8
<u>Service Workers</u>	141503	180768	208162	27.7	15.2
Private Household Wkrs.	28064	26717	23967	- 4.8	-10.3
Protective Service Wkrs.	8310	10647	13033	28.1	22.4
Firemen	1649	2192	2805	32.9	28.0
Guards, Watchmen	2770	3233	3465	16.7	7.2
Policemen, Other Law Enf.	3891	5222	6763	34.2	29.5

MINNESOTA OCCUPATIONAL EMPLOYMENT—continued

	Employment			Per Cent Change	
	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>1960-1968</u>	<u>1968-1975</u>
Waiters, Cooks, Bartenders	40501	54967	63952	35.7	16.3
Bartenders	4477	5901	6680	31.8	13.2
Cooks exc. Private Households	13376	18312	21388	36.9	16.8
Counter & Fountain Wkrs.	2108	3333	4376	58.1	31.3
Waiters & Waitresses	20540	27421	31508	33.5	14.9
Other Service Workers	64628	88437	107210	36.8	21.2
Attendants, Hosp. & other Inst.	11690	18003	24596	54.0	36.6
Charwomen & Cleaners	4065	5837	7093	43.6	21.5
Janitors & Sextons	14630	19312	21711	32.0	12.4
Nurses, Practical	4101	6131	8325	49.5	35.8
Service Workers, nec.	30142	39154	45485	29.9	16.2
<u>Laborers exc. Farm &amp; Mine</u>	49327	50708	49228	2.8	- 2.9
<u>Farmers &amp; Farm Workers</u>	180293	132696	102226	-26.4	-23.0

MINNEAPOLIS-ST. PAUL METROPOLITAN AREA  
INDUSTRY EMPLOYMENT

<u>Industry</u>	<u>Employment</u>			<u>Per Cent Change</u>	
	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	576020	744660	862550	29.3	15.8
Ag., For., Fish.	7950	5200	3600	-34.6	-30.8
Mining	370	560	600	51.4	7.1
Construction	33650	38750	44100	15.2	13.8
Durable Mfg.	81550	131000	154100	60.6	17.6
Non-Durable Mfg.	75700	85250	94000	12.6	10.3
Trans., Comm., P.U.	52750	56000	61250	6.2	9.4
Wholesale Trade	34300	39900	43300	16.3	8.5
Retail Trade	93700	120600	140000	28.7	16.1
Finance, Ins., R.E.	36550	43900	52050	20.1	18.6
Services	133250	191900	232800	44.0	21.3
Public Administration	26250	31600	36750	20.4	16.3

MINNEAPOLIS-ST. PAUL METROPOLITAN AREA  
EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP

<u>Occupation</u>	1960		1968		1975	
	<u>Employment</u>	<u>% of Total</u>	<u>Employment</u>	<u>% of Total</u>	<u>Employment</u>	<u>% of Total</u>
TOTAL	576082	100.0	755712	100.0	882538	100.0
Prof., Tech., Kind.	83619	14.5	127702	16.9	161330	18.3
Mgrs., Off., Prop.	52943	9.2	64713	8.6	72315	8.2
Clerical & Kindred	118323	20.5	156471	20.7	186389	21.1
Sales Workers	52708	9.1	64884	8.6	73211	8.3
Craftsmen	81051	14.1	105985	14.0	121274	13.8
Operatives	91217	15.8	119560	15.8	136534	15.6
Services	65390	11.3	86820	11.5	103846	11.8
Laborers	23827	4.1	25161	3.3	24685	2.8
Farmers & Farm Wkrs.	6999	1.2	4416	.6	2954	.3

MINNEAPOLIS-ST. PAUL METROPOLITAN AREA  
OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
TOTAL	576082	755712	882538	31.2	16.9
<u>Professional, Technical, Kindred</u>	83619	127702	161330	52.7	26.3
<u>Engineers, Technical</u>	10255	17839	23468	74.0	31.6
Engineers, Aeronautical	163	284	345	74.2	21.5
Engineers, Chemical	400	646	789	61.5	22.1
Engineers, Civil	1744	2257	2766	29.4	22.6
Engineers, Electrical	2292	4190	5554	82.8	32.6
Engineers, Industrial	1366	2703	3774	97.9	39.6
Engineers, Mechanical	2029	3626	4663	78.7	28.6
Engineers, Metallurgical	108	197	261	82.4	32.5
Engineers, Mining	38	44	50	15.9	13.6
Engineers, Other	2115	3892	5266	84.0	35.3
Natural Scientists	1740	2874	3714	65.1	29.2
Chemists	1145	1803	2260	57.5	25.3
Agricultural Scientists	70	100	126	42.9	26.0
Biological Scientists	160	253	334	58.1	32.0
Geologists, Geophysicists	40	77	98	92.5	27.3
Mathematicians	145	303	427	108.9	40.9
Physicists	130	257	386	105.4	44.6
Other Natural Scientists	50	71	83	42.0	16.9
Technicians, exc. Medical & Dental	7723	13460	18004	74.3	33.8
Draftsmen	2960	4958	6231	67.5	25.7
Surveyors	344	505	670	46.8	32.7
Radio Operators	383	454	500	18.5	10.1
Technicians, Other	4036	7543	10603	86.9	40.6
Medical, Other Health Workers	16190	22298	28111	37.7	26.1
Dentists	985	1215	1373	23.4	13.0
Dieticians, Nutritionists	284	364	402	28.5	10.4
Nurses, Professional	7318	9982	12455	36.4	24.8
Optometrists	108	122	126	13.0	3.5
Osteopaths	13	15	16	15.4	6.7
Pharmacists	964	1022	1009	6.0	- 1.3
Physicians & Surgeons	2512	3369	4140	34.1	22.9
Psychologists	217	376	523	73.3	39.1
Technicians, Medical & Dental	2247	3997	6107	77.9	52.8
Veterinarians	92	115	124	25.0	7.8
Other Health Workers	1450	1721	1836	18.7	6.7
Teachers	15809	23135	26321	46.3	13.8
Elementary	7830	10296	10304	31.5	0.1
Secondary	4329	6784	8238	56.7	21.4
College	2492	4326	5724	73.6	32.3
Other	1158	1729	2055	49.3	18.8

MINNEAPOLIS-ST. PAUL METROPOLITAN AREA—continued  
OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
Social Scientists	599	853	1040	42.4	21.9
Economists	248	375	463	51.2	23.5
Statisticians & Actuaries	326	437	523	34.0	19.7
Other	25	41	54	64.0	31.7
Other Prof., Tech., & Kindred	31303	47243	60672	50.9	28.4
Accountant & Auditors	7723	10835	13260	40.3	22.4
Airplane Pilots & Navigators	665	990	1376	48.9	39.0
Architects	495	680	811	37.4	19.3
Wkrs. in Arts & Entertainment	4863	6896	8248	41.8	19.6
Clergymen	1583	1983	2128	25.3	7.3
Designers, exc. Design Drafts	647	1042	1322	61.1	26.9
Editors & Reporters	1244	1469	1576	18.1	7.3
Lawyers & Judges	2448	3136	3552	28.1	13.3
Librarians	1014	1510	1745	48.9	15.6
Personnel & Labor Rel. Wkrs.	1298	2013	2591	55.1	28.7
Photographers	570	684	747	20.0	9.2
Social & Welfare Wkrs.	1444	1957	2588	35.5	32.2
Prof., Tech., Kind., nec.	7309	14048	20728	92.2	47.6
<u>Managers, Officials, Proprietors</u>	52943	64713	72315	22.2	11.7
Conductors, R.R.	300	264	264	-12.0	—
Creditmen	823	1200	1566	45.8	30.5
Officers, Pilots, Eng. Ship	21	21	22	—	4.8
Purchasing Agents	1451	2117	2570	45.9	21.4
Postmasters & Assistants	60	61	52	1.7	-14.8
Other Mgrs., Off., Prop., nec.	50288	61050	67839	21.4	11.1
<u>Clerical &amp; Kindred</u>	118323	156471	186389	32.2	19.1
Stenos, Typists, Secretaries	28888	40385	49658	39.8	22.9
Office Machine Operators	5530	8378	11115	51.5	32.7
Other Clerical & Kindred	83626	107708	125616	28.8	16.6
Accounting Clerks	1156	1348	1433	16.6	6.3
Bookkeepers, Hand	10160	12304	13929	21.1	13.2
Bank Tellers	1132	1637	2367	44.6	44.6
Cashiers	5124	7978	10602	55.7	32.9
Mail Carriers	2255	2916	3128	29.3	7.3
Postal Clerks	3109	4008	4281	28.9	6.8
Shipping, Receiving Clerks	3480	4200	4454	20.7	6.0
Telephone Operators	3310	4002	4518	20.9	12.9
Clerical & Kindred Wkrs. nec.	53900	59315	80904	28.6	16.7
<u>Sales Workers</u>	52708	64884	73211	23.1	12.8

MINNEAPOLIS-ST. PAUL METROPOLITAN AREA--continued  
OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<b>Craftsmen</b>	81051	105985	121274	30.8	14.4
<b>Construction Crafts</b>	20176	22731	24424	12.7	7.4
Carpenters	6425	6676	6727	3.9	0.8
Brickmasons & Tile Setters	1727	1901	2046	10.1	7.6
Cement, Concrete Finishers	451	569	698	26.2	22.7
Electricians	2645	3259	3613	23.2	10.9
Excavating, Grading Mach. Op.	987	1172	1357	18.7	15.8
Painters & Paper Hangers	3683	3930	3952	6.7	0.6
Plasterers	552	604	647	9.4	7.1
Plumbers & Pipefitters	2917	3614	4186	23.9	15.8
Roofers & Slaters	395	458	522	15.9	14.0
Structural Metal Workers	394	648	676	64.5	4.3
Foremen, nec.	10706	15138	18511	41.4	22.3
<b>Metal Working Crafts</b>	11634	17213	18840	47.9	9.5
Machinists & Related	6486	9398	9872	44.9	5.0
Blacksmiths, Forgemn, Hammer	160	177	144	10.6	-18.7
Boilermakers	133	154	158	15.8	2.6
Heat Treaters, Annealers	109	168	179	54.1	6.5
Millwrights	440	637	758	44.8	19.0
Molders, Metal exc., Coremakers	446	719	809	61.2	12.5
Patternmakers, Metal & Wood	320	525	608	64.1	15.8
Rollers & Roll Hands	37	58	70	56.8	20.7
Sheet Metal Workers	1704	2333	2658	36.9	13.9
Tool Makers & Diemakers	1799	3044	3584	69.2	17.7
<b>Printing Trade Crafts</b>	4560	5257	5590	15.3	6.3
Compositors, Typesetters	2441	2409	2180	- 1.3	- 9.5
Electrotypers, Stereotypers	160	135	95	-15.6	-29.6
Engravers exc. Photoengraver	112	151	181	34.8	19.9
Photoengraver, Lithographers	528	930	1287	76.1	38.4
Pressmen & Plate Printers	1319	1632	1847	23.7	13.2
<b>Transportation &amp; Other Pub. Util.</b>	3407	3589	3849	5.3	7.2
Linemen & Servicemen	2248	2754	3158	22.5	14.7
Locomotive Engineers	683	619	629	- 9.4	3.2
Locomotive Firemen	476	216	62	-54.6	-71.3
<b>Mechanics &amp; Repairmen</b>	19416	27893	33765	43.7	21.1
Airplane	1723	2171	2510	26.0	15.6
Motor Vehicle	5546	7476	8302	34.8	11.0
Office Machine	483	810	1037	67.7	28.0
Radio & TV Mechanics	838	1125	1191	34.2	5.9
Railroad & Carshop	450	405	409	-10.0	1.0
Other Mechanics	10376	15906	20316	53.3	27.7

MINNEAPOLIS-ST. PAUL METROPOLITAN AREA—continued  
OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
Other Craftsmen & Kindred	11152	14164	16295	27.0	15.0
Bakers	1211	1130	1073	- 6.7	- 5.1
Cabinetmakers	784	858	936	9.4	9.1
Crane Derrick, Hoistmen	592	890	1092	50.3	22.7
Glaziers	154	230	314	49.4	36.5
Jewelers & Watchmakers	250	306	303	22.4	- 1.0
Opticians, Lens Grinders	295	327	316	10.8	- 3.4
Inspectors, Log & Lumber	59	69	82	16.9	18.8
Inspectors, Other	902	1030	1197	14.2	16.2
Upholsterers	647	813	875	25.7	7.6
Craftsmen & Kindred, nec.	6258	8511	10107	36.0	18.8
<u>Operatives</u>	91217	119560	136534	31.1	14.2
Selected Trans. & Utility Oper.	20850	24522	27786	8.0	13.3
Drivers, Bus, Truck, Tractor	13964	16743	19019	19.9	13.6
Deliverymen & Routemen	4955	6005	6962	21.2	15.9
Brakemen & Switchmen, R.R.	1802	1634	1669	- 9.3	2.1
Power Station Operators	111	122	118	9.9	- 3.3
Sailors & Deckhands	18	18	18	—	—
<u>Semiskilled Metal Wkrs.</u>	12374	20809	24827	68.2	19.3
Furnancemen, Smelter, Powers	118	184	211	55.9	14.7
Heaters, Metal	15	24	30	60.0	25.0
Welders, & Flamecutters	2976	5110	6538	71.7	27.9
Assemblers	9265	15491	18048	67.2	16.5
<u>Semiskilled Textile Wkrs.</u>	1888	1475	1613	-21.9	9.4
Knitters, Loopers, Toppers	51	40	45	-21.6	12.5
Spinners	9	6	6	-33.3	—
Weavers	22	16	15	-27.3	- 6.3
Sewers & Stitchers, Mfg.	1805	1413	1547	-21.7	9.5
<u>Other Operatives</u>	56105	72754	82308	29.7	13.1
Asbestos, Insulation Wkrs.	159	222	269	39.6	21.2
Attendants, Auto Service	3064	4097	4933	33.7	20.4
Blasterers & Powdermen	4	6	7	50.0	16.7
Laundry & Dry Cleaning Op.	3087	3476	3683	12.6	6.0
Meat Cutters exc. Meat Pkg.	1375	1574	1625	14.5	3.2
Mine Operatives & Laborers	55	74	72	34.5	- 2.7
Other Operatives, nec.	48361	63305	71719	30.9	13.3
<u>Service Workers</u>	65390	86820	103846	32.8	19.6
Private Household Wkrs.	10610	10408	9644	- 1.9	- 7.4
Protective Service Wkrs.	4515	5167	6192	14.4	19.8
Firemen	1105	1218	1524	10.2	25.1
Guards, Watchmen	1485	1743	1971	17.4	13.1
Policemen, Other Law Enf.	1925	2206	2797	14.6	26.8



MINNEAPOLIS-ST. PAUL METROPOLITAN AREA --continued  
OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>1960-1968</u>	<u>1968-1975</u>
Waiters, Cooks, Bartenders	17989	25690	31141	42.8	21.2
Bartenders	1692	2335	2748	38.0	17.7
Cooks exc. Private Households	5472	7836	9488	43.2	21.1
Counter & Fountain Wkrs.	1410	2300	3116	63.1	35.5
Waiters & Waitresses	9415	13219	15789	38.9	19.4
Other Service Workers	32276	45555	56869	41.1	24.8
Attendants, Hosp. & other Inst.	4805	7885	11474	64.1	45.5
Charwomen & Cleaners	1637	2429	3007	48.4	23.8
Janitors & Sextons	7491	9918	11379	32.4	14.7
Nurses, Practical	1721	2750	3998	59.8	45.4
Service Workers, nec.	16622	22573	27011	35.9	19.7
<u>Laborers exc. Farm &amp; Mine</u>	23827	25161	24685	5.6	- 1.9
<u>Farmers &amp; Farm Workers</u>	6999	4416	2954	-36.9	-33.1

## ECONOMIC REGIONS

### Region 1 - Northwest

Kittson  
Mahnomon  
Marshall  
Pennington  
Polk  
Red Lake  
Roseau

### Region 2 - North

Beltrami  
Clearwater  
Hubbard  
Koochiching  
Lake of the Woods

### Region 3 - Northeast

Carlton  
Cook  
Itasca  
Lake  
St. Louis

### Region 4 - West

Becker  
Big Stone  
Clay  
Douglas  
Grant  
Norman  
Otter Tail  
Stevens  
Traverse  
Wilkin

### Region 5 - North Central

Aitkin  
Cass  
Crow Wing  
Morrison  
Todd  
Wadena

### Region 6 - West Central

Chippewa  
Kandiyohi  
Lac qui Parle  
Pope  
Redwood  
Renville  
Swift  
Yellow Medicine

### Region 7 - Central

Benton  
Chisago  
Isanti  
Kanabec  
Meeker  
Mille Lacs  
Pine  
Sherburne  
Stearns  
Wright

### Region 8 - Southwest

Cottonwood  
Jackson  
Lincoln  
Lyon  
Martin  
Murray  
Nobles  
Pipestone  
Rock

### Region 9 - South Central

Blue Earth  
Brown  
Faribault  
Le Sueur  
McLeod  
Nicollet  
Rice  
Sibley  
Waseca  
Watonwan

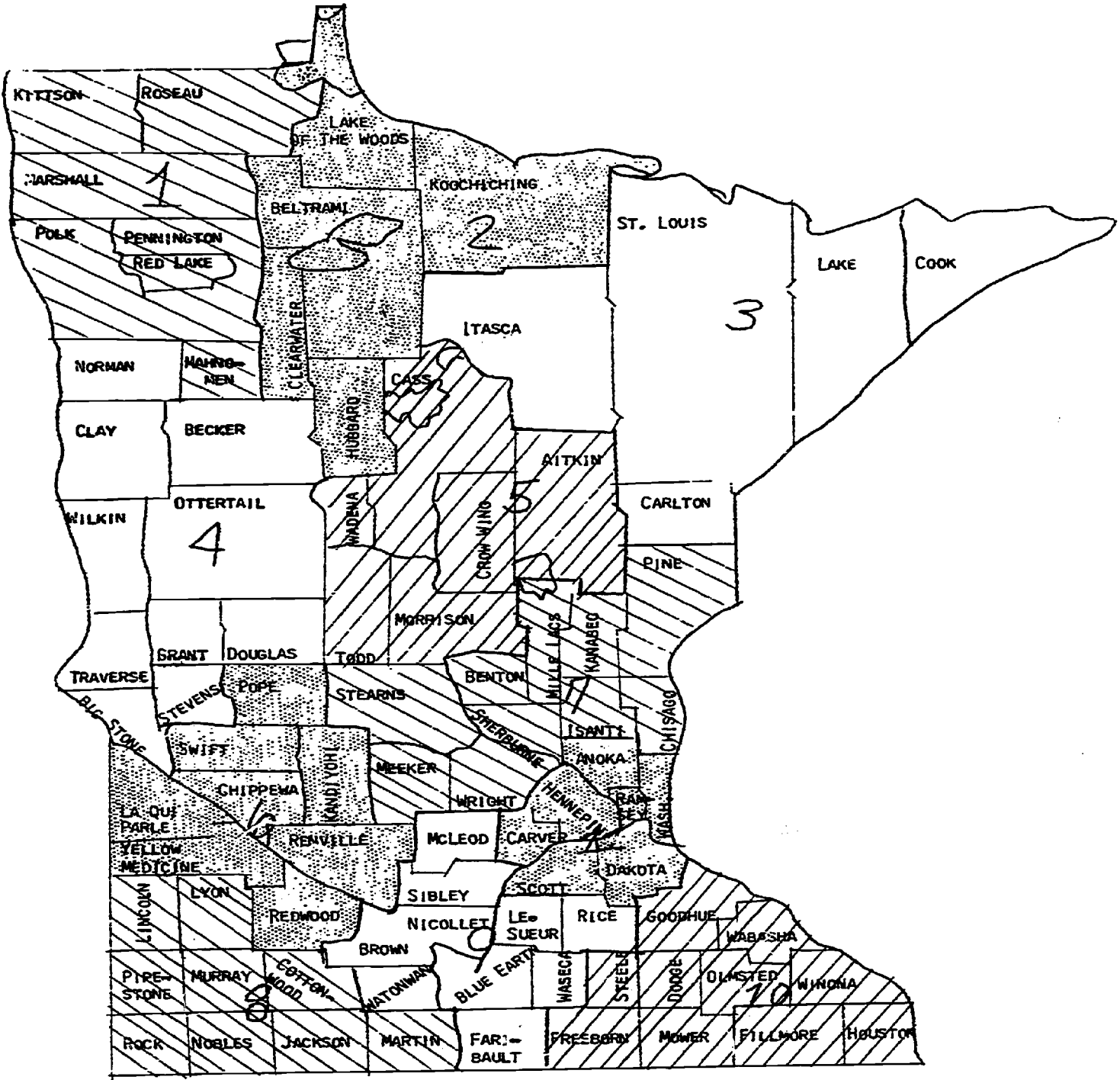
### Region 10 - Southeast

Dodge  
Fillmore  
Freeborn  
Goodhue  
Houston  
Mower  
Olmsted  
Steele  
Wabasha  
Winona

### Region 11 - Metropolitan

Anoka  
Carver  
Dakota  
Hennepin  
Ramsey  
Scott  
Washington

# ECONOMIC REGIONS



ECONOMIC REGIONS TOTAL EMPLOYMENT

	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>Per Cent Change</u> <u>1960-1968</u>	<u>1968-1975</u>
TOTAL STATE	1233370	1461310	1615580	18.5	10.6
Region 1	32510	34200	35200	5.2	2.9
Region 2	20050	19690	18740	- 1.8	- 4.8
Region 3	101020	102270	105410	1.2	3.1
Region 4	64200	69680	72940	8.5	4.7
Region 5	39790	43890	46720	10.3	6.4
Region 6	50520	53900	56360	6.7	4.6
Region 7	75320	90060	99220	19.6	10.2
Region 8	53720	53810	53010	0.2	- 1.5
Region 9	87900	100070	107240	13.8	7.2
Region 10	117370	129240	134000	10.1	3.7
Region 11	590970	764500	886740	29.4	16.0

ECONOMIC REGIONS INDUSTRY EMPLOYMENT

TOTAL STATE

	<u>1960</u>	<u>1968</u>	<u>1975</u>	Per Cent Change	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	1233370	1461310	1615580	18.5	10.6
Agriculture	182400	140500	112000	- 23.0	- 20.3
Mining	17970	15210	16680	- 15.4	9.7
Construction	69950	79350	88250	13.4	11.2
Durable Manufacturing	118150	184000	218300	55.7	18.6
Non-Durable Manufacturing	130900	148750	163800	13.6	10.1
Trans., Comm., P. U.	93150	94450	101700	1.4	7.7
Wholesale Trade	54050	59750	64600	10.5	8.1
Retail Trade	195400	240200	268750	22.9	11.9
F.I.R.E.	52350	62400	71050	19.2	13.9
Services	271450	374100	434600	37.8	16.2
Public Administration	47600	62600	75850	31.5	21.2

REGION 1

	<u>1960</u>	<u>1968</u>	<u>1975</u>	Per Cent Change	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	32510	34200	35200	5.2	2.9
Agriculture	12900	10550	8850	- 18.2	- 16.1
Mining	60	50	50	- 16.7	—
Construction	1650	1700	1700	3.0	—
Durable Manufacturing	500	1500	2500	200.0	66.7
Non-Durable Manufacturing	1350	1650	1900	22.2	15.2
Trans., Comm., P. U.	2100	2100	2350	—	11.9
Wholesale Trade	1150	1300	1400	13.0	7.7
Retail Trade	4900	5000	5000	2.0	—
F.I.R.E.	550	650	700	18.2	7.7
Services	6300	8250	8800	31.0	9.7
Public Administration	1050	1450	1850	38.1	27.6

ECONOMIC REGIONS INDUSTRY EMPLOYMENT—continued

REGION 2

	<u>1960</u>	<u>1968</u>	<u>1975</u>	Per Cent Change	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	20050	19690	18740	- 1.8	- 4.8
Agriculture	4500	3600	3000	- 20.0	- 16.7
Mining	50	40	40	- 20.0	—
Construction	1100	1200	1200	9.1	—
Durable Manufacturing	1350	1200	700	- 11.1	- 41.7
Non-Durable Manufacturing	2700	2450	2300	- 9.3	- 6.1
Trans., Comm., P. U.	1200	1200	1200	—	—
Wholesale Trade	350	450	450	28.6	—
Retail Trade	3100	3600	3800	16.1	5.5
F.I.R.E.	350	400	400	14.3	—
Services	4500	4500	4500	—	—
Public Administration	850	1050	1150	23.5	9.5

REGION 3

	<u>1960</u>	<u>1968</u>	<u>1975</u>	Per Cent Change	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	101020	102270	105410	1.2	3.1
Agriculture	3500	3100	2800	- 11.4	- 9.7
Mining	15820	13170	14460	- 16.8	9.8
Construction	5150	5900	6400	14.6	8.5
Durable Manufacturing	7600	7900	7900	3.9	—
Non-Durable Manufacturing	9200	9150	10000	—	9.3
Trans., Comm., P. U.	10700	9300	9300	- 13.1	—
Wholesale Trade	3150	2900	2800	- 7.9	- 3.4
Retail Trade	15550	15600	15500	—	- 0.1
F.I.R.E.	2950	2650	2350	- 10.2	- 11.3
Services	22650	26700	26750	17.9	—
Public Administration	4750	5900	7150	24.2	21.2

ECONOMIC REGIONS INDUSTRY EMPLOYMENT--continued

REGION 4

	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>Per Cent Change</u>	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	64200	69680	72940	8.5	4.7
Agriculture	22650	17650	14200	- 22.1	- 19.5
Mining	100	80	90	- 20.0	12.5
Construction	3700	4100	4400	10.8	7.3
Durable Manufacturing	1100	2400	3200	118.1	33.3
Non-Durable Manufacturing	3100	3350	3450	8.1	3.0
Trans., Comm., P. U.	4100	4400	5000	7.3	13.6
Wholesale Trade	2350	2400	2500	2.1	4.2
Retail Trade	10350	11500	12000	11.1	4.3
F.I.R.E.	1600	1950	2000	21.9	2.6
Services	13200	19000	22400	43.9	17.8
Public Administration	1950	2850	3700	46.2	29.8

REGION 5

	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>Per Cent Change</u>	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	39790	43890	46720	10.3	6.4
Agriculture	11950	9750	8150	- 18.4	- 16.4
Mining	890	740	820	- 16.9	10.8
Construction	2250	2250	2600	—	15.6
Durable Manufacturing	2100	2950	3450	40.5	16.9
Non-Durable Manufacturing	2850	3550	4100	24.6	15.5
Trans., Comm., P. U.	2750	2600	2600	- 5.5	—
Wholesale Trade	800	1300	1650	62.5	26.9
Retail Trade	5950	6700	7000	12.6	4.5
F.I.R.E.	750	900	950	20.0	5.6
Services	8000	11000	12650	37.5	15.0
Public Administration	1500	2150	2750	43.3	27.9

ECONOMIC REGIONS INDUSTRY EMPLOYMENT—continued

REGION 6

	<u>1960</u>	<u>1968</u>	<u>1975</u>	Per Cent Change	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	50520	53900	56360	6.7	4.6
Agriculture	20600	15150	11600	- 26.5	- 23.4
Mining	70	50	60	- 28.6	20.0
Construction	2750	3050	3300	10.9	8.2
Durable Manufacturing	650	2250	3650	246.1	62.2
Non-Durable Manufacturing	2150	2050	2100	- 4.7	2.4
Trans., Comm., P. U.	2650	2300	2300	- 13.2	—
Wholesale Trade	1700	1700	1800	—	5.9
Retail Trade	7750	9100	9800	17.4	7.7
F.I.R.E.	1050	1300	1350	23.8	3.8
Services	9700	14500	17600	49.5	21.4
Public Administration	1450	2150	2800	48.2	30.2

REGION 7

	<u>1969</u>	<u>1968</u>	<u>1975</u>	Per Cent Change	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	75320	90060	99220	19.6	10.2
Agriculture	22000	17650	14500	- 19.8	- 17.8
Mining	70	60	70	- 14.3	16.7
Construction	4350	5050	5650	16.1	11.9
Durable Manufacturing	6800	7650	8500	12.5	11.1
Non-Durable Manufacturing	5650	8050	9450	42.5	17.4
Trans., Comm., P. U.	3900	3800	4100	- 2.6	7.9
Wholesale Trade	1850	2000	2300	8.1	15.0
Retail Trade	11100	16600	20000	49.5	20.5
F.I.R.E.	1500	2000	2150	33.3	7.5
Services	15600	23250	28100	49.0	20.9
Public Administration	2500	3950	4400	58.0	11.4



ECONOMIC REGIONS INDUSTRY EMPLOYMENT--continued

REGION 8

	<u>1960</u>	<u>1968</u>	<u>1975</u>	Per Cent Change	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	53720	53810	53010	0.2	- 1.5
Agriculture	20550	15350	11950	- 25.3	- 22.1
Mining	70	60	60	- 14.3	—
Construction	2700	2850	3000	5.6	5.3
Durable Manufacturing	1150	1500	1600	30.4	6.7
Non-Durable Manufacturing	4000	3750	3800	- 6.3	1.3
Trans., Comm., P. U.	2450	2250	2100	- 8.2	- 6.7
Wholesale Trade	2050	2000	2000	- 2.5	—
Retail Trade	8450	9600	10000	11.4	4.2
F.I.R.E.	1250	1400	1450	11.2	3.6
Services	9600	13000	14500	35.4	11.5
Public Administration	1450	2050	2550	41.4	24.4

REGION 9

	<u>1960</u>	<u>1968</u>	<u>1975</u>	Per Cent Change	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	87900	100070	107240	13.8	7.2
Agriculture	25300	19100	14900	- 24.5	- 22.0
Mining	200	170	190	- 15.0	11.8
Construction	4900	5200	5700	6.1	9.6
Durable Manufacturing	4850	7900	10000	62.9	26.6
Non-Durable Manufacturing	8150	12100	14400	48.5	19.0
Trans., Comm., P. U.	3950	3500	3400	- 11.4	- 2.9
Wholesale Trade	2950	2300	2500	- 22.0	8.7
Retail Trade	14200	17750	19450	25.0	9.6
F.I.R.E.	2150	2700	2800	25.6	3.7
Services	19050	25700	28900	34.9	12.5
Public Administration	2200	3650	5000	65.9	37.0

ECONOMIC REGIONS INDUSTRY EMPLOYMENT—continued

REGION 10

	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>Per Cent Change</u>	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	117370	129240	134000	10.1	3.7
Agriculture	26400	20250	16000	- 23.3	- 21.0
Mining	220	190	200	- 13.6	5.3
Construction	6550	7900	8700	20.6	10.1
Durable Manufacturing	8850	14300	18000	61.6	25.9
Non-Durable Manufacturing	14650	15500	15900	5.8	2.6
Trans., Comm., P. U.	5750	5700	6200	- 0.9	8.8
Wholesale Trade	3000	2700	2900	- 10.0	7.4
Retail Trade	18100	20600	21500	13.8	4.4
F.I.R.E.	3350	4000	4100	19.4	2.5
Services	27200	33000	33850	21.3	2.6
Public Administration	3300	5100	6650	54.5	30.4

REGION 11

	<u>1960</u>	<u>1968</u>	<u>1975</u>	<u>Per Cent Change</u>	
				<u>1960-1968</u>	<u>1968-1975</u>
TOTAL	590970	764500	886740	29.4	16.0
Agriculture	12050	8350	6050	- 30.7	- 27.5
Mining	420	600	640	42.9	6.7
Construction	34850	40150	45600	15.2	13.6
Durable Manufacturing	83200	134150	158700	61.2	18.3
Non-Durable Manufacturing	77100	87150	96400	13.0	10.6
Trans., Comm., P. U.	53600	57300	63150	6.9	10.2
Wholesale Trade	34700	40700	44300	17.3	8.8
Retail Trade	95950	124150	144700	29.4	16.6
F.I.R.E.	36850	44450	52800	20.6	18.8
Services	135650	195200	236550	43.9	21.1
Public Administration	26600	32300	37850	21.4	17.2

REGION 1 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<b>TOTAL</b>	32499	33582	34012	3.3	1.3
<u>Professional, Technical, Kindred</u>	2636	3566	4070	35.3	14.1
Engineers, Technical	85	146	212	71.8	45.2
Natural Scientists	12	19	26	58.3	36.8
Medical, Other Health Workers	556	735	794	29.9	8.0
Teachers (Elem. & Sec.)	960	1214	1258	26.5	3.5
Social Scientists	—	—	—	—	—
Other Prof., Tech., & Kind.	1013	1452	1780	43.3	22.6
Accountants & Auditors	58	77	90	32.8	16.9
Architects	5	6	7	20.0	16.7
Designers & Draftsmen	18	29	39	61.1	34.5
Lawyers & Judges	53	66	69	24.5	4.5
Personnel & Labor Related Wkrs.	4	7	9	75.0	28.6
Other	875	1267	1566	44.8	23.6
<u>Managers, Officials, Proprietors</u>	2680	2849	2919	6.3	3.7
<u>Clerical &amp; Kindred</u>	2289	2847	3271	24.4	14.9
Stenos, Typists, Secretaries	370	507	609	37.0	20.1
Office Machine Operators	16	23	29	43.8	26.1
Other Clerical & Kindred	1903	2317	2633	21.8	13.6
Bookkeepers	463	500	517	8.0	3.4
Cashiers	94	125	149	33.0	19.2
Shipping, Receiving Clerks	22	27	29	22.7	7.4
Telephone Operators	106	112	124	5.7	10.7
Other	1218	1553	1814	27.5	16.8
<u>Sales Workers</u>	1685	1793	1852	6.4	3.3
<u>Craftsmen</u>	2850	3339	3741	17.2	12.0
Carpenters	602	581	539	- 3.5	- 7.2
Electricians	91	105	114	15.4	8.6
Plumbers & Pipefitters	75	83	89	10.7	7.2
Foremen nec.	283	400	520	41.3	30.0
Machinists & Related	33	58	83	75.8	43.1
Blacksmith, Forge., Hammer.	21	25	25	19.0	—
Boilermakers	4	3	5	- 25.0	66.7
Millwrights	—	—	—	—	—
Sheet Metal Workers	16	22	29	19.0	31.8
Toolmakers & Diemakers	—	—	—	—	—
Printing Trades Crafts	68	54	96	- 20.6	88.2
Mechanics & Repairmen	832	1062	1244	27.6	17.1
Other Craftsmen	825	916	997	11.0	8.8
<u>Operatives</u>	2881	3578	4224	24.2	18.1
Assemblers :	29	87	148	200.0	70.1
Welders	70	125	185	78.6	48.0
Sewers & Stitchers, Mfg.	—	—	—	—	—
Drivers & Deliverymen	1025	1147	1278	11.9	11.4
Other Operatives	1757	2219	2613	26.3	17.8
<u>Service Workers</u>	3754	4522	4728	20.5	4.6
Private Household	1031	1152	1043	11.7	- 9.4
Protective Service Wkrs.	98	134	169	36.7	26.1
Waiters, Cooks, Bartenders, Countermen	1146	1279	1337	11.6	4.5
Other Service Workers	1479	1957	2179	32.3	11.3
<u>Non Laborers</u>	12721	10024	8141	- 21.2	- 18.8
<u>Non Laborers exc. Farm</u>	-1003	1064	1066	6.1	0.2

REGION 2 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<b>TOTAL</b>	20049	19590	18601	- 2.3	- 5.1
<u>Professional, Technical, Kindred</u>	2139	2291	2368	7.1	3.4
Engineers, Technical	61	72	72	18.0	0.0
Natural Scientists	31	39	44	25.8	12.8
Medical, Other Health Workers	263	272	277	3.4	1.8
Teachers (Elem. & Sec.)	815	790	768	- 3.1	- 2.8
Social Scientists	4	4	4	0.0	0.0
Other Prof., Tech., & Kind.	965	1114	1203	15.4	8.0
Accountants & Auditors	45	48	50	6.7	4.2
Architects	—	—	—	—	—
Designers & Draftsmen	17	19	19	11.8	0.0
Lawyers & Judges	20	19	18	- 5.0	- 5.3
Personnel & Labor Related Wkrs.	16	21	24	31.3	14.3
Other	867	1007	1092	16.1	8.4
<u>Managers, Officials, Proprietors</u>	1897	1948	1851	2.7	- 5.0
<u>Clerical &amp; Kindred</u>	1588	1766	1837	11.2	4.0
Stenos, Typists, Secretaries	333	374	392	12.3	4.8
Office Machine Operators	8	10	11	25.0	10.1
Other Clerical & Kindred	1247	1382	1434	10.8	3.8
Bookkeepers	247	259	258	4.9	~ 0.4
Cashiers	110	157	194	42.7	23.6
Shipping, Receiving Clerks	4	4	3	0.0	- 25.0
Telephone Operators	80	79	78	- 1.3	- 1.3
Other	806	883	901	9.0	2.0
<u>Sales Workers</u>	1106	1235	1256	11.7	1.7
<u>Craftsmen</u>	2148	2227	2149	3.7	- 3.5
Carpenters	294	278	243	- 5.5	- 12.6
Electricians	107	110	102	2.8	- 7.3
Plumbers & Pipefitters	69	74	73	7.2	- 1.4
Foremen nec.	239	256	249	7.1	- 2.7
Machinists & Related	13	11	7	- 15.4	- 36.4
Blacksmith, Forge., Hammer.	4	2	1	- 50.0	- 50.0
Boilermakers	—	—	—	—	—
Millwrights	102	102	86	0.0	- 15.7
Sheet Metal Workers	31	31	28	0.0	- 9.7
Toolmakers & Diemakers	—	—	—	—	—
Printing Trades Crafts	53	47	43	- 11.3	- 8.5
Mechanics & Repairmen	594	670	703	12.8	4.9
Other Craftsmen	642	646	614	0.6	- 5.0
<u>Operatives</u>	2687	2635	2449	- 1.9	- 7.1
Assemblers	8	7	4	- 12.5	- 42.9
Welders	67	74	65	10.4	- 12.2
Sewers & Stitchers, Mfg.	25	25	25	0.0	0.0
Drivers & Deviverymen	811	865	876	6.7	1.3
Other Operatives	1776	1664	1479	- 6.3	- 11.1
<u>Service Workers</u>	2379	2483	2518	4.4	1.4
Private Household	585	499	424	- 14.7	- 15.0
Protective Service Wkrs.	90	106	114	17.8	7.5
Waiters, Cooks, Bartenders, Countermen	711	812	863	14.2	6.3
Other Service Workers	993	1066	1117	7.4	4.8
<u>Farm Laborers</u>	4198	3237	2611	- 22.9	- 19.3
<u>Workers exc. Farm</u>	1907	1768	1562	- 7.3	- 11.7

REGION 3 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
TOTAL	101012	102412	105702	1.4	3.2
<u>Professional, Technical, Kindred</u>	11892	14102	15326	18.6	8.7
Engineers, Technical	1172	1384	1672	18.1	20.8
Natural Scientists	262	312	391	19.1	25.3
Medical, Other Health Workers	2384	2820	2873	18.1	1.9
Teachers (Elem. & Sec.)	2929	3339	3245	14.0	- 2.8
Social Scientists	46	53	61	15.2	15.1
Other Prof., Tech., & Kind.	5099	6194	7084	21.5	14.4
Accountants & Auditors	746	818	906	9.7	10.8
Architects	29	32	32	10.3	0.0
Designers & Draftsmen	273	307	348	12.5	13.4
Lawyers & Judges	262	279	272	6.5	0.0
Personnel & Labor Related Wkrs.	123	157	199	27.6	26.8
Other	3666	4601	5327	25.5	15.8
<u>Managers, Officials, Proprietors</u>	10014	9593	9453	- 4.2	- 1.5
<u>Clerical &amp; Kindred</u>	12486	13248	14204	6.1	7.2
Stenos, Typists, Secretaries	2598	2941	3260	13.2	10.8
Office Machine Operators	112	188	164	23.2	18.4
Other Clerical & Kindred	9776	10169	10780	4.0	6.0
Bookkeepers	1353	1334	1325	- 1.4	- 0.7
Cashiers	632	792	923	25.3	16.5
Shipping, Receiving Clerks	197	188	190	- 4.6	1.1
Telephone Operators	506	455	453	- 10.1	- 0.4
Other	7088	7400	7889	4.4	6.6
<u>Sales Workers</u>	6457	6328	6257	- 2.0	- 1.1
<u>Craftsmen</u>	17826	17737	18814	- 0.5	6.1
Carpenters	1057	1026	966	- 2.9	- 5.9
Electricians	998	944	977	- 5.4	3.5
Plumbers & Pipefitters	493	541	595	13.2	10.0
Foremen nec.	2813	2872	3263	2.1	13.6
Machinists & Related	648	586	554	- 9.6	- 5.5
Blacksmith, Forge., Hammer.	155	93	62	- 40.0	- 33.3
Boilermakers	62	53	50	- 14.5	- 5.7
Millwrights	345	379	408	9.9	7.7
Sheet Metal Workers	201	221	236	10.0	6.8
Toolmakers & Diemakers	61	63	63	3.3	0.0
Printing Trades Crafts	330	319	337	0.0	5.6
Mechanics & Repairmen	4592	4982	5529	8.5	11.0
Other Craftsmen	6071	5658	5774	- 6.8	2.1
<u>Operatives</u>	20978	19443	20156	- 7.3	3.7
Assemblers	85	87	86	2.4	- 1.2
Welders	970	1116	1320	15.1	18.3
Sewers & Stitchers, Mfg.	364	392	456	7.7	16.3
Drivers & Deliverymen	5110	5003	5391	- 2.1	7.8
Other Operatives	14449	12845	12903	- 11.1	0.5
<u>Service Workers</u>	12860	14340	14594	11.5	1.8
Private Household	2588	2604	2213	0.6	- 15.0
Protective Service Wkrs.	1159	1337	1567	15.4	17.2
Waiters, Cooks, Bartenders, Countermen	3162	3377	3447	6.8	2.1
Other Service Workers	5951	7022	7367	18.0	4.9
<u>Farm Laborers</u>	2916	2490	2175	- 14.6	- 12.7
<u>ers exc. Farm</u>	5583	5131	4723	- 8.1	- 8.0

REGION 4 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
TOTAL	64192	68471	70855	6.7	3.5
<u>Professional, Technical, Kindred</u>	5432	7888	9549	45.2	21.1
Engineers, Technical	161	264	360	64.0	36.4
Natural Scientists	48	79	104	64.6	31.6
Medical, Other Health Workers	1063	1504	1777	41.5	18.2
Teachers (Elem. & Sec.)	1827	2541	2903	39.1	14.2
Social Scientists	8	12	15	50.0	25.0
Other Prof., Tech., & Kind.	2325	3488	4390	50.0	25.9
Accountants & Auditors	212	291	349	37.3	19.9
Architects	3	4	5	33.3	25.0
Designers & Draftsmen	49	77	100	57.1	29.9
Lawyers & Judges	106	142	158	34.0	11.3
Personnel & Labor Related Wkrs.	50	80	111	60.0	38.8
Other	1905	2894	3667	51.9	26.7
<u>Managers, Officials, Proprietors</u>	5588	6208	6437	11.1	3.7
<u>Clerical &amp; Kindred</u>	5141	6625	7766	28.9	17.2
Stenos, Typists, Secretaries	855	1212	1486	41.8	22.6
Office Machine Operators	264	381	482	44.3	26.5
Other Clerical & Kindred	4022	5032	5798	25.1	15.2
Bookkeepers	916	1039	1098	13.4	5.7
Cashiers	224	321	401	43.3	24.9
Shipping, Receiving Clerks	146	159	166	8.9	4.4
Telephone Operators	448	507	577	13.2	3.8
Other	2288	3006	3556	31.4	18.3
<u>Sales Workers</u>	4219	4679	4860	10.9	3.9
<u>Craftsmen</u>	6234	7454	8267	19.6	10.9
Carpenters	1307	1319	1272	0.9	- 3.6
Electricians	186	220	240	18.3	9.1
Plumbers & Pipefitters	187	216	240	15.5	11.1
Foremen nec.	517	698	845	35.0	21.1
Machinists & Related	85	122	141	43.5	15.6
Blacksmith, Forge., Hammer	74	74	67	0.0	- 9.5
Boilermakers	8	10	12	25.0	20.0
Millwrights	4	7	8	75.0	14.3
Sheet Metal Workers	56	76	91	35.7	19.7
Toolmakers & Diemakers	4	8	10	100.0	25.0
Printing Trades Crafts	289	317	326	9.7	2.8
Mechanics & Repairmen	1958	2594	3058	32.5	17.9
Other Craftsmen	1559	1793	1957	15.0	9.1
<u>Operatives</u>	6090	7300	8137	19.9	11.5
Assemblers	50	108	143	116.0	32.4
Welders	205	331	431	61.5	30.2
Sewers & Stitchers, Mfg.	75	89	98	18.7	10.1
Drivers & Deliverymen	2537	2895	3240	14.1	11.9
Other Operatives	3223	3877	4225	20.3	9.0
<u>Service Workers</u>	7278	9526	10733	30.9	12.7
Private Household	1941	2384	2385	22.8	0.0
Protective Service Wkrs.	189	269	343	42.3	27.5
Waiters, Cooks, Bartenders, Counter men	2295	2788	3080	21.5	10.5
Other Service Workers	2853	4085	4930	43.2	20.7
<u>Farm Laborers</u>	22324	16765	13060	- 24.9	- 22.1
Farm Laborers exc. Farm	1886	2026	2041	7.4	0.7

REGION 5 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<b>TOTAL</b>	39768	43093	45304	8.7	5.1
<u>Professional, Technical, Kindred</u>	3244	4519	5363	39.3	18.7
Engineers, Technical	103	152	201	47.6	32.2
Natural Scientists	8	13	17	62.5	30.8
Medical, Other Health Workers	643	880	1018	36.9	15.7
Teachers (Elem. & Sec.)	1263	1681	1874	33.1	11.5
Social Scientists	—	—	—	—	—
Other Prof., Tech., & Kind.	1227	1793	2253	46.1	25.7
Accountants & Auditors	60	80	96	33.3	20.0
Architects	—	—	—	—	—
Designers & Draftsmen	24	34	43	41.7	26.5
Lawyers & Judges	55	70	76	27.3	8.6
Personnel & Labor Related Wkrs.	4	6	8	50.0	33.3
Other	1084	1603	2030	47.9	26.6
<u>Managers, Officials, Proprietors</u>	3644	4118	4358	13.0	5.8
<u>Clerical &amp; Kindred</u>	2853	3636	4233	27.4	16.4
Stenos, Typists, Secretaries	423	592	725	39.9	22.5
Office Machine Operators	4	6	8	50.0	33.3
Other Clerical & Kindred	2426	3038	3500	25.2	15.2
Bookkeepers	492	571	619	16.1	8.4
Cashiers	136	194	241	42.6	24.2
Shipping, Receiving Clerks	26	32	35	23.1	9.4
Telephone Operators	148	154	161	4.1	4.5
Other	1624	2087	2444	28.5	17.1
<u>Sales Workers</u>	2295	2708	2922	18.0	7.9
<u>Craftsmen</u>	4573	5186	5848	13.4	12.8
Carpenters	720	672	684	- 6.7	1.8
Electricians	149	158	176	6.0	11.4
Plumbers & Pipefitters	137	149	174	8.8	10.1
Foremen nec.	541	696	848	28.7	21.8
Machinists & Related	136	160	171	17.6	6.9
Blacksmith, Forge., Hammer.	65	45	37	- 30.8	- 17.8
Boilermakers	17	19	17	11.8	- 10.5
Millwrights	20	27	31	35.0	14.8
Sheet Metal Workers	52	63	76	21.2	20.6
Toolmakers & Diemakers	—	—	—	—	—
Printing Trades Crafts	177	216	244	22.0	13.0
Mechanics & Repairmen	1167	1511	1786	29.5	18.2
Other Craftsmen	1392	1470	1604	5.6	9.1
<u>Operatives</u>	5254	6218	6956	18.3	11.9
Assemblers	153	211	245	37.9	16.1
Welders	221	322	411	45.7	27.6
Sewers & Stitchers, Mfg.	151	204	252	35.1	23.5
Drivers & Deliverymen	1621	1848	2051	14.0	11.0
Other Operatives	3108	3633	3997	16.9	10.0
<u>Service Workers</u>	4355	5590	6259	28.4	12.0
Private Household	991	1163	1136	17.4	- 2.3
Protective Service Wkrs.	208	287	362	38.0	26.1
Waiters, Cooks, Bartenders, Counter men	1340	1625	1786	21.3	9.9
Other Service Workers	1816	2515	2975	38.5	18.3
<u>Farm Laborers</u>	11729	9219	7460	- 21.4	- 19.1
<u>Workers exc. Farm</u>	1821	1899	1905	4.3	0.3



## REGION 6 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
TOTAL	50532	52826	54394	4.5	3.0
<u>Professional, Technical, Kindred</u>	4186	6248	7690	49.3	23.1
Engineers, Technical	68	126	178	85.3	41.3
Natural Scientists	33	53	71	60.6	34.0
Medical, Other Health Workers	908	1327	1605	46.1	20.0
Teachers (Elem. & Sec.)	1642	2369	2786	44.3	17.6
Social Scientists	13	21	28	61.5	33.3
Other Prof., Tech., & Kind.	1522	2352	3022	54.5	28.5
Accountants & Auditors	101	143	176	41.6	23.1
Architects	—	—	—	—	—
Designers & Draftsmen	31	53	73	71.0	37.7
Lawyers & Judges	74	102	117	37.8	14.7
Personnel & Labor Related Wkrs.	4	7	10	75.0	42.9
Other	1312	2047	2646	56.0	29.3
<u>Managers, Officials, Proprietors</u>	4223	4814	5072	14.0	5.4
<u>Clerical &amp; Kindred</u>	3509	4582	5431	30.6	18.5
Stenos, Typists, Secretaries	538	788	988	46.5	25.4
Office Machine Operators	30	44	57	46.7	29.5
Other Clerical & Kindred	2941	3750	4386	27.5	17.0
Bookkeepers	817	946	1024	15.8	8.2
Cashiers	197	295	378	49.7	28.1
Shipping, Receiving Clerks	15	17	19	13.3	11.8
Telephone Operators	221	228	249	3.2	9.2
Other	1691	2264	2716	33.9	20.0
<u>Sales Workers</u>	3090	3547	3785	14.8	6.7
<u>Craftsmen</u>	4286	5238	5916	22.2	12.9
Carpenters	694	711	698	2.4	- 1.8
Electricians	147	174	193	18.4	10.9
Plumbers & Pipefitters	225	261	294	16.0	12.6
Foremen nec.	303	428	532	41.3	24.3
Machinists & Related	35	72	88	105.7	22.2
Blacksmith, Forge., Hammer.	42	47	42	11.9	- 10.6
Boilermakers	5	6	8	20.0	33.3
Millwrights	8	16	21	100.0	31.3
Sheet Metal Workers	30	47	58	56.7	23.4
Toolmakers & Diemakers	—	—	—	—	—
Printing Trades Crafts	109	108	113	- 0.9	4.6
Mechanics & Repairmen	1304	1772	2120	35.9	19.6
Other Craftsmen	1384	1596	1749	15.3	9.6
<u>Operatives</u>	4249	5268	5963	24.0	13.2
Assemblers	36	139	197	286.1	41.7
Welders	133	256	354	92.5	38.3
Sewers & Stitchers, Mfg.	8	9	9	12.5	0.0
Drivers & Deliverymen	1679	1803	1938	7.4	7.5
Other Operatives	2393	3061	3465	27.9	13.2
<u>Service Workers</u>	5478	7425	8558	35.5	15.3
Private Household	1593	2031	2095	27.5	3.2
Protective Service Wkrs.	111	163	210	46.8	28.8
Waiters, Cooks, Bartenders, Countermen	1764	2246	2553	27.3	13.7
Other Service Workers	2010	2985	3700	48.5	24.0
<u>Farm Laborers</u>	20267	14369	10640	- 29.1	- 26.2
<u>laborers exc. Farm</u>	1244	1335	1339	7.3	0.3



## REGION 7 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<b>TOTAL</b>	75325	89107	97724	18.3	9.7
<u>Professional, Technical, Kindred</u>	6774	10219	12599	50.9	23.3
Engineers, Technical	229	340	444	48.5	30.6
Natural Scientists	25	42	57	68.0	35.7
Medical, Other Health Workers	1360	2036	2474	49.7	21.5
Teachers (Elem. & Sec.)	2126	3064	3587	44.1	17.1
Social Scientists	—	—	—	—	—
Other Prof., Tech., & Kind.	3034	4737	6037	56.1	27.4
Accountants & Auditors	172	245	294	42.4	20.0
Architects	29	40	47	37.9	17.5
Designers & Draftsmen	180	258	328	43.4	27.1
Lawyers & Judges	114	159	179	39.5	12.6
Personnel & Labor Related Wkrs.	12	20	26	66.7	30.0
Other	2527	4015	5163	58.9	28.6
<u>Managers, Officials, Proprietors</u>	5432	7034	7751	29.5	10.2
<u>Clerical &amp; Kindred</u>	5841	8198	9836	40.4	20.0
Stenos, Typists, Secretaries	899	1337	1659	48.7	24.1
Office Machine Operators	56	89	116	58.9	30.3
Other Clerical & Kindred	4886	6772	8061	38.6	19.0
Bookkeepers	1169	1551	1791	32.7	15.5
Cashiers	252	463	654	83.7	41.3
Shipping, Receiving Clerks	97	116	131	21.6	11.0
Telephone Operators	205	231	263	12.7	13.8
Other	3163	4409	5222	39.4	18.4
<u>Sales Workers</u>	4409	6190	7279	40.4	17.6
<u>Craftsmen</u>	8417	10564	12131	25.5	14.8
Carpenters	1137	1201	1202	5.6	0.1
Electricians	260	302	335	16.2	10.9
Plumbers & Pipefitters	252	305	350	21.0	14.8
Foremen nec.	890	1210	1476	35.9	22.0
Machinists & Related	296	309	316	4.4	2.3
Blacksmith, Forge., Hammer.	72	69	56	- 4.2	- 18.9
Boilermakers	8	9	11	12.5	22.2
Millwrights	18	23	27	27.8	17.4
Sheet Metal Workers	152	194	224	19.8	15.5
Toolmakers & Diemakers	50	56	63	12.0	12.5
Printing Trades Crafts	198	271	310	36.9	14.4
Mechanics & Repairmen	2313	3354	4133	45.0	23.2
Other Craftsmen	2761	3261	3628	18.1	11.3
<u>Operatives</u>	11059	13926	15960	25.9	14.6
Assemblers	829	921	1031	11.1	11.9
Welders	688	931	1159	35.3	24.5
Sewers & Stitchers, Mfg.	217	331	414	52.5	25.1
Drivers & Deliverymen	2747	3349	3857	21.9	15.2
Other Operatives	6578	8394	9499	27.5	13.2
<u>Service Workers</u>	9055	13312	15892	47.0	19.4
Private Household	2045	2599	2669	27.1	2.7
Protective Service Wkrs.	513	766	871	49.3	13.7
Waiters, Cooks, Bartenders, Counter men	2510	3823	4701	52.3	23.0
Other Service Workers	3987	6124	7651	53.6	24.9
<u>Farm Laborers</u>	21774	16831	13391	- 22.7	- 20.4
<u>Laborers exc. Farm</u>	2564	2883	2885	10.5	1.8

REGION 8 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<b>TOTAL</b>	53703	53088	51722	- 1.2	- 2.6
<u>Professional, Technical, &amp; Kindred</u>	4205	5655	6383	34.5	12.9
Engineers, Technical	142	201	248	41.5	23.4
Natural Scientists	13	19	24	46.2	26.3
Medical, Other Health Workers	810	1080	1204	33.3	11.5
Teachers (Elem. & Sec.)	1831	2397	2591	30.9	8.1
Social Scientists	3	4	5	33.3	25.0
Other Prof., Tech., & Kind.	1406	1954	2311	39.0	18.3
Accountants & Auditors	85	107	120	25.9	12.1
Architects	—	—	—	—	—
Designers & Draftsmen	35	49	57	40.0	16.3
Lawyers & Judges	65	83	87	27.7	4.8
Personnel & Labor Related Wkrs.	9	13	17	44.4	30.8
Other	1212	1702	2030	40.4	19.3
<u>Managers, Officials, Proprietors</u>	4267	4532	4506	6.2	- 0.6
<u>Clerical &amp; Kindred</u>	4009	4806	5324	19.9	10.8
Stenos, Typists, Secretaries	673	873	1012	29.7	15.9
Office Machine Operators	13	17	21	30.8	23.5
Other Clerical & Kindred	3323	3916	4291	17.8	9.6
Bookkeepers	914	986	1010	7.9	2.4
Cashiers	233	335	413	43.3	23.3
Shipping, Receiving Clerks	44	43	42	- 2.3	- 2.3
Telephone Operators	226	232	234	2.7	0.9
Other	1906	2320	2592	21.7	11.7
<u>Sales Workers</u>	3499	3814	3912	9.0	2.6
<u>Craftsmen</u>	4403	4922	5214	11.8	5.9
Carpenters	592	570	534	- 3.7	- 6.3
Electricians	171	181	187	5.8	3.3
Plumbers & Pipefitters	176	190	202	8.0	6.3
Foremen nec.	482	565	631	17.2	11.7
Machinists & Related	69	72	70	4.3	- 2.8
Blacksmith, Forge, Hammer.	30	26	19	- 13.3	- 26.9
Boilermakers	4	4	4	0.0	0.0
Millwrights	8	10	10	25.0	0.0
Sheet Metal Workers	28	33	36	17.9	9.1
Toolmakers & Diemakers	12	14	16	16.7	14.3
Printing Trades Crafts	121	112	113	- 7.4	0.9
Mechanics & Repairmen	1456	1820	2038	25.0	12.0
Other Craftsmen	1254	1325	1354	5.7	2.2
<u>Operatives</u>	6112	6465	6600	5.8	2.1
Assemblers	183	238	249	30.1	4.6
Welders	128	168	195	31.3	16.1
Sewers & Stitchers, Mfg.	5	5	6	0.0	20.0
Drivers & Deliverymen	1989	2079	2118	4.5	1.9
Other Operatives	3807	3975	4032	4.4	1.4
<u>Service Workers</u>	5373	6771	7356	26.0	8.6
Private Household	1240	1432	1357	15.5	- 5.2
Protective Service Wkrs.	139	186	227	33.8	22.0
Waiters, Cooks, Bartenders, Countermen	1635	1973	2134	20.7	8.2
Other Service Workers	2359	3180	3638	34.8	14.4
<u>Farm Laborers</u>	20337	14643	11023	- 28.0	- 24.7
<u>aborers exc. Farm</u>	1498	1480	1404	- 1.2	- 5.1



REGION 9 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<b>TOTAL</b>	87909	99012	105499	12.6	6.6
<u>Professional, Technical, &amp; Kindred</u>	8467	11982	14253	41.5	19.0
Engineers, Technical	259	432	593	66.8	37.3
Natural Scientists	24	42	57	75.0	35.7
Medical, Other Health Workers	1714	2400	2725	35.3	13.5
Teachers (Elem. & Sec.)	2680	3497	3816	30.5	9.1
Social Scientists	11	17	22	54.5	29.4
Other Prof., Tech., & Kind.	3719	5594	7040	50.4	25.8
Accountants & Auditors	231	320	382	38.5	19.4
Architects	12	16	18	33.3	12.5
Designers & Draftsmen	106	164	212	54.7	29.3
Lawyers & Judges	156	203	219	30.1	7.9
Personnel & Labor Related Wkrs.	61	105	146	72.2	39.0
Other	3153	4786	6063	51.8	26.7
<u>Managers, Officials, Proprietors</u>	6666	7753	8219	16.3	6.0
<u>Clerical &amp; Kindred</u>	8075	10804	12763	33.8	18.1
Stenos, Typists, Secretaries	1692	2408	2941	42.3	22.1
Office Machine Operators	60	90	117	50.0	30.0
Other Clerical & Kindred	6323	8306	9705	31.4	16.8
Bookkeepers	1442	1725	1862	19.6	7.9
Cashiers	512	804	1039	57.0	29.2
Shipping, Receiving Clerks	149	185	210	24.2	13.5
Telephone Operators	410	437	471	6.6	7.8
Other	3810	5155	6123	35.3	18.8
<u>Sales Workers</u>	6199	7501	8232	21.0	9.7
<u>Craftsmen</u>	9080	11268	12887	24.1	14.4
Carpenters	1223	1210	1192	- 1.1	- 1.5
Electricians	355	415	466	16.9	12.3
Plumbers & Pipefitters	403	469	538	16.4	14.7
Foremen nec.	936	1367	1710	46.0	25.1
Machinists & Related	238	331	377	39.1	13.9
Blacksmith, Forge., Hammer.	16	16	15	0.0	- 6.3
Boilermakers	—	—	—	—	—
Millwrights	12	19	24	58.3	26.3
Sheet Metal Workers	120	163	197	35.8	20.9
Toolmakers & Diemakers	29	46	59	58.6	28.3
Printing Trades Crafts	273	388	451	42.1	16.2
Mechanics & Repairmen	2417	3321	3990	37.4	20.1
Other Craftsmen	3058	3523	3868	15.2	9.8
<u>Operatives</u>	11168	14761	17028	32.2	15.4
Assemblers	720	1160	1453	61.1	25.3
Welders	267	423	564	58.4	33.3
Sewers & Stitchers, Mfg.	242	390	496	61.2	27.2
Drivers & Deliverymen	2873	3249	3591	13.2	10.5
Other Operatives	7066	9539	10924	35.0	14.5
<u>Service Workers</u>	10059	13321	15013	32.4	12.7
Private Household	1837	2114	2019	15.1	- 4.5
Protective Service Wkrs.	349	529	688	51.6	30.1
Waiters, Cooks, Bartenders, Counter men	3183	4154	4685	30.5	12.8
Other Service Workers	4690	6524	7621	39.1	16.8
<u>Farm Laborers</u>	24972	18180	13710	- 27.2	- 24.6
<u>laborers exc. Farm</u>	3223	3442	3394	6.8	- 1.4

REGION 10 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<b>TOTAL</b>	117355	128631	132957	9.6	3.4
<u>Professional, Technical, Kindred</u>	13374	17188	18963	28.5	10.3
Engineers, Technical	600	969	1289	61.5	33.0
Natural Scientists	112	169	213	50.9	26.0
Medical, Other Health Workers	4558	5593	5830	22.7	4.2
Teachers (Elem. & Sec.)	3570	4191	4173	17.4	0.0
Social Scientists	46	63	80	37.0	27.0
Other Prof., Tech., & Kind.	4488	6203	7378	38.2	18.9
Accountants & Auditors	465	596	675	28.2	13.3
Architects	25	29	31	16.0	6.9
Designers & Draftsmen	181	268	333	48.1	24.3
Lawyers & Judges	229	267	267	16.6	0.0
Personnel & Labor Related Wkrs.	97	152	200	56.7	31.6
Other	3491	4891	5872	40.1	20.1
<u>Managers, Officials, Proprietors</u>	8478	9360	9572	10.4	2.3
<u>Clerical &amp; Kindred</u>	12690	15875	17856	25.1	12.5
Stenos, Typists, Secretaries	2682	3540	4080	31.7	15.3
Office Machine Operators	149	211	263	41.6	24.6
Other Clerical & Kindred	9853	12124	13513	23.0	11.5
Bookkeepers	1916	2140	2201	11.7	2.9
Cashiers	690	984	1208	42.6	22.8
Shipping, Receiving Clerks	357	399	422	11.8	5.8
Telephone Operators	462	495	535	7.1	8.1
Other	6428	8106	9147	26.1	12.8
<u>Sales Workers</u>	8062	9029	9433	12.0	4.5
<u>Craftsmen</u>	12722	15564	17302	22.3	11.2
Carpenters	1739	1875	1833	7.8	- 2.2
Electricians	424	516	568	21.7	10.1
Plumbers & Pipefitters	528	650	738	23.1	13.5
Foremen nec.	1410	1875	2248	33.0	20.0
Machinists & Related	465	629	707	35.3	12.4
Blacksmith, Forge., Hammer.	25	27	25	8.0	- 7.4
Boilermakers	8	9	10	12.5	11.1
Millwrights	37	52	62	40.5	19.2
Sheet Metal Workers	187	265	315	41.7	18.9
Toolmakers & Dienmakers	140	219	272	56.4	24.2
Printing Trades Crafts	450	467	470	3.8	0.6
Mechanics & Repairmen	3563	4575	5259	28.4	15.0
Other Craftsmen	3746	4405	4795	17.6	8.9
<u>Operatives</u>	17807	21265	23463	19.4	10.3
Assemblers	989	1578	1966	59.6	24.6
Welders	507	814	1071	60.6	31.6
Sewers & Stitchers, Mfg.	192	222	245	15.6	10.4
Drivers & Deliverymen	4022	4485	4915	11.5	9.6
Other Operatives	12097	14166	15266	17.1	7.8
<u>Service Workers</u>	14001	16748	17484	19.6	4.4
Private Household	3096	3204	2789	3.5	- 13.0
Protective Service Wkrs.	807	1129	1398	39.9	23.8
Waiters, Cooks, Bartenders, Countermen	3997	4740	5036	18.6	6.2
Other Service Workers	6101	7675	8261	25.8	7.6
<u>Farm Laborers</u>	26089	19280	14740	- 26.1	- 23.6
<u>laborers exc. Farm</u>	4132	4322	4144	4.6	- 4.1

REGION 11 OCCUPATIONAL EMPLOYMENT

	Employment			Per Cent Change	
	1960	1968	1975	1960-1968	1968-1975
<b>TOTAL</b>	591061	775369	906307	31.2	16.9
<u>Professional, Technical, Kindred</u>	84834	129522	163617	52.7	26.3
Engineers, Technical	10325	17975	23678	74.1	31.7
Natural Scientists	1757	2906	3761	65.4	29.4
Medical, Other Health Workers	16144	22162	27868	37.3	25.7
Teachers (Elem. & Sec.)	12756	17881	19428	40.2	8.7
Social Scientists	820	1236	1574	50.7	27.3
Other Prof., Tech., & Kind.	43032	67362	87308	56.5	29.6
Accountants & Auditors	7774	10919	13375	40.5	22.5
Architects	499	685	817	37.3	19.3
Designers & Draftsmen	3623	6028	7594	66.4	26.0
Lawyers & Judges	2473	3170	3591	28.2	13.3
Personnel & Labor Related Wkrs.	1306	2032	2620	55.6	28.9
Other	27357	44528	59311	62.8	33.2
<u>Managers, Officials, Proprietors</u>	54014	66293	74272	22.7	12.0
<u>Clerical &amp; Kindred</u>	119750	158843	189625	32.6	19.4
Stenos, Typists, Secretaries	29243	40990	50491	40.2	23.2
Office Machine Operators	5554	8426	11189	51.7	32.8
Other Clerical & Kindred	84953	109427	127945	28.8	16.9
Bookkeepers	10387	12647	14360	21.8	13.5
Cashiers	5186	8101	10796	56.2	33.3
Shipping, Receiving Clerks	3537	4291	4571	21.3	6.5
Telephone Operators	3399	4140	4709	21.8	13.7
Other	62444	80248	93509	28.5	16.5
<u>Sales Workers</u>	53456	66090	74789	23.6	13.2
<u>Craftsmen</u>	82935	108727	124806	31.2	14.8
Carpenters	6724	6997	7050	4.1	0.8
Electricians	2749	3402	3788	23.8	11.3
Plumbers & Pipefitters	2983	3702	4293	24.1	16.0
Foremen nec.	10360	15402	18889	41.8	22.6
Machinists & Related	6564	9531	10048	45.2	5.4
Blacksmith, Forge., Hammer.	205	240	216	17.1	- 10.0
Boilermakers	133	154	158	15.8	2.6
Millwrights	448	652	779	45.5	19.5
Sheet Metal Workers	1716	2353	2684	37.1	14.1
Toolmakers & Diemakers	1832	3107	3675	69.6	18.3
Printing Trades Crafts	4598	5309	5657	15.5	6.6
Mechanics & Repairmen	19870	28656	34841	49.3	21.6
Other Craftsmen	24253	29222	32728	20.5	16.0
<u>Operatives</u>	93614	123353	141631	31.8	14.8
Assemblers	9472	15883	18615	67.7	17.2
Welders	3056	5271	6781	72.5	28.6
Sewers & Stitchers, Mfg.	1830	1450	1597	- 20.8	10.1
Drivers & Deliverymen	19485	23615	27148	21.2	15.0
Other Operatives	59771	77134	87490	29.0	13.4
<u>Service Workers</u>	66911	89115	106738	33.2	19.8
Private Household	10860	10701	9927	- 1.5	- 7.2
Protective Service Wkrs.	4595	5311	6402	15.6	20.5
Waiters, Cooks, Bartenders, Countermen	18773	26934	32775	43.5	21.7
Other Service Workers	32683	46169	57634	41.3	24.8
<u>Farm Laborers</u>	11044	7413	5207	- 32.9	- 29.8
<u>Laborers exc. Farm</u>	24503	26013	25622	6.2	- 1.5

**APPENDIX**

A NOTE ON USE OF THE BLS NATIONAL OCCUPATIONAL MATRIX

Assume Occupation K, and a set of Occupation K coefficients for 1960 and 1975, for industries  $A_1$ ,  $A_2$ ,  $A_3$ , and  $A_4$  as given below. Then further assume that 1960 industry employment in Minnesota for industries  $A_1$  through  $A_4$  is 400, 300, 200 and 100 respectively. The total number employed in Occupation K, if Minnesota was identical to the National staffing pattern, would then be given by multiplying the industry employment levels by their respective occupational coefficients for Occupation K.

Labor Coefficients

	<u>1960</u>	<u>1968</u>	<u>1975</u>
Industry $A_1$	0.01	(0.015)	0.2
Industry $A_2$	0.05	(0.076)	0.10
Industry $A_3$	0.10	(0.153)	0.20
Industry $A_4$	0.05	(0.076)	0.10

For 1960, employment in Occupation K =  $400 (0.01) + 300 (0.05) + 200 (0.10) + 100 (0.05) = 44$ . If for 1960, the U. S. Census gives the total employment for Occupation K as 55, this means that the BLS national coefficients yield an employment level which is only 4/5ths, i.e., 44/55 of the U. S. Census determined employment. If one assumes the same discrepancy between Census determined State employment in Occupation K and nationally derived estimates to obtain in 1975, it can be presumed that it will also exist for 1968. If one further assumes that the change in Occupation K coefficients over the period 1960 to 1975 is constant, one can arrive at the 1968 coefficients by linear interpolation, e.g.,  $0.01 + 8/15 (0.01) = 0.018$  or the Occupation K coefficient for Industry  $A_1$ . Once the set of coefficients is derived for 1968, the employment in Occupation K is readily secured by multiplying these coefficients by the level of specific industry employment in 1968. The resultant value can then be adjusted upward using the 1960 ratio of U. S. Census to the derived employment (for Occupation K) which was based on the national industry coefficients.

For example, if 1968 total industry employment levels were 800, 600, 300, and 200, respectively, and the occupational coefficients were as noted, then the preliminary occupational employment estimate for all industries ( $A_1$  through  $A_4$ ) would be as follows:  $800 (0.018) + 600 (0.076) + 300 (0.153) + 200 (0.076) = 121$ . As before, assume that 121 is 4/5ths of the U. S. Census employment for Occupation K, thus giving an "adjusted" employment level of 151. For 1975, the employment estimates would be secured in a similar fashion.



What remains to be ascertained, is whether one can expect that the State coefficients for the respective industries would approach more nearly those derived from national data, as time progressed. Some would argue that they will. If so, then the State estimates of employment in Occupation K will need less adjustment as one gets nearer to 1975. In such a case, the 1968 preliminary values would be expected to be nearer the "true" values than those of 1960, and instead of comprising only 4/5ths of the true value (Census) in 1968, they might be expected to be closer to 9/10ths of same.

Of course, it is most difficult to surmise accurately whether the State coefficients are moving closer to those derived from national data. Much depends on the point in transition through which the State industry (relative to the national industry) is passing. Again, since the components which constitute the exact make-up of the State SIC industry may not be precisely the same (in relative importance and content) as nationally, discrepancies could arise which may, in time, actually increase. Studies to examine whether the State coefficients would approximate those of the nation, over time, should be initiated at the earliest in order to clear up this unknown factor in developing occupational employment projections for States and smaller regions using the BLS matrix.